

## **Egypt**

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# **Sustainable Transformation for Agricultural Resilience in Upper Egypt Project Design Report**

## **Main report and annexes**

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# Map of the Project Area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 08-07-2019

## Abbreviations and Acronyms

<b>AB</b>	Agent Bank
<b>ABE</b>	Agricultural Bank of Egypt
<b>AC</b>	Agricultural Cooperative
<b>ADP</b>	Agricultural Development Plan
<b>AF</b>	Adaptation Fund
<b>AFD</b>	Agence Française de Développement
<b>AfDB</b>	African Development Bank
<b>AFI</b>	Alliance for Financial Inclusion
<b>AOS</b>	Annual Outcome Survey
<b>BMGF</b>	Bill and Melinda Gates Foundation
<b>BMS</b>	Business Development and Marketing Specialist
<b>CB</b>	Commercial Banks
<b>CBE</b>	Central Bank of Egypt
<b>CC</b>	Credit Cooperatives
<b>CDA</b>	Community Development Association
<b>CFI</b>	Cooperating Financial Institution
<b>CGC</b>	Credit Guarantee Company
<b>CIB</b>	Commercial International Bank
<b>CPMI</b>	Community Production and Marketing Institution
<b>CW</b>	Credit Wholesalers
<b>ECM</b>	Environment and Climate Manager
<b>EDHS</b>	Egypt Demographic and Health Survey
<b>EGP</b>	Egyptian Pound (1USD=16.6EGP)
<b>EMFF</b>	Egyptian Micro Finance Federation
<b>ESC</b>	Executive Steering Committee
<b>FC</b>	Finance Coordinator
<b>FIGI</b>	Financial Inclusion Initiative
<b>FM</b>	Finance Manager
<b>FRA</b>	Financial Regulatory Authority
<b>FSS</b>	Financial Services Specialist
<b>GA</b>	GPCU Agronomist
<b>GDM</b>	Governorate Deputy Manager
<b>GFA</b>	GPCU Accountant
<b>GoE</b>	Government of Egypt
<b>GPC</b>	Governorate Programme Coordinator
<b>GPCU</b>	Governorate Programme Coordination Unit
<b>GSC</b>	Governorate Steering Committee
<b>GSM</b>	Gender and Social Inclusion Manager
<b>HRA</b>	HR and Administration Assistant

<b>HRM</b>	HR and Administration Manager
<b>IAMP</b>	Irrigation Asset Management Plan
<b>IAS</b>	Irrigation Advisory Services
<b>ICB</b>	Institutional Capacity Building
<b>IDB</b>	Industrial Bank of Egypt
<b>IE</b>	Infrastructure Engineer
<b>IGE</b>	Income generation and enterprise
<b>IIS</b>	Irrigation improvement Sector
<b>ITU</b>	International Telecommunications Union
<b>KM</b>	Knowledge Management
<b>KYC</b>	Know your Customer
<b>LSP</b>	Lead Service Provider
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MAPS</b>	Medicinal and Aromatic Plants
<b>MA</b>	Marketing Association
<b>MALR</b>	Ministry of Agriculture and Land Reforms
<b>MF</b>	Microfinance
<b>MFI</b>	Micro Finance Institution
<b>MFP</b>	M&E Focal Point
<b>MIC</b>	Ministry of investment and International Cooperation
<b>MKIS</b>	M&E, KM and ICT Specialist
<b>MKM</b>	M&E and KM Manager
<b>MKS</b>	M&E and KM Specialists
<b>MoF</b>	Ministry of Finance
<b>MoSIT</b>	Ministry of Supply and Internal Trade
<b>MoSS</b>	Ministry of Social Solidarity
<b>MSME</b>	Micro/Small Medium Enterprise
<b>MSMEDA</b>	Micro and Small Medium Enterprises Development Agency
<b>MWRI</b>	Ministry of Water Resources and Irrigation
<b>NBFI</b>	Non-Bank Financial Institution
<b>NC</b>	National Coordinator
<b>NGO</b>	Non-Governmental Organisation
<b>NGO-MFI</b>	NGO Microfinance Institutions
<b>NPCU</b>	National Programme Coordination Unit
<b>NPL</b>	Non-Performing Loan
<b>NPM</b>	National Programme Manager
<b>OFIDO</b>	On-farm Irrigation Development Project in Old-lands
<b>ORMS</b>	The Operational and Results Management System
<b>PAR</b>	Portfolio at Risk
<b>PB</b>	Participating Bank
<b>PCR</b>	Project Completion Review

<b>PM</b>	Procurement Manager
<b>PMA</b>	Production and Marketing Association
<b>PRIDE</b>	Promoting Resilience in Desert Environments
<b>PRIME</b>	Promotion of Rural Incomes through Market Enhancement Project
<b>PS</b>	Procurement Specialist
<b>PSC</b>	Programme steering committee
<b>SAIL</b>	Sustainable Agricultural Investments and Livelihoods
<b>SC</b>	Subcomponent
<b>SCS</b>	Social and Community Mobilization Specialist
<b>STS</b>	STAR Technical Specialist
<b>SYP</b>	Star Young Professional
<b>ToT</b>	Training of Trainers
<b>VC</b>	Value chain
<b>VIP</b>	Village Implementation Plan
<b>WRMP</b>	Water Resources Management Plan
<b>WUA</b>	Water Users Association
<b>YCF</b>	Young Community Facilitators

## Executive Summary

**Introduction**<sup>[1]</sup>: The Sustainable Transformation for Agricultural Resilience (STAR) programme aims to contribute to improved living standards of smallholder farmers and poor and vulnerable women and youth in the rural areas in Upper Egypt. The target households will develop resilience to future water scarcity and climate risks by increasingly adopting efficient production and irrigation technologies, improving the quality and productivity of their produce, enhancing their profitability through better market linkages and diversifying their income through a range of microenterprises. The programme duration is Seven years. The target outreach is 240,000 households (1.2 million household members) comprising 160,000 households who will directly benefit from STAR interventions and 80,000 households who will indirectly benefit as their farmlands are located in the STAR rehabilitated command areas. STAR will reach the target households across 160 villages in 24 irrigation command area based clusters (refer para 6 below)

**Benefits:** Key impacts/outcomes of the STAR programme include: i) 20% reduction in percentage of rural households living below the national poverty line in the targeted areas, ii) 50% increase in average HH income, iii) 12,555 new jobs (full time equivalent) created, iv) 50% of rural producers' organizations reporting increase in sales, v) 60% of households reporting increase in production, vi) 60% of households reporting reduced water shortage vis-à-vis production needs, vii) 2 policies or strategies proposed to policy makers for approval, ratification or amendment, viii) an increase in social welfare (multiplying effect) of Egyptian Pound (EGP) 1.04 billion, ix) an incremental tax revenue of EGP 324 million, and x) a tax recovery index of the programme of 75%.

**Programme area:** STAR will implement its activities in three governorates of upper Egypt: Menya, Asyut and Sohag. The geographic area is identified based on high poverty and food insecurity levels. Around 12 million people live in rural regions of these governorates, and 6.7 million (56%) are poor and cannot meet their basic needs. The poverty levels for the three governorates are, Asyut (66%), Sohag (66%) and Menya (57%). Within these areas STAR will follow a programmatic approach as described below.

**Programmatic approach:** STAR will aim at rural transformation in the selected governorates following a programmatic approach. The current IFAD funding cycle of seven years will support STAR Phase 1 which will enable STAR benefits to reach 160 villages, or 20% of the 850 villages in the three governorates. The subsequent phases will be implemented with the objective of building on the Phase 1 success stories and expanding the STAR benefits to the other villages and other governorates in a systematic manner. STAR Phase 1 will facilitate smooth transition to subsequent phases by strengthening Ministry of Agriculture and Land Reforms (MALR's) capacity and readiness to continue, convening donor and government resources to support subsequent phases, leveraging STAR credit funds to crowd-in additional financial resources from private financial institutions, widely disseminate success stories and their implementation mechanisms using digital technologies, strengthening community level institutions and human capacities; and developing a network of service providers capable of scaling up STAR's achievements.

**Implementation stages:** STAR Phase 1 will have two implementation stages, the 'calibration stage' and the 'scaling up' stage. In the *calibration stage (Years 1 to 3)* STAR will focus on consolidating and showcasing the achievements of other donor and IFAD projects and implementing the full range of STAR demonstrations and other interventions in 20-30 model villages (across the 24 clusters) where strong CDAs and community institutions are already present. Year 1 will be devoted to programme start-up, focusing on preparatory activities, embedding the STAR innovations in the programme delivery structures and strengthening the partnerships with the development partners, with limited thrust on achieving village level outreach. The calibration stage will also mobilise and strengthen CDAs and community institutions in the remaining STAR villages (130-140 villages in the 24 clusters) and prepare them for full implementation in the next stage. The *scaling-up stage (Years 4 to 7)* will support the implementation of the full range of STAR interventions in the remaining 130-140 villages which fulfil a set of preconditions that demonstrate their readiness for STAR implementation

**Irrigation command area-based village cluster selection:** STAR will follow an irrigation command area based clustering approach whereby programme interventions will be focused on 24 clusters each comprising a group of 6-8 villages that are served by the same branch canal (mostly third and fourth order) that needs rehabilitation. The IFAD supported On-farm Irrigation Development Project in Old-lands (OFIDO) along with the directorates of MALR, Ministry of Water Resources and Irrigation (MWRI) and Ministry of Social Solidarity (MoSS) in each governorate will identify the STAR clusters by superimposing the map of branch canals (third and fourth-order which need rehabilitation) in the governorate on the map of villages with high or medium presence of poor population.

**Target group:** STAR direct beneficiaries will be classified into six target groups, described mainly based on poverty level, land ownership and access to market. These are i) Very poor households (20% of direct outreach) who are worse-off, landless and near landless households with less than 0.5 feddan; ii) Poor subsistence households (50% of direct outreach) who practice subsistence agriculture (0.5 -1 feddan), with a low surplus for selling and low income due to low prices; iii) market-oriented smallholder households (25% of direct outreach), who own 1 to 3 feddans and are considered borderline poor as they are above the poverty line but at risk to slide back into poverty due to stress and external shocks; iv) better off households (5% of direct outreach) who are lead farmers (3 feddan plus), agro-enterprises and processors who can serve as aggregators and transformation agents and demonstrate the viability of new approaches; v) youth (18-35 years - 41% of direct outreach) comprising those currently engaged (full time or part time) in rural activities and those unemployed (or seasonal workers at minimum wage) interested to explore, identify and engage in better opportunities; and vi) women (45% of direct outreach) with limited opportunities for economic engagement.

**STAR Components:** STAR has two inter-related technical components namely Component 1: Strengthening rural institutions, enterprises and markets and Component 2: Improvement of smallholders' productivity and resilience. Component 3 focuses on Programme management and policy engagement.

**Component 1: Strengthening rural institutions, enterprises and markets:** This component will increase the marketing of produce and profitability of target households' by strengthening their community institutions (CI) and microenterprises and linking these to domestic and export markets. There are two subcomponents (SC): SC 1.1: Strengthening marketing institutions and partnerships; and SC 2.2: Microenterprise development.

*Sub-component 1.1: Strengthening marketing institutions:* This sub-component will increase the profitability of the target households by i) developing and strengthening around 160 Community Development Associations (CDA) and Agricultural Cooperatives (AC) and 1,000 PMAs; ii) facilitating the development of 2,850 business plans (BPs) and credit support to at least 150,000 farmers to facilitate the implementation of these BPs, iii) brokering improved marketing linkages (exporters and domestic market buyers) benefitting at least 85,000 farmers supporting and iv) facilitating improved access to marketing infrastructure and post-harvest technologies for at least 50,000 farmers. The implementation of this subcomponent will involve preparatory studies and capacity assessments, awareness and training module development, preparing a pool of master trainers through ToTs, selection and institutional strengthening of partner CDAs and ACs, mobilisation of Production and Marketing Associations (PMAs), Water Users Associations (WUAs), Income Generation and Enterprise Groups (IGEs), BP development by these groups, supporting these groups to implement BPs by facilitating their market linkages, access to credit funds and technical implementation support. Digital marketing and financing technologies will be developed such as STAR market platform comprising (market players inventory, e-market place, STAR input dealer connect and STAR payments), visual agricultural marketing, and digital finance technologies.

*Sub-component 1.2: Microenterprise development:* This subcomponent will reduce women and youth dependence on their families and increase

smallholder family resilience to income shocks by i) engaging them in income generation and microenterprise activities through 1,500 IGE groups, 200 collective youth enterprises and 50 Small and Medium Enterprises (SME), ii) providing entrepreneurship and skills training to about 40,000 women and youth, iii) creating around 12,555 full time equivalent job opportunities. Women IGEs will be promoted in areas such as poultry and small ruminants (e.g. ducks, goats, sheep), homestead processing and services, roof and homestead gardens, complemented with nutritional awareness campaigns and food conservation. Youth IGEs will include processing and value addition, e.g. dried basil, tomato paste, sun dried tomatoes, pomegranate processing; provision of agricultural services (nurseries, equipment repairs, agro dealership, transport services, mechanisation, agro-dealers and other input provision), marketing information and digital technologies. Digital microenterprise solutions will be promoted such as i) development of mobile based and on-line ordering system for delivery of fresh local produce to the consumers, ii) an "uber" model to aggregate village level produce to the urban markets, or sharing farm technology such as tractors, and iii) e-commerce activities involving rural youth in doorstep (field) delivery of the inputs.

STAR will also support the development of 200 collective youth enterprises such as dairy processing and food processing units which will create 1-9 full time youth jobs each and have supply chain linkages to 20-200 target households. STAR will also support around 50 MSMEs operating as independent enterprise CDAs or companies. Each MSME will create 10-99 jobs (based on MSMEDA classification for MSMEs) and will have supply chain linkage to 50-300 target households. Collective youth enterprises can graduate to MSMEs. STAR will support the SMEs in a similar way to the collective youth enterprises. Collective youth enterprises can graduate to MSMEs. STAR will facilitate the IGEs and enterprises with institutional and entrepreneurial capacity development, BP development, access to credit, technical capacity building and implementation support to implement the BPs successfully.

**Component 2 Improvement of smallholders' productivity and resilience:** This component will improve the resilience to climate change of smallholder crop producers by: securing their access to water resources, active participation in WUAs; enhancing the efficiency and sustainability of their use of soil and water resources, and lower production costs; ensuring compliance with market standards including good agricultural practices (GAP) and safe pesticide residues free food. It will have two subcomponents: SC 2.1 Investments in irrigation infrastructure and management; and SC 2.2 Improved crop farming practices.

*Subcomponent 2.1: Investments in irrigation infrastructure and management:* This subcomponent will improve water management and supply in branch canals and on-farm irrigation efficiency in the 24 selected command areas consisting of connected third and fourth order branch canals and mesqas (mesqa typically serves an area of 50 to 200 feddan or 20 to 80 hectares) in one water unit. This will be achieved through: i) improved irrigation water planning and asset management at governorate level for equitable and reliable water distribution considering current and future challenges from climate change; ii) establishment and strengthening of at least 320 WUAs to enhance participation of water users in irrigation investments, operation, maintenance, and management for sustainability; and iii) improved irrigation systems at on-farm level, for more efficient use of irrigation water benefitting at least 30000 farmers. The Sub Component is a continuation of the interventions implemented under OFIDO building on lessons learnt and introduction of digital technologies in water management. The intended results are irrigation command areas with reliable water supply for farmers (especially at the tail end), improved irrigation efficiency, increased land values at the tail end of the canals and piped mesqas, and water, energy, land and labour saving at programme completion. The implementation of the subcomponent will involve selection of irrigation command areas, improved planning and asset management for equitable and reliable water distribution at governorate level, digitalisation of water management, rehabilitation of branch canals and drainage systems, establishment and strengthening of WUAs to enhance participation of water users in irrigation investments and management and improved irrigation systems at mesqa and on-farm for more rational use of irrigation water.

*Subcomponent 2.2: Improved crop farming practices:* This subcomponent will facilitate smallholder's adoption of improved crop cultivation practices mainly identified in the business plans under subcomponent 1.1. The improvements will consider market product requirements as well as current and future challenges from climate change and the sustainability of the use and management of soil and water resources. This will be achieved through: i) strengthening of public, private and digital extension services; ii) participatory analysis of crop production challenges and identification of options for tolerant crop varieties and improved practices and technologies; iii) training of 500-750 farmers' groups stimulating their experimental learning; iv) technical and financial support for at least 640 demonstration farmers; and v) improved access to machinery. The intended results are farmers accessing timely and scale adapted advice and technical assistance for improving their cropping systems and produce quality and safety, increasing nutrient and biomass recycling, soil sustainability and reducing costs for agrochemical inputs, and adopting practices that builds resilience against heatwaves and actions responding to early warning of reduced water availability in years with low Nile flow. The implementation of the subcomponent will involve i) the strengthening of extension services through STAR young professional (SYP) program, training of CDAs and government extension staff, digital extension services and private extension services; ii) analysis of challenges and identification of solutions; iii) modules for farmers group training and learning; iv) demonstration farmers; and v) access to agricultural machinery services

### **Component 3: Programme management and policy engagement**

*Component 3.1: Programme management:* The Government's lead agency will be the MALR. A high ranking inter-ministerial Programme Steering Committee (PSC) would be set up for overall policy decisions and guidance at the National level. A Governorate Steering Committee (GSC) will be formed in each STAR Governorate to oversee planning, review progress, facilitate linkages between programme stakeholders. A two-level organisational structure will be established. A National Programme Coordination Unit (NPCU) at the National level and three Governorate Programme Coordination Units (GPCU) (one in each Governorate) will be established for implementing STAR.

The NPCU will be established in Cairo at the MALR as a unified coordination unit for consolidated management of all IFAD projects/programme in the country overseeing implementation of STAR along with three other IFAD projects (PRIDE, PRIME, SAIL). All NPCU staff members will be competitively recruited from the professional labour market and will work on a full-time basis for managing all the project/programmes in the NPCU. A National Programme Manager (NPM) will head the NPCU day to day operations. STAR will establish three GPCUs, one each in Menya, Sohag, and the Asyut Governorates. The GPCUs will be dedicated only to the implementation of STAR. The GPCUs will be established as separate offices within the Directorate of MALR and will be headed by a Governorate Programme Coordinator (GPC) from the MALR Directorate. The GPCUs will carry out programme implementation at the village level with the support of partner CDAs, Young Community Facilitators (YCF) and STAR Young Professionals (SYP).

*Component 3.2: Policy engagement:* IFAD will engage with the Government of Egypt in evidence-based policy dialogue, with key decision makers in MALR, MWRI and Ministry of Supply and Internal Trade (MoSIT). This is in line with the COSOP Strategic Objective 2 supporting the development of enhanced policies for inclusive and sustainable rural transformation. More specifically, STAR can play an influencing role in (i) strengthening cooperatives and marketing associations and their regulatory environment; (ii) promoting inclusive rural financial systems for smallholder farmers; (iii) fostering collaboration between MALR, MWRI and WUAs on irrigation water management; and (iv) provide digital solutions for agricultural and rural development. Policy briefs are to be prepared, based on the analyses and results of programme interventions, and shared in learning and policy dialogue events. To that end, at the request of the government, FAO in cooperation with IFAD are in discussion to revise the National Sustainable Agriculture Strategy (SADS) 2030 for Egypt. This policy document, together with a Medium-Term Action Plan to be prepared, determine the national agricultural development strategy and respective investments for a 5-10 year period. Developing policy engagement mechanisms and inter-ministerial coordination are a key part of programme management and will be handled by the NPCU in close collaboration with the IFAD Country Director.

### Programme costs:

The total programme cost is USD 269.6 million of which around i) approximately USD 173.2 million (65%) is mobilized as loans from STAR co-financing partners (USD 63.2 million from IFAD, USD 90 million from African Development Bank, USD 20 million from OFID); ii) USD 14.1 million (5%) is mobilised as grants from STAR co-financing partners (USD 1.3 million from IFAD, USD 2.8 million from Adaptation Fund, USD 9.9 million from World Food Programme); iii) USD 14.6 million (5%) is contribution from the government and iv) USD 67.9 million (25%) is beneficiary contribution (in saved cash, kind, credit accessed from private financial institutions).

Out of the total budget, about USD 189 million (70% of investments) will be used to support very poor and poor smallholder households and USD 81 million (30% of investments) will be directed at market oriented and better off households included as transformation drivers.

STAR will be highly youth sensitive with around USD 111 million (41% of investments) invested on youth and also highly gender mainstreamed with around USD 122 million (45% of investments) invested on women.

About USD 145 million (82% of loans to GoE from STAR co-financing partners) will be recoverable through repayment of preferential credits to cooperating financial institutions, repayments to revolving fund schemes set up at the CDA level and assessment and recovery of dues through government departments (mainly for irrigation improvement investments where CFI credit is not available). All target groups will be clearly informed about the recoverable nature of the STAR investments (wherever relevant) and STAR support will commence only after receiving the prior consent of the beneficiaries on this issue. To avoid any ambiguity about the recoverable nature of STAR support, 75-90% of the recoverable investments will be channelled as credit in preferential terms (refer section 1.A.a, rural financial services) through cooperating financial institutions (CFIs). Non-recoverable costs e.g. climate-change related capacity development, demonstration plots, and support to livelihoods of the poorest beneficiaries, will be covered from the grant resources (e.g. from IFAD and AF), to the extent possible. The nature of activities supported for different target groups and broad mechanism for recovery of these investments is presented in the table below.

Target group	Investment (USD mn)	% of investment	Direct outreach	Activities supported	Recovery mechanism
· Very poor households	54	20%	32,000	- Income generation activities (ducks, goats, sheep); homestead processing, roof/homestead gardens, food conservation; Training and capacity building, Capacity building of CIs	- Repayment of loans to CFIs; Revolving funds repayments to CDAs; support through grants.
· Poor smallholder subsistence households	135	50%	80,000	- Irrigation improvement; Adoption of improved agricultural technology; access to marketing infrastructure, post harvest technologies; Digital marketing and production, Capacity building of CIs	- Repayment of loans to CFIs; Assessment and recovery of share through government departments; some support through grants.
· Market-oriented smallholder	68	25%	40,000	- Irrigation improvement; Adoption of improved agricultural technology, Demonstrations, Digital marketing and production, Capacity building of CIs	- Repayment of loans to CFIs; Assessment and recovery through govt departments; Fees and charges (e.g. for infrastructure use)
· Better off households	13	5%	8,000	- Demonstrations - Digital marketing and production	- Repayment of loans to CFIs; Fees and charges (e.g. for marketing infrastructure use)
· <b>Total</b>	<b>270</b>	<b>100%</b>	<b>160,000</b>		
· Youth (41% investment & outreach)	111	41%	65,000	- Microenterprises: value addition, e.g. dried basil, tomato paste, pomegranate processing, ag. services e.g. nurseries, equipment repairs, agro dealership transport services; input provision, marketing information and digital technologies.	- Repayment of loans to CFIs
· Women	122	45%	72,000	- Women will be supported in all the above mentioned categories. Special focus will be on supporting women from the very poor category on income generation and nutrition improvement activities	- Repayment of loans to CFIs; Revolving funds repayments to CDAs; support through grants for women from very poor category.

**Exit strategy and sustainability:** STAR's exit strategy and sustainability is built on developing the capacity, readiness and resources of the STAR partners, to continue their services in the STAR clusters, driven by market forces, even after Phase 1. This will involve i) strengthening MALR's capacity to continue STAR implementation on programmatic basis by establishing separate NPCU/GPCUs offices, deploying full-time staff and using a mix of seconded staff and competitively recruited staff from the market which will develop technical excellence ii) leveraging the STAR credit funds to crowd-in additional finance to support STAR oriented, pro-poor business opportunities; iii) strengthening community level institutions and human capacities by supporting institutional development, financial sustainability and technical capacity so that they can continue providing services in the programme areas; iv) widely disseminating success stories and their implementation mechanisms using digital technologies; and v) developing a network of service providers to continue supporting STAR's achievements in phase 1 clusters and also support STAR development in future clusters.

## 1. Context

### A. National context and rationale for IFAD involvement

#### a. National Context

- Governance and administration:** The Arab Republic of Egypt has four regions of which the Nile Valley and Delta Region is the only cultivable part of the country. Though this region covers just 5% of the total land area, about 95% of Egypt's population of 98.5<sup>[2]</sup> million live here. The Nile valley part of this region is located towards the South and is referred to as upper Egypt, while the delta part, situated towards the North, is known as lower Egypt. The country has 27 Governorates subdivided into many districts and numerous villages.
- Political and economic context:** Following the revolution in 2011, Egypt underwent political and economic turmoil which slowed down the annual GDP growth rate to 2.5%, increased inflation to 33% and increased the current account deficit alarmingly<sup>[3]</sup>. The present government, sworn-in in 2014, initiated a series of reforms to spur the economy which included passage of the VAT law, reducing energy subsidies, currency liberalisation and containing wage bills. The changes have gradually restored economic confidence, increased stability, promoted investments and enhanced exports. In 2018, Egypt reported an increased GDP growth rate of 5.4%, reduction of inflation to 14% and lowering of the unemployment rate to 11%<sup>[4]</sup>. Much of Egypt's economic reform has unfortunately come at the cost of taking on more debt. In December 2018, Egypt's foreign debt totalled to an all-time high of US\$ 96.6 billion<sup>[5]</sup>, compounded by domestic debt of US\$ 240<sup>[6]</sup> billion. In response, the government has introduced austerity measures, including liberalising the price of bread flour, slashing fuel and transportation subsidies and an in-depth review of new external and domestic debt proposals to reduce non-productive borrowings.
- State of fragility:** The total cultivated area of 3.7 million<sup>[7]</sup> Ha comprises 'old-lands' (two-thirds) which are farmlands adjoining the Nile, and 'new-lands' (one-third) which are reclaimed lands developed away from the Nile, to ease the demands on the old-lands. The pressure on the natural resources in the old-lands has increased rapidly over the last two decades, from the fast-paced population increase from 65 million in 1998 to 98.5 million people in 2018. Furthermore, the population is projected to increase to 150 million in the next 20 years, causing growing concerns about water scarcity, land scarcity, low productivity and widespread food shortages. The population pressure has caused i) high levels of land fragmentation with 43% (upper Egypt) and 30% (lower Egypt) of all farms falling below one feddan (0.42 Ha) land-holding size and ii) incidences of water salinity and increased water shortages mainly affecting the smallholders at the end of the irrigation networks. Irrigation systems, suffers from inadequate investments and maintenance and, are unable to respond to the increased demand for irrigation water. The availability of Nile water is likely to suffer future fluctuations due to climate change and upstream dam construction in Ethiopia. To develop resilience against potential water shortages, the government has identified some command areas that are suitable for shifting to drip irrigation practices. However, at the farm level, there is still little impact of these threats (water shortage) and policies (for water conservation), and farmers continue to use surface irrigation resulting in water application efficiency of only 50%<sup>[8]</sup>. The main factors which challenge the adoption of water-saving technologies are the lack of awareness, demonstration, finances, technical support in managing salinity and adjusting drip irrigation equipment and practices to specific soil types and crops, and marketing support for input supply and selling of outputs.
- Poverty:** The national poverty line is EGP 736 per person per month. Poverty has increased steadily since the beginning of the millennium from 17% (1999-00) to 27.8%<sup>[9]</sup> (2015-16). Another 25% of the population lives just above the poverty line<sup>[10]</sup> and may slide back into poverty with minor shocks. Disparities in poverty follow geographic and gender lines. Around 57% of the population lives in rural areas, and 33% of them are poor. However, in upper Egypt, 75% of the population live in rural areas, and 52% of them are poor. Around 16% of the rural population is landless. Poverty in upper Egypt is driven by high population pressure, land fragmentation, illiteracy, unemployment and low levels of investment in infrastructure and human capital. Women, experience multi-dimensional poverty, with women head of households (11%<sup>[11]</sup> of rural households) being most vulnerable. Youth unemployment (34%) and the lack of women's economic engagement (51% unemployment) have caused high levels of dependency, leading to poverty. Poverty incidences vary widely across governorates, with income poverty most critical in Asyut (66%), Sohag (65.8%) and Menya (56.7%) governorates in Upper Egypt.
- National poverty reduction programs:** In 2015, the Ministry of Social Solidarity (MoSS) launched the "Takaful and Karama" (solidarity and dignity) scheme targeting the poor and most vulnerable, children under 18 years, elderly poor above 65 years and disabled persons. The scheme transfers cash to the eligible families to subsidise costs of children's education, mothers and children health care, healthy nutrition and family planning. The impact evaluation on the scheme show that 90% of the 9.4 million beneficiaries so far are poor and ultra-poor rural women.
- Agriculture development:** Agriculture accounts for 13% of GDP, 20% of export revenue and 55% of rural employment. Around 25%<sup>[12]</sup> of the national, and 55%<sup>[13]</sup> of the upper Egypt labour force is engaged in agriculture. However, the sector is affected by low productivity, low efficiency, gaps in market information, weak linkages to high-value markets, weak rural institutions and limited access to affordable finance. Some of the crops such as wheat, rice, maize, sugar cane and sugar beet are designated as strategic crops. Potatoes, tomatoes, oranges, onions, grapes, and dates constitute 60% of the total fruits and vegetable production. The main exports are cotton, potatoes, onions, tomatoes, legumes, citrus, grapes and melons<sup>[14]</sup>. Economic opportunities related to the production, processing and supply of agricultural produce are growing both in export and the domestic markets. Fruits and vegetables exports have increased 40% from 2.0 to 2.8 million tons over the last decade due to supportive policies, improved quality standards and finding new markets e.g. in EU, China and South Africa. The export of Medicinal and Aromatic plants (MAPS) such as basil, chamomile, fennel, cumin and caraway has increased 10-12% annually over the last 4-5 years. The domestic fruits and vegetable market is expected to grow from the current US\$ 5.5 to 6.2 billion in 2023. (refer PIM, Annex 3, background note on markets and value chains).
- Smallholder farmers:** Around 38% farmers own less than one feddan resulting in a large group of smallholder farmers. Smallholders' production practices are not market oriented and yields are below potential affected by outdated technologies, deteriorating irrigation infrastructure, limited access to quality inputs, services and post-harvest support. These factors combined with, overuse of water resources and agrochemicals, also lead to high production costs, decreased soil fertility, wastage and losses. Smallholders mainly depend on village middlemen (commission brokers) to sell their produce. They are unable to access large traders and exporters directly due to the limited quantity and quality of their produce, individual rather than collective marketing efforts and lack of access to market information such as price, volumes and quality requirements. Studies show that 10-30% of the total harvest by smallholders is affected by deterioration, perishability and wastage due to lack of access to post-harvest technologies and marketing infrastructure such as collection centres, cold storage, storage and packing houses. Smallholders are also affected by the limited access to technical guidance through public extension services which are inadequately funded and have limited capacities. Digital solutions for improved water and soil management, integrated pest management, and sharing and accessing technical and market intelligence information are rarely used. These factors contribute to low farm income for smallholders. A major fallout of the low farm income is the lack of incentive for smallholders for adopting water conservation technologies and improving irrigation efficiencies in addition to the overuse of agrochemicals due to limited knowledge on integrated soil and pest management practices. Consequently, there is very little preparation or resilience against future shocks mainly expected from the increased fluctuations in the flow of the Nile water.

8. **Rural financial services:** The MFI law 2014 considers credit upto EGP 100,000 as microfinance loans. The formal rural microfinance sources are banks (10 out of 40 banks offer microfinance services), MFI companies (10), NGO-MFIs (901) and ACs. MFIs, NGO-MFIs and ACs cannot collect deposits and must borrow from credit wholesalers (CA) such as Agricultural Development Plan (ADP) and Micro, Small and Medium Enterprises Development Agency (MSMEDA) for on-lending. NGO-MFIs have the largest share of rural clients. A wide range of financing options are available for different farming activities at preferential interest rates of 12-15% for individual loans and 5-10% for MSMEs. However, farmers are not aware of the many possibilities and how to use them according to their needs. The NGO-MFIs have limited financial capacity to serve the needs of their clientele quickly which has created the perception of credit unavailability. To bypass the long waiting lists of the NGO-MFIs farmers often opt to get non-preferential credit from MFIs at 25-30%. Perceptions are also not well-grounded on collateral requirements. Despite an array of options to access credit with soft guarantees (without collateral, promissory checks, communal guarantees) farmers express concerns about collateral issues. Cases of lack of collateral hindering access to finance, are exaggerated through word of mouth.
9. The two main credit wholesalers (CWs) are i) the ADP, a revolving fund (from EU, IFAD, GoE, etc) under the Ministry of Agriculture and Land Resources (MALR supporting agricultural credit activities and ii) MSMEDA, a successor of the Social Fund for Development (SFD) offering both financial and non-financial services. The Agricultural Bank of Egypt (ABE) has been restructuring since 2016 and is a critical supplier with 1,210 branches. The Credit Guarantee Company (CGC) is a private company offering guarantees to encourage financial institutions to lend in the rural sector. The agricultural insurance market is underdeveloped with limited crop and livestock insurance services. MSMEDA is working with AfDB to develop indexed crop insurance products, and JICA is working to identify micro-enterprise insurance products (refer PIM, Annex 6, background note on rural finance sector).
10. **National strategies policies and lead institutions:** In line with the UN Sustainable Development Goals (SDGs) 2030 the Government of Egypt (GoE) has a working plan called the Sustainable Development Strategy (SDS) (Egypt vision 2030) which encompasses the economic, social and environmental dimensions of development. All development plans in the country are incorporated under the SDS. In line with the SDS 2030, the MALR has developed the Sustainable Agricultural Development Strategy (SADS) 2030, aimed at modernizing Egyptian agriculture, achieving food security and improving the livelihood of the rural population. SADS 2030 promotes the reduction of rural poverty through sustainable use of natural resources, increased land and water productivity, increased food security, promote competitive agricultural products in local and international markets, more agricultural investments and higher income from rural livelihoods. The GoE has also launched specific projects that address the needs of youth, women and individuals with special needs. The National Water Resources Plan (NWRP 2017-2037) aims at developing water security based on the four pillars of enabling environment, water resources development, enhancing water quality and rational water use. The European Union (EU) is supporting the Ministry of Trade and Industry (MTI) and its key stakeholders in MSME and Entrepreneurship National Strategy Implementation. MSMEDA is currently revising the Micro, Small and Medium Enterprises Strategy.
- 11.

#### b. Special aspects relating to IFAD's corporate mainstreaming priorities

12. **Gender and Social Inclusion:** Egypt ranks 135 out of 149 countries in the 2018 Global Gender Gap Index. The female literacy rate is 65.5% compared to 76.5%<sup>[15]</sup> for male, and female labour participation is 24% compared to 42%<sup>[16]</sup> for male. The illiteracy and difference between men and women's access to education are higher in rural areas in particular in Upper Egypt where 82% of men have ever attended school, compared with 66% of women. Educational attainment is also associated with wealth index, with the largest difference between males and females observed in the lowest two wealth quintiles.<sup>[17]</sup> Women, and even more so rural women. Women suffer from limited mobility and lack of access to skill development training, entrepreneurial opportunities, finance, financial education, market information, nutritious food and dietary diversity. Women's social and economic marginalisation has also led to lower access to education, health, employment, vulnerability to poverty, food security, ill-health and violence. Women have a critical role in Egyptian agriculture, but their contribution is invisible. While men carry out the land preparation, planting, weeding, irrigation, and pest control, women are mostly engaged in animal husbandry (95% in Upper Egypt), fattening small ruminants, and generate additional income from milk, cheese, butter, eggs and poultry. The products are usually used for consumption with a minimal amount sold in the village market. When women are allowed to work outside the homestead they are involved in harvesting, handling, sorting and packing processes within the post-harvest activities. The project aims at 45% of the total direct beneficiaries will be women by supporting productive opportunities that are suitable for them, increasing women's access to skills, knowledge and business orientation, and promote women's leadership and representation. Women are vulnerable to poverty, food security, ill-health and violence. For every 100,000 live births, 33 women die from pregnancy-related causes; the adolescent birth rate is 50 births per 1,000 women aged 15-19.
13. **Youth:** With 24% youth population (ages 18-35) Egypt is facing a youth bulge. The youth population is higher in rural areas. About 34% of youth are unemployed<sup>[18]</sup> compared to the 13% national unemployment rate. About 38% of the unemployed youth hold university degrees, and unemployment rates are double for young women (51%) compared to young men (24%). In recognition of the problem of youth unemployment, the GoE has initiated youth employment schemes in agriculture and agribusinesses, e.g. new land plots reserved for youth from poor families and unemployed graduates. The labour-intensive traditional agricultural practices do not attract the youth to agricultural production activities. The main concern for rural youth is their lack of access to entrepreneurial opportunities, finance, upskilling training and job qualifications. Youth are also more keen to engage with digital solutions improving efficiency and opening new business opportunities in production, processing and marketing. The project aims at 41% of total direct beneficiaries will be youth (18-35 years old) by providing training on entrepreneurial skills, agribusiness, trade, services provision and digital solutions, access to youth financing schemes, and implementing a STAR young professional program.
14. **Nutrition:** Malnutrition is a growing public health concern, with high rates of stunting, micronutrient deficiencies, overweight and obesity. The number of undernourished has increased from 3.7% to 4.6% over the last decade. A recent 'Cost of Hunger' analysis in Egypt concludes that the total losses associated with malnutrition can be as high as 26.8 billion EGP by 2025 without measures to address this issue<sup>[19]</sup>. Obesity is on the rise, compounded by high prices of healthy food, changing lifestyles, and poor nutritional awareness. Around 15% of children are overweight. Also, 31% of adults and 48% of rural women older than 15 are obese. Rising poverty has resulted in increasing dependence on cheaper, calorie-dense foods, including subsidised commodities, all of which correlate with obesity. The project will contribute to improved diet among the target population by supporting smallholder farmers in increasing their production of healthy food and most importantly through nutrition awareness training as an integral part of training offered to women and youth. The project will undertake a detailed nutritional assessment at baseline taking into account specific nutritionally vulnerable populations considering nutrition requirements by age, gender and poverty status.
15. **Climate and environment:** Agriculture in Egypt is very sensitive to climate change. Analysts forecast a temperature increase of 1.5-2°C by 2040, which can decrease the production of wheat by 12%, maize by 47%, rice by 26 to 47% and vegetables by 28%<sup>[20]</sup>. It can reduce the production of livestock and affect the productive potential of many agricultural zones. The marginal agrarian areas will be negatively affected, and desertification will increase, including in the margins of the new lands. High temperatures would increase evaporation and crop and animal water needs, cause acute water scarcity and lead to soil degradation and loss of soil fertility. A rise in sea levels will have negative impacts on coastal areas, tourism and agricultural land in the Nile Delta region<sup>[21]</sup>. Climate change impacts on increased variation in the Nile water flow is

already felt. Egypt suffers from an annual 21 billion cubic meters between water consumption and production. This gap is exacerbated by a decrease of 5 billion cubic meters in Nile waters in 2019 due to decreasing rate of annual rainwater in Ethiopian highlands. The high population pressure increases the pressure on the natural resources causing water scarcity to strike much faster, pushing a high percentage of poverty vulnerable people further into poverty. The project will support smallholders in implementing changes in technologies and practices increasing water and land productivity and livelihood diversification in order to develop their resilience to climate change. Adaptation measures will include improvements in irrigation techniques and know-how, the introduction of drought and salinity tolerant cultivars, the introduction of renewable energy alternatives for water pumping, as well as improving production, post-harvest and marketing facilities.

### c. Rationale for IFAD involvement

16. About 56% of the population in Upper Egypt are poor (compared to 19% in the Nile Delta) due to the prevalence of traditional farming practices in highly fragmented land areas with 77% of agricultural land owned by smallholders where some have 1-3 feddan but the majority have less than 1 feddan. The smallholder farmers in this region have little marketable surplus that weakens their bargaining power and increases their dependence on individual selling in local markets and on commission-based middlemen, leading to low incomes. Moreover, they suffer from limited access to market information, limited value addition opportunities, underdeveloped marketing infrastructure and feeble participation in collective marketing initiatives. The low farm incomes together with the lack of access to affordable finance and limited savings constrain their ability to invest in upgrading their production technologies and adopting market-oriented production practices. Their production capacity is further affected by weak extension services, slow adoption of resource-use efficient and sustainable production practices, deteriorating irrigation infrastructure, especially at the end of the irrigation systems, and limited access to mechanised services.
17. Smallholders are increasingly vulnerable to two slowly intensifying stress factors; namely the population growth and climate change putting pressure on land and water resources. The lack of incentives for adopting water conservation technologies (in the old lands), where surface irrigation still predominates, results in low preparedness and resilience against livelihood risks from increasing temperatures and expected fluctuations in the Nile water flow (due to climate change and the construction of dams upstream). Other key challenges, contributing to limited diversification of family incomes and low resilience capacities, are limited economic opportunities for women, high levels of youth unemployment and moderate levels of malnutrition and lack of dietary diversity. Women's involvement in agriculture production is relatively low due to social norms limiting their movement and farmlands located distant from the village settlements. At the same time there are limited income generation opportunities for women in the villages. The youth are not attracted to agricultural production activities due to labour-intensive traditional agricultural practices generating only limited income. Youth engagement in microenterprises and rural sector jobs are restricted due to limited skills and skill development opportunities and limited access to finance. The project seeks to address these challenges building on the government's and IFAD's experiences and comparative advantages and engagement in Upper Egypt.
18. IFAD has since 1979 accumulated a vast experience from rural development programmes in Egypt, particularly in the areas of developing rural institutions and marketing associations, productivity improvement, supporting resilient livelihoods, improving marketing linkages, and rehabilitation of irrigation infrastructure. IFAD co-financed programmes have benefitted around 1.3 million households and covered about 447,000 feddan. They have mainly focused on two groups of activities: a) support for settlements in lands reclaimed from the desert (the new-lands); and b) support for productivity improvement in old-lands in the Nile Valley and Delta. E.g. the West Noubaria Rural Development Project (WNRDP), helped to increase the settlement rate in new lands from 25% to 100% through social infrastructure and local institution development and creating market linkages. The Upper Egypt Rural Development Project (UERDP) increased incomes, assets and expenses on key items such as education, health and food, and enhanced the resilience of livelihoods of 40,000 beneficiaries.
19. IFAD also has long engagement with the government in supporting smallholders in addressing their production and marketing constraints in Upper Egypt. The IFAD supported PRIME project (completion in 2020) has resulted in several success stories related to marketing and increasing productivity in the STAR programme area. PRIME has capacitated 126 marketing associations (FA) and linked 50% of them (4,000 members) directly to buyers through contract farming. These linkages increased the net income of the farmers by at least 15%. The IFAD supported OFIDO project has rehabilitated irrigation for 20,000 feddans by replacing numerous uncontrolled small lifting diesel pumps, located at multiple points along the branch canals, with single-lift electrically powered collective pumping stations. Open earth canals have been replaced by low pressure buried pipes distributing directly water to farmer plots through outlet hydrant valves reducing the loss of water. STAR will build on lessons learned and integrate and consolidate the achievements of these projects where relevant and expand the outreach of the benefits to other poverty pockets in Upper Egypt.
20. STAR will contribute to the successful implementation of the COSOP (2019-2024) for Egypt as STAR's goals and development objectives are aligned to the COSOP. The COSOP focuses at the lack of incentives for adopting conservation oriented irrigation technologies, the dependence on traditional marketing linkages, lack of access to rural finance and growing threats from climate change and has two inter-related Strategic Objectives (SOs). SO1, is oriented to improve the livelihoods of the rural households enhancing the productivity and profitability of agricultural related activities and SO2 aims to develop policies that support sustainable rural transformation. STAR is also in line with the IFAD Strategic Framework 2016-2025 and relevant IFAD policies. In particular, it is in line with the SO1 of the Strategic Framework 'Increase poor rural people's productive capacities' through improved access to agricultural technology, rural finance and capacity building and SO2 'Increase poor rural people's market participation' through strengthening of farmers organisations, marketing infrastructure and strengthening of the rural investment environment. The design of STAR activities, implementation arrangements and M&E system complies with IFAD Targeting Policy, the Rural Youth Action Plan 2019-21, IFAD rural finance policy and IFAD policy on gender equality and women's empowerment. STAR is also aligned to the IFAD mainstreaming priorities of climate and environment, gender and youth inclusion.
21. STAR will benefit from IFAD's convening capacity to support the government in leveraging and coordinating partnerships with other developing agencies (AfDB, OFID, WFP, etc) to contribute to making STAR a comprehensive programme, supporting the government's strategy to invest jointly in developing the rural sector in Upper Egypt and scale up good practices. Although donor programmes have several success stories, the lack of harmonisation of these initiatives has diluted continuation and consolidation of achievements. The number of poor families in Upper Egypt is very high. Limited time and resources available to the individual donor projects often constrain them from reaching the critical mass needed for triggering transformation and achieving sustainable and scalable results. STAR will provide a platform for multiple donors working on similar themes to collaborate towards achieving a unified objective, with each partner focusing its implementation efforts on its areas of comparative advantage. The STAR platform will facilitate different partners to harmonise their planning, financing and implementation activities and adopt the STAR supported clustering approach for a systematic development of the governorates instead of disbursing resources without coordination.
22. The STAR interventions will capitalise on the existing opportunities created by development trends and other donor and government projects to address the critical developmental challenges in the programme area. The delta region, which is the main agricultural production basin, is facing increasing competition, partnership costs and water salinity issues, causing agribusinesses to explore partnership opportunities in the Upper Egypt region, which has fertile lands, limited competition and fewer water quality and availability issues. Donor projects (e.g. IFAD-PRIME, USAID-Feed the Future) have responded to these opportunities and have demonstrated that it is possible to connect smallholders to export and domestic markets. Similarly, WFP has started land consolidation and joint production among farmers activities, thereby increasing productivity of

fragmented land. Youth are increasingly interested in entrepreneurial activities instead of regular jobs. Responding to this attitude, some donors (UNIDO, WFP) have promoted youth enterprises such as honey production, fruits and vegetable processing and agricultural residue-based handicrafts making. Similarly, WFP has successfully supported women's income generation and nutrition-related activities, e.g. poultry, small ruminants and roof gardens. However, the overall outreach of these success stories is limited. STAR will harmonize, consolidate and upscale the successful experiences of previous projects.

23. Telecommunication network and mobile phones have high penetration which opens up new opportunities for digital solutions, that the project seeks to promote. Farmers are increasingly using social media for agronomic and market-related support. The growing familiarity with digital technologies and social media in the villages provides possible platforms for a range of digital services including digital extension, aggregation, market identification, price transparency, financial inclusion and agronomic support services tailored to smallholders. STAR will build on these opportunities and support developing a set of digital interventions to assist production, marketing, youth employment leading to innovations, efficiency, and scaling up of successful experiences.

## B. Lessons learned

24. **Lessons from PRIME and OFIDO:** STAR design is based on the following lessons learned from the implementation of OFIDO and PRIME:
25. *Geographical concentrated focus within governorates:* The PRIME project implemented its activities in different parts of the governorates without following any specific pattern. Village selection was made mainly based on the presence of strong partner Community Development Associations (CDAs which are NGOs) or cooperatives and not based on poverty targeting or marketing-based criteria. At the same time the investments done through credits are geographically disconnected from the Marketing Associations (MAs) supported and also the OFIDO investments in water infrastructure has not been coordinated with PRIME activities and beneficiaries. STAR will overcome these challenges by following a command area (water unit) based geographical clustering approach in which the poor villages located in the command areas of branch canals (requiring more significant, urgent rehabilitation), will be prioritised for STAR interventions. The model will be replicable in other branch canals. The STAR villages in a cluster will receive the full package of interventions, including credit, water management, production improvement, and marketing support, to create synergies and higher levels of poverty alleviation impacts, using a territorial approach.
26. *Joint planning of village-level interventions.* The PRIME supported credit investments were disconnected geographically from the supported MAs. The gap occurred as MSMEDA and ADP, the CWs which implemented the rural finance component, selected CFIs without coordination or consultation with the PRIME implementation units. The selected CFIs were often located far from the PRIME core villages and they did not select credit beneficiaries based on poverty targeting criteria. STAR will overcome this challenge by involving all partners (CFIs, private sector actors, community institutions and government agencies) engaged in village level implementation of STAR activities to jointly develop a village implementation plan (VIP) at the beginning of each year which will identify the activities of each partner and coordination mechanisms between them (refer component 1.1). Further, the CWs will select the final CFIs from a list of pre-screened CFIs already identified by STAR. Thus, only CFIs that are aware of the STAR objectives and are willing to deliver services in the STAR supported villages will be selected.
27. *Business plan-based approach.* PRIME and OFIDO developed community institutions such as Water Users Associations (WUAs), CDAs and MAs, as community level implementation partners, but there was not enough emphasis on the long-term vision and financial sustainability of these institutions. STAR will follow a participatory institutional and business plan development approach for engaging with the community institutions. The business plans will identify the future goals and objectives and provide a blueprint of activities for achieving these through the successful STAR partnership. No investments will be done before these plans have been agreed by the assembly of the beneficiaries in the group. The institutional development and business plan approach will improve the capacity of the community institutions to sustain and further develop the achievements of STAR interventions.
28. *Separate STAR offices managed by full-time STAR staff:* MALR implemented PRIME and OFIDO using government staff members who also had other responsibilities. Project implementation quality was affected by capacity gaps and the absence of dedicated staff attention to project needs. To address this challenge, IFAD and the GoE will set up a National Project Coordination Unit (NPCU) in Cairo for dedicated management of all IFAD projects including STAR using competitively hired full time technical staff. STAR will establish separate Governorate Programme Coordination Units (GPCU) offices within the MALR directorates, with full time staff to facilitate STAR implementation in the governorates. These changes will provide more time, continuous support and better quality of STAR implementation at the community level.
29. *Strengthen STAR procurement:* The review of MALR's procurement system (applied to OFIDO and PRIME) has indicated: i) low procurement capacity; ii) lack of clarity in instructions to bidders, qualification, evaluation, award criteria, and contract management; iii) inequitable balance in the contract conditions between the employer and contractor; and iv) lack of application of a post-qualification process on the nominated contractor. STAR will address these shortcomings by hiring two qualified procurement specialists on full-time basis at the NPCU. IFAD will provide procurement-related international and national TA during the start-up phase and implementation to strengthen procurement capacity and strengthen the procurement procedures.
30. *Improve coordination with other Ministries:* The ground level implementation of OFIDO was affected by ineffective coordination between different Ministries, e.g. MALR and MWRI. STAR will overcome this by developing a Governorate Steering Committee (GSC) in each STAR Governorate to oversee planning, review progress, facilitate linkages between programme stakeholders and remove bottlenecks affecting smooth implementation. The GSC will meet quarterly. The GSC will also constitute a GSC Technical Committee from within the GSC members to meet whenever needed to resolve any programme implementation bottlenecks encountered. Additionally, participatory AWPB preparation will be followed involving all stakeholders from the beginning.
31. *Transparent and efficient engagement with the communities:* In many locations, OFIDO delayed the development of WUAs, held limited consultations with the communities before implementation, and informed them about the recoverable nature of the project investments only after implementation. These delays and limitations in the consultations have limited the capacity of the WUAs to manage the new infrastructures sustainably and generated resistance to repayments. STAR will address these challenges by developing and strengthening WUAs as the entry point for irrigation related activities. The GPCUs will hold detailed consultations with the WUAs as a part of the process for developing technical specifications for irrigation works. WUAs will also be involved in the development of the village AWPBs and joint village investment plans. Water investment works will only be started when an agreement, detailing investment types and planning and post investment maintenance and operation arrangements, has been achieved with the WUAs. Further, the recoverable investments will be delivered through CFIs to avoid any misconception about the recoverable nature of the investments.
32. **Lessons from the other partners:** STAR design includes many features based on the lessons learned by other development partners. WFP has developed a land consolidation/joint cultivation model (where individual farmers retain their land titles) that incentivises smallholders to merge their lands to support efficient production practices. STAR will partner with WFP for the replication of this model in STAR areas. The USAID 'Feed the Future' project has shown that produce selling contracts have the risk of delayed payments to producers. STAR will guide farmers to develop buffer mechanisms through savings, overdraft accounts and other means to mitigate for late-payments and enjoy higher prices. The USAID experience has also shown little awareness amongst smallholders of regulatory standards, particularly for exports

(traceability, pesticide-free, etc). STAR will strengthen physical extension services and introduce digital extension practices for developing farmer awareness and capacity building related to the above-mentioned areas.

## 2. Project Description

### C. Project objectives, geographic area of intervention and target groups

#### 33. Programme goals and objectives:

34. The **programme goal** is to contribute to improved living standards of smallholder farmers and poor and vulnerable women and youth in the rural areas in Upper Egypt.

35. STAR's **development objective** is to improve the income and resilience of smallholder and landless families. This will be done through better marketing linkages, sustainable and climate change adapted agricultural intensification, development of small rural businesses and inclusive policies and strategies, building on women and youth potentials as untapped resources for family resilience.

36. **Programme duration:** The STAR programme duration is seven years.

37. **Programme outreach:** STAR will provide services to 240,000 poor rural households (1.2 million individuals with an average of 5 members per household), across 160 villages in 24 command area based clusters in the three Governorates of Menya, Asyut and Suhag. The target households are divided into 'direct' and 'indirect' categories. The direct target group consists of 160,000 smallholder households (800,000 individuals) who will receive the full set of STAR services. These producers will be drawn mainly from the categories of extra small (less than 1 feddan) and small landholders (less than 3 feddans) with special emphasis on the inclusion of women, women-headed households and youth (aged 18-35). The indirect target group comprises 80,000 households (400,000 individuals) with farmlands located within the command areas who will also benefit from the STAR supported rehabilitated water infrastructures and their inclusion as transformation drivers in STAR supported WUAs and Production and Marketing Associations (PMA). However, many of these households will possibly be the relatively better-off (above three feddans), who can forge linkages to markets, financing institutions, input suppliers and agricultural service providers on their own.

38. **Key outcomes and impact indicators:** Key impacts/outcomes of the STAR programme include: i) 20% reduction in percentage of rural households living below the national poverty line in the targeted areas, ii) 50% increase in average HH income, iii) 20% increase in Pro-WEAL score over baseline, iv) 12,555 new full time equivalent jobs created, v) 50% of rural producers' organizations reporting increase in sales, vi) 60% of households reporting increase in production, vii) 30% of women reporting improved quality of their diets, viii) 60% of households reporting reduced water shortage vis-à-vis production needs, and ix) 2 policies or strategies proposed to policy makers for approval, ratification or amendment.

39. **STAR supported commodities:** STAR investments will support activities related to fresh and processed fruits and vegetables, medicinal and aromatic plants, field crops relevant to smallholders and other livelihood diversification options such as poultry, small ruminants and beekeeping. To a limited extent, STAR will support dairy, fisheries and other farm-based opportunities with relevant profitability for the target groups. STAR will prioritise commodities with higher nutrition improvement potential in addition to market and income generation potential.

#### 40. Geographic area of intervention

41. STAR will implement its activities in three governorates of Upper Egypt: Menya, Asyut and Sohag. The geographic area is identified based on its high poverty and food insecurity level. Around 12 million people live in rural regions of these governorates, and 6.7 million (56%) are poor and cannot meet their basic needs. The poverty levels for the three governorates are, Asyut (66%), Sohag (66%) and Menya (57%). The largest population with poor access to food in upper Egypt is registered in Asyut with 2.4 million, followed by Sohag with 2.1 million (WFP, 2013). STAR will follow a programmatic approach for further geographical targeting and planning of interventions within these three governorates as described below.

42. **Programmatic approach:** STAR will aim at rural transformation in the selected governorates following a programmatic approach. The current IFAD funding cycle of seven years will support STAR Phase 1 which will enable STAR benefits to reach 160 villages, 20% of the 850 villages in the three governorates. The subsequent phases will be implemented with the objective of building on the Phase 1 success stories and expanding the STAR benefits to the other villages and other governorates in a systematic manner. The key aspects embedded in the implementation arrangements of Phase 1 to enable STAR to make a smooth transition to the next phase are: i) strengthen MALR capacity, coordination with MWRI, and develop their readiness for the next phase; ii) develop standardized implementation arrangements for the successful interventions identified for the next phase; iii) convene government and donor resources to support the next phase; iv) capacitate and orient the CFIs to expand their STAR oriented portfolios to potential clusters for the next phase; v) widely disseminate success stories and their implementation mechanisms using digital technologies; vi) develop the digital agriculture infrastructure and services delivery models necessary for supporting the rapid scaling up of these technologies in the next phase; vii) support policy dialogue based on Phase 1 implementation experiences and strengthen the enabling environment for implementing the next phase; viii) facilitate the strong partner CDAs and ACs to mentor other CDAs/ACs in potential clusters for the next phase; and ix) develop a network of service providers to continue strengthening STAR's achievements in the next phase (refer section on 'exit strategy' for more details).

43. **Implementation stages:** STAR Phase 1 will have two implementation stages, the 'calibration stage' and the 'scaling up' stage. In the *calibration stage (Years 1 to 3)* STAR will focus on consolidating and showcasing the achievements of other donor and IFAD projects and implementing the full range of STAR demonstrations and other interventions in 20-30 model villages (across the 24 clusters in the three governorates) where strong CDAs and community institutions are already present. Year 1 will be devoted to programme start-up, focusing on preparatory activities, embedding the STAR innovations in the programme delivery structures and strengthening the partnerships with the development partners, with limited thrust on achieving village level outreach. Thereafter, STAR will i) mobilise and strengthen CDAs and community institutions in the remaining STAR villages (130-140 villages in the 24 clusters); ii) expose the target households in the new villages to the demonstrations in the model villages using physical study trips and digital extension methodologies, iii) stimulate business ideas and develop readiness of community institutions to prepare BPs that can be implemented in the next stage with STAR support. In the *scaling-up stage (Years 4 to 7)* STAR will support the implementation of the full range of STAR interventions in the remaining 130-140 villages which fulfil a set of preconditions that demonstrate their readiness for STAR implementation (e.g. presence of already strengthened CDAs and community institutions, willingness of target households to participate and adopt new technologies demonstrated).

44. **Irrigation command area-based village cluster selection:** STAR will follow an irrigation command area (water units) based approach for clustering villages focusing programme interventions on a group of 6-8 villages that are served by the same branch canal (mostly third and

fourth order) that needs rehabilitation. STAR will select the irrigation command areas based on criteria including (i) higher concentration of poverty; (ii) the main and second order branch canals and the drainage system are in good working condition and there is no need for major investments for their upstream improvements; (iii) there are no major social and environmental problems that would require substantial mitigation interventions by the programme; and (iv) there is willingness by farmers served by the command area and mesqas (mesqa typically serves an area of 50 to 200 feddan or 20 to 80 hectares and may be subdivided in Merwas, which are canals going into the fields) to participate in the programme including forming WUAs, participate in the management of the branch canal, and agree on cost recovery mechanisms. The IFAD supported OFIDO along with the directorates of MALR, MWRI and MoSS in each governorate will identify the STAR clusters by superimposing the map of branch canals (third and fourth-order which need rehabilitation) in the governorate on the map of villages with high or medium presence of poor population. The cluster selection process will also consider that: i) the selected clusters are distributed across the poorer districts and not concentrated in just 1-2 districts; and ii) some of the clusters in each governorate are located in the edges of the old lands that can allow STAR to develop models and interventions aimed at expanding the green belt at the edges of the old lands.

45. **Community institutions in the programme area:** The different community institutions (CI) present in the programme area are i) Agricultural Cooperatives (AC), present in each village and used by MALR to supply subsidized agricultural inputs to farmers. Their marketing function is very weak, and their management is dominated by larger farmers; ii) Community Development Associations (CDA) are NGOs, registered and supervised by the Ministry of Social Solidarity (MoSS). They have a general assembly with 50-400 community members and partner with larger NGOs and donors projects to implement development programmes at the village level; iii) Marketing Associations (MA) are special interest groups supporting members' produce marketing. They lack legal status and are function under the umbrella of the village CDAs. STAR will refer to these groups as Production and Marketing Associations (PMA) to reflect both production and marketing related functions carried out by them; iv) Income generation and enterprise groups (IGE) are informal groups focused on savings, internal loans, income generation and microenterprise activities. They too function under the CDA; v) Water Users Associations (WUA) are legal entities established under Ministerial decrees as specialized associations performing functions related to water management. They are not involved in marketing activities (refer PIM, Annex 4, background note on community based organisations).

46. **Target groups**

47. **Direct beneficiaries can be classified into six target groups**, described mainly based on poverty level, land ownership and access to market. These are i) very poor households; ii) poor subsistence households; iii) market-oriented smallholder households; iv) better off households and v) youth (age 18-35) and vi) women. The table below summarises target group characteristics;

Target group	Direct outreach	% of outreach	Land ownership	Productivity and access to markets	Other characteristics
· <b>Very poor households</b>	32,000	20%	0.5 feddan	- Limited agricultural and other productive assets	- Landless & near landless, living below the poverty line, ranking amongst the poorest
· <b>Poor smallholder subsistence households</b>	80,000	50%	Less than 1 feddan	- Experiencing very limited access to market and income generation due to low surplus	- Farming on very limited land holding - Living below the poverty line,
· <b>Market-oriented smallholder households</b>	40,000	25%	1-3 feddan	- Access to market but limited return due to low prices, high production and transaction costs, low bargaining power	- Farming on small land holding size - Slightly above the poverty line but vulnerable and transitory poor due to the risks of sliding back into poverty
· <b>Better off households</b>	8,000	5%	More than 3 feddan	- Commercial involvement in value chains - Offers potential market linkage to other target groups	- medium and large holder farmers, traders, processors, aggregators and other actors along the value chains; - transformation drivers
<b>Total</b>	<b>160,000</b>	<b>100%</b>			
<b>Youth (18-35)</b>	65,000	41%		- skilled, graduated as well as unskilled - low opportunities of employment and self-employment - in agriculture (either as farming as a business or skilled/unskilled labours) and - allied sector (agro-entrepreneurship, service provision, extension).	
<b>Women</b>	72,000	45%		- low opportunities of employment and self-employment	

48. *Landless, near landless, very poor and women headed households:* They are worse-off landless and near landless households with less than 0.5 feddan. They have high number of family members/dependants, limited productive capacity and livelihoods focused on animal husbandry (eggs, poultry, ducks), low-income off-farm activities and farm labour. STAR, in line with principles of leave no one behind will include 32,000 such households (70% women, 30% youth).

49. *Poor subsistence smallholders' households (less than 1 feddan):* Farmers in this category practice subsistence agriculture (0.5 -1 feddan), with

a low surplus for selling and low income due to low prices. Adult men are involved in land preparation, planting, weeding, irrigation and pest control while women engage in animal husbandry, dairy activities, cheese and butter processing, and occasional informal selling activities. STAR will target 80,000 such households with minimum 30% women inclusion. STAR will consider specific activities for men (land consolidation, improved agriculture practices) and women (on-farm and off-farm) along the value chains.

50. **Market-oriented smallholders' households (1-3 feddan):** Farmers in this category are considered borderline poor as they are above the poverty line but at risk to slide back into poverty due to stress and external shocks. They typically own 1 to 3 feddans, 1 to 2 cows and buffalos and 5 to 6 small ruminants. They have sufficient labour skills but lack affordable inputs, connectivity to profitable networks and markets, technical capacity, scale and bargaining power. Their produce is sold at a low price through formal and informal outlets such as neighbours, domestic markets, brokers, aggregators. Women practice animal husbandry, small animals fattening, ducks rearing, dairy production for informal sale to complement household income. STAR will target 40,000 market-oriented smallholder households with minimum 30% women inclusion.
51. **Better off households:** These include actors at least one step higher in the agriculture value chain. They include lead farmers (3 feddan plus), agro-enterprises and processors who can serve as aggregators and demonstrate the viability of new approaches. STAR will engage them as transformation agents and will consider their influence and potential to serve other producers with market linkages/services. STAR will target 8,000 better-off households including a smaller percentage of women and youth mainly young men and women graduated from universities and interested in agriculture from agronomic, business and market perspectives.
52. **Youth:** STAR will be highly youth sensitive with around USD 111 million (41% of investments) invested on youth. Youth will comprise 41% of total direct beneficiaries (21% women and 20% men). The target group includes (i) youth (18-35 years) currently engaged (full time or part time) in rural activities at subsistence level with an interest to further develop their activities as a business, making use of technologies and increase their income, and (ii) unemployed (or seasonal workers at minimum wage) youth interested to explore, identify and engage in better employment and self-employment opportunities in agri-business, service provision and allied sectors; and (iii) young graduates interested to apply their skills in the agriculture sectors as professionals service providers.
53. **Women:** STAR will be highly gender sensitive with around USD 122 million (45% of investments) invested on women. Women will comprise 45% of total direct beneficiaries. Details of women's roles and responsibilities and opportunities are presented in the PIM.
54. **Youth mainstreaming strategy:** Young beneficiaries can be economically active by: i) receiving training on agribusiness, trade and services provision; ii) improving entrepreneurial capacities through training, skill building and access to youth financing schemes; iii) STAR young professional program which will develop their field experience, CVs, farmer engagement experiences and capacities to engage in rural sector projects.
55. **Gender mainstreaming strategy:** Women will comprise 45% and men 55% of the total outreach. STAR will address gender disparities by: i) ensuring that women have equal access to capacity building, training, and economic opportunities by deploying facilitators to create an environment and ensure their mobility and participation; ii) promoting productive opportunities that are suitable for women; iii) increasing women's access to skills, knowledge and business orientation through financial literacy, digital literacy and saving habit development; iv) promote women's leadership and women representation in the community institutions; and v) improving household's nutrition by providing women with nutrition education.
56. **Targeting Strategy:** STAR will apply a combination of self-targeting and direct targeting mechanisms. Specific entrepreneurial opportunities (e.g. poultry, small ruminants fattening) will be promoted for the landless and vulnerable households. Poor subsistence households will benefit from interventions such as land consolidation/joint cultivation. Market oriented smallholders will receive support to improve production systems, and irrigation efficiencies and better-off farmers will be more oriented towards demonstration of new technologies which require higher investments and risk-taking behaviour. The type of financing will be aligned to the nature of the above-mentioned interventions. Low-income subsistence households, including unemployed youth and women, will have assured access to affordable credit through revolving fund grants (from WFP resources) to CDAs. Market-oriented smallholders and better off households (transformation drivers) will adopt new processing and packaging facilities, agricultural practices and technologies using STAR credit support extended at preferential terms through collaborating financial institutions (CFI). Refer PIM for detailed description of target groups and targeting strategies, youth and gender mainstreaming strategies, implementation modalities including social assessment, village level profiling, group formation and training and technical assistance for women and youth mainstreaming.

## D. Components/outcomes and activities

57. STAR is designed with two inter-related technical components and a programme management and policy engagement component: Component 1: Strengthening rural institutions, enterprises and markets; ii) Component 2: Improvement of smallholders' productivity and resilience and iii) Component 3: Programme management and policy engagement.
58. **Component 1: Strengthening rural institutions, enterprises and markets**
59. This component will increase the marketing of healthy and nutritious produce and profitability of target households' by strengthening their community institutions (CIs) and microenterprises and linking these institutions to domestic and export markets. There are two subcomponents (SC): SC 1.1: Strengthening marketing institutions and partnerships; and SC 2.2: Microenterprise development.
60. **Sub-component 1.1: Strengthening marketing institutions**
61. This sub-component will increase the profitability of the target households by i) developing and strengthening around 160 CDAs and ACs and 1,000 PMAs; ii) facilitating the development of 2,850 business plans and credit support to at least 150,000 beneficiaries (farmers, women, youth) to facilitate the implementation of these BPs, iii) brokering improved marketing linkages (exporters and domestic market buyers) benefitting at least 85,000 beneficiaries (farmers, women, youth) supporting and iv) facilitating improved access to marketing infrastructure and post harvest technologies for at least 50,000 beneficiaries (farmers, women, youth).
62. **Preparatory studies and assessments:** STAR will contract Lead Service Providers (LSPs) to carry out a set of studies/surveys to: i) assess the capacities and institutional needs of the CIs; ii) prioritise the commodities with more 'market potential', assess their value chains, market channels, competitiveness and marketing infrastructure needs; iii) pre-screen agribusiness with more potential to partner with the STAR supported CIs; iv) identify business opportunities for value addition, agricultural service provision (e.g. nurseries, rental of farm equipment) and income generation for youth and women (refer SC 1.2); v) pre-screen potential CFIs; vi) identify potential digital agricultural services; vii) assess potential climate risks and develop a preliminary list of measures to address these (financed by Adaptation Fund resources.) and viii) identify dietary practices and opportunities for improving family nutrition. STAR will select the LSPs from available private, public, university, and NGO resources through competitive bidding with performance-based contracts (refer PIM, Annex 1 for profile of LSPs). The project will undertake a detailed nutritional assessment at baseline taking into account specific nutritionally vulnerable populations considering nutrition requirements by age, gender and poverty status.

63. **Develop a pool of master trainers through ToTs:**The LSPs will develop a range of training modules based on the findings of the studies/surveys. The STAR NPCU team in consultation with the GPCU teams will review and approve these modules. The modules will address community sensitisation and mobilisation needs, CI institutional development needs, nutrition sensitive agriculture development needs, enterprise and business development needs. STAR will collaborate with the LSP to organise a series of Training of Trainers (ToT) to prepare “master trainers” to roll out the training modules in the STAR villages. The master trainers will include STAR staff members, MALR officers, STAR Young Professionals (SYPs) recruited by STAR, 5-10 Young Community Facilitators (YCFs) nominated by CDAs and ACs in the STAR villages, potential CFIs (for finance, business management modules), other NGOs, donor programs and private consultancy firms (refer PIM for details).
64. **Select and strengthen partner CDAs and ACs:**In most villages CDAs will be selected as STAR partners with some cases where ACs will be selected, when ACs are active in marketing activities. The partner CDAs and ACs will serve as the STAR entry points in a village. STAR will select the partner CDA and ACs from a shortlist prepared by the LSP, based on the initial survey of CIs applying criteria such as partnership track record, governance and management, poor women and youth members; support to PMAs and microenterprises, financial linkages and agriculture and climate related experiences. MoSS will be consulted for final selection of the CDAs. STAR will sign partnership agreements with selected partner CDAs and ACs. STAR will engage the master trainers to strengthen CDAs and ACs focusing on, stronger governance, leadership, management, transparent financial system, pro-poor orientation, enhanced business inclination, climate risks management, orientation to food safety, dietary diversification and nutrition standards (providing knowledge of food sources and their intake requirements for maintaining healthy diets); STAR will also support the partner CDAs and ACs with registration, bank account opening, office furnishing, equipment supply and payment of allowances and engage a YCFs to implement STAR related activities in the villages (refer PIM for details).
65. **Village Implementation Plans:** STAR will begin its collaboration with the partner CDAs and ACs by supporting the development of a Village Implementation Plan (VIP) for each village. The VIP will present how the vision for the development of economic and productive opportunities in the village will be achieved through the STAR supported interventions. It will present the overall scope of the STAR related activities in the village, the target groups, implementing partners and overall budget estimate. It will also present needs for nutrition awareness raising and how training on healthy diets can be included in capacity building activities for different groups. Against this overall framework the partner CDA and AC will prepare detailed annual VIPs at the beginning of each year with physical and financial targets to be achieved in the village during the year. These can be related to activities such as formation of groups, BP development, training and technical assistance needs in areas such as marketing, production, business development, entrepreneurship, food safety, dietary diversification and nutrition standards. The partners responsible for implementing each activity will be identified along with the village level coordination mechanisms between them. STAR will direct support to the villages based on the activities identified in the VIPs.
66. **Community sensitisation and mobilisation:** STAR will mobilise PMAs (C 1.1), IGEs (C 1.2) and WUA (C 2.1). The table below summarises the expected outreach of STAR beneficiaries in these institutions;

Type of community institution	Members /beneficiaries	Approximate STAR outreach (households)*	Women and youth	Poor and very poor
- Water user associations (refer C2.1)	150-500	30,000	60%	70%
- Production and marketing associations	25-75	55,000		
- Income generation and enterprise groups (refer C 2.2)	20-30	40,000		
- Youth enterprise groups (refer C 2.2)	20-200	22,500		
- MSMEs (enterprise CDAs, companies)	50-300	12,500		
	<b>Total</b>	<b>160,000</b>		

67. \*Some beneficiaries can be members in many community institutions. They are counted only once in the above estimates.
68. The partner CDAs and ACs will carry out intense community sensitisation and mobilisation activities in the STAR villages through the engagement of YCFs, appointed at the village level, and support from GPCU staff members and SYP appointed at the village level. The activities will include, communication campaigns including social media and rural radio programmes; capacity building of youth volunteers; meetings with local authorities and special communication events on market days, harvest days; visits to more mature CDAs, ACs, WUAs and PMAs; and usage of digital communication methods to support multi-channel communication and reinforce the key messages. Health and nutrition education, targeting in particular women and youth as agents of change, will feature prominently in the community sensitization activities from the onset.
69. **Forming and strengthening production and marketing associations:** The PMAs will comprise 25-75 members in newly formed or existing groups. They can be loosely structured at the beginning but with the potential to develop into more structured entities with a 3-5 member steering committee. The PMAs will be informal groups housed in the partner CDAs and ACs referred to as the host CDAs/ACs. All PMA members will be members of the general assembly of the host CDA/AC. The PMAs will establish membership fees, regular savings and credit activities, and the practice of retaining some profits to support next cycle investments. PMAs will provide its members with both marketing and production related services. The marketing services will include identification of remunerative markets, negotiating attractive marketing contracts and payment terms, developing marketing/delivery/selling arrangements for supplying the produce to the buyers, and facilitating certification, packaging, grading, branding and labelling of the produce to improve their market appeal.
70. **PMA institutional development and graduation:** PMAs will be trained on, farming as a business and crop budgeting; market analysis, access to market information, partnerships, contract negotiation, financial literacy, access to credit and repayment, public-private producers' partnerships

(4Ps) provision of business advisory services; food safety standards; productivity and production efficiencies (under SC 2.2); and technologies to address climate change and environment related challenges and issues of water availability (also under sc 2.2).. They will also be trained to plan crop production for domestic consumption according to nutritional aspects and dietary diversification factors. A graduation model will be developed to facilitate the progression of mature PMAs from operating as sub-entities of the CDAs into independent income generating associations and private companies. The graduation steps will include capacitating the PMA steering committees to manage independently the PMA's marketing, financial and production related linkages, increase in membership/beneficiaries (e.g. from 25-75 members/beneficiaries to 100-300 members/beneficiaries); increase in the volume of business and accumulated internal capital.

71. **Business plan development:** Two categories of BPs will be developed; i) BPs focused on PMAs (and WUAs) offering marketing support and production linkages to its members and ii) BPs developed by IGEs, youth enterprises and larger graduated enterprises focusing on a range of income generation and microenterprise activities along different agricultural value chains. The total number of BPs prepared and implemented over STAR programme will be as follows;

VIPs	Year 2*	Year 3	Year 4	Year 5	Year 6	Year 7	Total
CDAs and ACs (Total)	30	80	50				160
<b>BPs</b>							
PMAs and WUAs	60	180	350	340	200	20	1,150
IGEs, youth enterprises, graduated enterprises	90	330	565	480	225	10	1,700
<b>Total</b>	<b>150</b>	<b>510</b>	<b>915</b>	<b>820</b>	<b>425</b>	<b>30</b>	<b>2,850</b>

\*year 1 will be devoted to preparatory activities and partnership building with limited village level outreach

72. The main elements and structure of both categories of BPs will be similar. The BPs will include, description of the business concept/business model, targeted market opportunities, strategic, operational and financial elements of the businesses, target beneficiaries (particularly women and youth) outreach of benefits; measures to improve production efficiencies and compliance with market standards, address the effects of climate change and adopt digital technologies; specific measures to increase the impacts on the income, nutrition and resilience of target households. YCF and SYPs will assist CIs interested in preparing a BP to draft and submit a short concept note (1-2 pages). After the concept note is approved by STAR and the relevant STAR CFI, the CIs will develop and submit detailed BPs. STAR will form a BP review committee which will meet quarterly to review and approve submitted BPs (refer PIM for details).
73. **Contract agreement and partnerships:** STAR will support the CIs with approved BPs to develop marketing linkages and partnerships through: i) access to market information involving buyer linkage workshops to connect interested buyers to the STAR supported PMAs, investment in developing the digital STAR market platform (detailed later) to increase producers' knowledge of market prices, standards required, and volumes demanded, and CDAs and PMAs participation in trade fairs and information campaigns to boost their linkages with larger VC actors and institutional buyers; ii) marketing partner identification involving STAR support to PMAs to identify marketing partners based on assessment of information such as quality, quantity of produce demanded, delivery logistics, pricing and price transparency; iii) partnership brokering involving STAR assistance to PMAs to negotiate contracts, establish 4-PPs, receive fair and timely payment from buyers; and (iv) start-up the partnerships through partnership financing, monitoring timely quantity and quality of produce, PMAs' institutional capacity building to develop production work plans, farmers mobilisation, linkages to agro-dealers, machinery services and extension services.
74. **Other market development and marketing support interventions:** STAR will invest in other market development and linkages activities such as: i) produce certification, including organic certification, basic certification (e.g. pesticide free) for local, domestic and export markets; ii) post-harvest support and market infrastructure development, comprising technical assistance and investments in equipment and technologies for improving post-harvest practices (cooling, cleaning, sorting etc) and support product identity, brand development, packaging and labelling related initiatives; and iii) Market infrastructure development, involving investments in market infrastructure including collection centres, cold chains, storage facilities and market outlets. These investments will be prioritised based on their locations, additional benefit to the target households and volume of produce handled. Various operations and maintenance models will be explored (community, PPPs and private). STAR will collaborate with the Ministry of Supply and Internal Trade to promote domestic trade through development of District level mobile markets, Governorate level wholesale markets and rehabilitation of state-of-the-art market places at selected strategic locations.
75. **Financing business plan implementation:** STAR will inject credit funds in Cooperating Financial Institutions (CFI) comprising Commercial Banks (CB), Microfinance Institutions (MFI), Credit Cooperatives (CC), and NGO-MFIs to enable them to offer credit support at preferential terms to CIs with approved BPs. STAR credit funds will enable the CFIs to leverage additional credit funds from their own sources and support the STAR oriented activities by applying the best available preferential interest rates (5-15%) and flexible collateral practices (no collateral, third party guarantees, promissory cheques, group guarantees, formal credit guarantee). STAR credit will support five investment categories: i) on farm irrigation improvement; ii) production improvement, iii) income generating activities; iv) youth enterprises and v) SMEs. Summary of STAR supported investments is presented below.

Type of investment	Investment Size (EGP)	Access through	Tenure (years)	Grace period (months)	No, of HH*	Target bens. (approx. %)	STAR credit investments (%)	Items financed
<b>Agricultural production</b>								

- On farm Irrigation improvement	10,000 – 60,000	WUA	5-6	12	85,000	55%	70%	Pumps, pipes, civil works, hydrants, water meters, digital technologies and model irrigation systems (drip or sprinkler) for improving irrigation efficiency
- Production improvement	7,000-15,000	PMA, CDA, Coops	2-3	6				Inputs, mechanized services; technology adoption (solar, greenhouse, digital); post-production (packaging, branding, labelling); Certification.
<b>Microenterprises</b>								
- Income generating activities	1,000 – 20,000	IGE groups, CDA	1-2	3	40,000	25%	20%	Poultry, small ruminants, honey, homestead production; trading; fruits, vegetables, herbs drying and processing; dairy produce; roof garden.
- Collective youth enterprises	100,000-500,000	youth enterprise gps., CDA	3-5	12	35,000	20%	10%	agro-processing and agro-allied production e.g. handicrafts from agri-residue; dairy, fishery; agro-inputs and machinery services; digital solutions and aggregation models; processing (jam, jelly, tomato paste); commercial operation of cold storage, storage, etc.
- MSMEs	0.5-1.0 million	CDA, coops company						
<b>Total</b>					160,000	100%	100%	

76. \* Some beneficiaries can be members in many community institutions. They are counted only once in the above estimates.

77. *Partnership and credit delivery using Credit Wholesalers and CFIs* STAR will use credit wholesalers (CWs – MSMEDA and ADP), and engage with ABE (and any other commercial bank or eligible financial institution) to manage the STAR credit activities. STAR will disburse credit lines on performance-based criteria to the CWs selected through a competitive process. The CWs will on-lend the funds to CFIs comprising CBs, MFIs, CCs and NGOs-MFIs, which in turn will offer specified loan products to STAR beneficiaries. The CWs will select CFIs in consultation with STAR from a list of shortlisted CFIs prepared by STAR. The CFIs will lend to STAR beneficiaries at market terms. STAR will not interfere on credit risk assessment, ceilings on interest rates and collateral requirements. STAR will orient the competitive process to favour avenues offering milder and more effective credit terms. By maintaining a neutral position, and not distorting the credit market STAR will allow the financial sector to respond positively and crowd-in additional financing resources to support the beneficiaries and sustain the credit-lines for future STAR phases (details in PIM).

78. *Other rural financial interventions:* Other STAR rural finance interventions will include: i) Credit guarantee, wherein STAR will cooperate with the CGC to structure a credit guarantee product to support access to credit by high risk segments of the target group; Savings culture, STAR will promote savings culture within the target group and amongst all institution types and also offer training on planning for future investments through retained earnings from current business cycles and accumulated savings; Non-financial services, STAR will train the CFIs as ‘master trainers’ for training beneficiaries on topics such as business development, financial management, buffer mechanisms (savings, overdraft accounts) to mitigate delayed payments risk from buyers; Revolving funds grants, STAR will use WFP resources to establish revolving fund grants in the selected partner CDAs as an avenue to provide financial support to the very poor target households organized as IGEs (women and youth). The CDAs will deliver affordable income generation credit products as a buffer source of financial support to help the very poor households if they are unable to get STAR credit support through the CFIs due to high risk associated with their new businesses.

79. **Digital technologies:** STAR will support digital marketing and finance technologies such as i) STAR market platform. The STAR market platform will be web based and mobile based system consisting of, a *market players inventory*, in which a database of market players, potential players and commodity wise demand supply data will be maintained, *E-market place*, which will digitally connect farmers to the online marketplace, compare the prevalent market prices for the commodity, determine farmer revenues and profitability and suggests the most optimal market price, enable entrepreneurs, agri-business players to view the details of the farmers produce on dynamic basis; *STAR input dealer connect*, which will provide a digital display of inventory data of some of the most reliable agro-input providers and *STAR payment*, through which, in the later stages of STAR (years 3 or 4), the market platform will be linked to the payment gateways, subject to feasibility; ii) Visual agriculture marketing: “Visual agriculture” refers to the use of the internet, cloud computing, radar and video technology to present models, means and methods of cultivation. Agri-business/merchants may use “visual agriculture” to remotely observe the entire cultivation and management process of vegetables, fruits, etc. Photographs of critical growth stages of the crop will be uploaded in the platform which will provide assurance about the quality of the produce and attract buyers (exporters, merchants). The CDAs or the youth entrepreneurs can take the responsibility for taking and uploading the pictures with low cost digital camera or a smart phone; iii) Digital Finance, Digital finance will offer granular farmer level data (generated from the STAR Platform) to financial service providers for credit profiling and issuing STAR finance cards to provide users with access to a minimum amount of credit for buying inputs at outlets that accept the cards/digital money. In due course, from 2023, STAR money and STAR wallets will be introduced during the 2nd tier of digital strategies (refer PIM for details).

#### 80. Sub-component 1.2: Microenterprise development

81. The objective of this subcomponent is to reduce women’s and youth dependence on and increase their contributions to their families and increase smallholder family resilience to income shocks by: i) engaging them in income generation and value addition microenterprise activities through 1,500 income generation and enterprise groups, 200 collective youth enterprises and 50 MSMEs; ii) providing entrepreneurship and skills training to about 40,000 women and youth; and iii) creating around 12,555 full time equivalent job opportunities. It will: i) ensure that trained youth and women interested in starting or expanding small agri-business receive business development and financial support; ii) promote private agricultural services to complement public extension services, improve the provision of inputs, and other agricultural services, such as compost

making, nurseries and renting of machinery; and iii) promote processing and value addition of agricultural commodities thereby also reducing post harvest losses.

82. **Formation and strengthening of income generation and enterprise groups** The CDCs will mobilise the IGEs with support from the YCF and the YPs at the village level. There will be a special focus on the formation of women's IGEs. The IEGs will comprise between 20-30 individuals, be informal in nature, and developed under the umbrella of the host CDA. All the IGE members must be members of the general body of the CDA. The CDAs will also support the IGEs to develop the IGE bylaws, description of activities and rules and regulations. There will be special focus on training the IGEs on family nutrition and dietary diversification standards. The IGEs will be encouraged to adopt activities which directly enhances family nutrition and dietary diversification. Members will also be trained on how to invest the additional family incomes from the IEG activities on a variety of nutrition rich food items specially for women and children. IGEs will start operations with regular savings activities and investment in internal credit and collective income generation activities. Based on the performance the CDAs will facilitate the IGEs to develop their BPs and access external credit to expand their business activities. Women's IGEs will promote BPs in areas such as poultry and small ruminants (e.g. ducks, goats, sheep), homestead processing and services, roof and homestead gardens, complemented with nutritional awareness campaigns and food conservation.
83. Youth IEGs will include nutrition training and healthy eating habits, processing and value addition, e.g. dried basil, tomato paste, sun dried tomatoes and pomegranate processing; as well as the provision of agricultural services including nurseries, equipment repairs, agro dealership and other input provision, transport services, mechanisation, agro-dealers and other input provision, marketing information and digital technologies. The above-mentioned activities can be carried out by individual group members or collectively by the group.
84. **Digital microenterprise solutions.** Among microenterprises ideas STAR will support digital microenterprise solutions such as: i) development of mobile based and on-line ordering system for delivery of fresh local produce to the consumers; ii) an "uber" model to aggregate village level produce to the urban markets, or sharing farm technology such as tractors; iii) e-commerce activities involving rural youth in doorstep (field) delivery of the inputs, animal husbandry products, which at a scale will prove to be an income generation activity; iv) digital support to small and medium enterprises through services such as reporting, business risk assessment, bank loan feasibility analysis to support their business growth.
85. **Collective youth enterprises and SMEs:** STAR will support the development of 200 collective youth enterprises such as dairy processing unit and food processing unit. STAR will support them through technical training to improve back-office functions such as book keeping and finance management, networking and marketing development support, certification (where relevant), access to credit and outreach to target households. The collective youth enterprises can emerge from IGEs or they can be existing initiatives in the STAR clusters. They will create 1-9 full time youth jobs and have supply chain linkages to 20-200 target households. STAR will also support around 50 Small and Medium Enterprises (SME) operating as independent enterprise CDAs or companies. Each SME will create 10-99 jobs (based on MSMEDA classification for SMEs) and will have supply chain linkage to 50-300 target households. Collective youth enterprises can graduate to SMEs. STAR will support the SMEs in a similar way to the collective youth enterprises.
86. **Institutional and entrepreneurial capacity development:** STAR will facilitate specialised entrepreneurial training for development of business ideas and business skills such as: (i) tailored entrepreneurial training, for example Start and Improve Your Own Business; (ii) technical capacity building in production, processing and agricultural services and the marketing of these products; (iii) applied skills and practical training through apprenticeship programs with established agribusiness; and (iv) mentoring and coaching from experienced entrepreneurs. Entrepreneurial training modules will be developed by SPs with specific expertise in these areas. These will include: i) CFIs which will incorporate the entrepreneurship and income generating training as a part of their outreach strategy; ii) specialised technical service providers such as MSMEDA, NGOs, hired through a competitive bidding process, to diversify its existing training curricula, developing new modules on sources of finance and repayment; iii) ARC, MoI, Technical and Vocational Education and Training (TVET) to diversify curricula, developing new modules on (pre) processing, post-harvest, food conservation and processing, agricultural services, and digital agriculture; iv) UNIDO, on agro-processing such as tomato paste, sun dried tomatoes, and pomegranate; v) WFP technical training on processing; vi) Innovation and Technology Centres of the Ministry of Industry (Refer PIM, Annex 5 for profile of potential service providers).
87. **Enterprise graduation models:** STAR will incentivise a microenterprise graduation model to motivate leading microenterprises to grow and expand the outreach of their businesses. For example, the model will support the IGE enterprises to develop into collective youth enterprises and independent companies on achievement of a set of conditions such as i) a certain level of internal capital; ii) expanding membership base; iii) number of jobs supported; iv) proportion of very poor and poor, women and youth members; v) readiness to form independent credit linkages and other institutional linkages. STAR will incentivise the enterprise graduation process by facilitating access to larger credit volumes, facilitating access to marketing infrastructure support, supporting technical and institutional capacity building needs, assisting the legal formalities and costs for registering and facilitating larger credit linkages.
88. **Business plan preparation:** Microenterprises must develop BPs in order to benefit from STAR credit support and other services. The BP development, review and approval process will be the same as described in SC 1.1. The SYPs and the CYFs responsible for facilitating the BP development process will encourage, where possible, joint proposals between the entrepreneur/s and the marketing association, with contracting arrangements and joint resources already in place. These joint proposals could potentially benefit from additional programme support, both financially and in terms of technical assistance.
89. **Access to finance.** STAR will support the approved microenterprise BPs to access credit support from CFIs. The process for gaining access to finance, potential products, interest rates, collateral mechanisms and access to guarantee fund support will be the same as described in SC 1.1. STAR will use IFAD resources as well as co-financing resources from AfDB to support the relatively large 200 collective youth enterprises and the 50 SMEs.
90. **Component 2 Improvement of smallholders' productivity and resilience**
91. The objective of this component is to improve the resilience of smallholder crop producers by: securing their access to water resources and active participation in WUAs; enhancing the efficiency and sustainability of their use of soil and water resources, and lower production costs; and ensuring compliance with market standards including good agricultural practices (GAP) and safe pesticide residue free food. It will have two subcomponents: SC 2.1 Investments in irrigation infrastructure and management; and SC 2.2 Improved crop farming practices.
92. **Subcomponent 2.1: Investments in irrigation infrastructure and management**
93. The objective of this SC1 is to improve water management and supply in branch canals and on-farm irrigation efficiency in the 24 selected command areas consisting of connected third and fourth order branch canals and mesqas in one water unit. This will be achieved through: i) improved irrigation water planning and asset management at governorate level for equitable and reliable water distribution considering current and future challenges from climate change; ii) establishment and strengthening of at least 320 WUAs to enhance participation of water users in irrigation investments, operation, maintenance, and management for sustainability; iii) rehabilitation of 24 branch canals and upgrading of 320 mesqa level irrigation systems; and iv) improved irrigation systems at on-farm level, for more efficient use of irrigation water benefitting an

estimated 30,000 farmers.

94. The SC is a continuation of the interventions implemented under OFIDO. The intended results are irrigation command areas with reliable water supply for farmers (especially at the tail end), improved irrigation efficiency, increased land values at the tail end of the canals and piped mesqas, and water, energy, land and labour saving at programme completion. Irrigation efficiency will be improved primarily through reduction of losses in the water delivery system (branch canals mesqas and marwas) and at field level. These achievements will be complemented by SC 2.2 results and lead to more stable and increased production and productivity for smallholder farmers increasing their access to food and surplus for marketing. Well defined models of water management, investment cost recovery, and on farm irrigation improvement interventions will be documented for scaling up by the three project governorates and by the national Government in other governorates. The SC will be implemented lead by the Irrigation Improvement Sector (IIS) of the MWRI and their Directorates at governorate level, in close collaboration with the MALR and its Directorates at governorate level, and building on the lessons learned from OFIDO. It will support the following activities:
95. *Selection of irrigation command areas.* As explained under geographical targeting water units/command areas comprising a third and fourth order branch canals and the connected mesqas will be selected for improvement under the programme. Improvement efforts would cover the whole command area, in order to be able to demonstrate impacts of the interventions on production and water productivity and water saving. The criteria for selection of command areas are included in the geographical targeting section. It is expected that an estimated 24 branch canal command areas including 320 mesqas will be improved. To be confirmed based on the ongoing water infrastructure rehabilitation needs and poverty mapping exercise.
96. *Improved planning and asset management for equitable and reliable water distribution at governorate level:* To assist in the planning and management of water resources at governorate level, the programme will finance technical assistance for the development of a water resources management plan (WRMP) and an irrigation asset management plan (IAMP) in each governorate participating in the programme. The WRMPs will provide for the implementation of a local water management system that covers all irrigation water used in the governorate and ensures high levels of water use efficiency and equitable distribution are achieved. The WRMPs will consider the challenges from climate change with increased inter-year variability in the Nile water flow and plan for water distribution management in normal water flow years as well as years with low flows combined with an early warning system and advice to farmers on production related decisions and adaptive measures to take due to reduced water allocations. In addition, the irrigation assets serving each command area in each of the governorates will be identified, mapped and their condition ascertained. An asset management plan will be developed that will identify the necessary frequency for maintenance, rehabilitation, required costs and financing. GIS based interactive maps of the water distribution networks, with key layers and features, will be prepared.
97. *Digitalisation of water management.* To support the effective implementation and continuous updating of the WRMPs and GIS asset maps, digital water meters will be installed at strategic points in the selected branch canal command areas. The digital water meters will be virtually connected through smart phones/data logging systems with the IIS/MWRI and the MWRI Directorate staff at governorate level. The data will be synced with the digital water module of the STAR Platform. The water quantity and quality and time of operation and many other parameters of importance will be collected from 400 installations and analysed to improve the efficiency of irrigation systems in project command areas involving 50 WUAs. Empirical evidence of irrigation efficiency impacts will lead to data driven irrigation management and crop planning. The system could subsequently be moved upstream to second order and primary canals at project midterm. At the farm level, digital water management will be introduced to interested WAUs including phone based automated pump starters which will enable farmers to operate the motor pump set from anywhere anytime using mobile or landline. This activity will bring efficiency in irrigation scheduling, remote access, motor running status, warning alerts, accurate timing of irrigation, precision farming and will transform the irrigation management in the long run. Each governorate will be encouraged to pilot this technology through at least one pilot areas of 1-3 branch canals command areas served by the same second order canal (refer PIM for more details).
98. *Rehabilitation of branch canals and drainage systems.* The third and fourth level canals in the project command areas will be improved through reinforced concrete intakes, stone pitching, control structures (head and cross regulators if any), tail ends. Stone pitching of canals will be done in all areas where the soil conditions are prone to high levels of water infiltration. Drainage systems will be improved including cleaning of large drains and installation of in-field subsurface drains as needed. Feasibility studies and environmental and social impact assessments for the rehabilitation work will identify any eventual social and environmental risks and comparison of alternative designs will support the identification of possible avoidance or appropriate measures to address these risks. The works will be contracted based on competitive bidding processes and social and environmental risk mitigation measures will be included in the contracts as identified.
99. *Establishment and strengthening of WUAs to enhance participation of water users in irrigation investments and management* Rehabilitation and upgrading needs for the mesqas in the selected branch canals will be mapped and discussed with the concerned farmers together with investment and improved irrigation management options. Farmers sharing the same mesqa and expressing interest in forming a WUA and investing in improvement of their mesqa as well as willingness to invest in improved field level irrigation systems will be selected (as a part of Sub Component 1.1 actions) for programme support by the governorate project team including representatives from the IIS/MWRI.
100. In accordance with the Law No 213, formation of WUAs by the beneficiary farmers is a prerequisite for the Government support for mesqa improvement. No mesqa improvement will be implemented unless the WUA is formed and involved in planning and decisions on the design of the improvements and the subsequent management and cost recovery mechanisms covering both investments, operation and maintenance costs. An implementation agreement will be signed between the WUA, IIS/MWRI and MALR agriculture Directorates at governorate level including the design of the improved irrigation infrastructures and works to be procured, and budget and cost recovery conditions and mechanisms (refer PIM for more details).
101. It is estimated that about 320 WUAs will be developed under the Management Transfer Model. This Model gives the full water management responsibilities and its financing (at mesqa level) to the WUAs and minimizes the need for government control. The role of the MWRI staff (District Engineers) will be transformed from implementers to technical advisors and monitors. The WUAs will, within the Law and terms and conditions of the MWRI (as indicated in the implementation agreement), operate, maintain, rehabilitate and improve the water management infrastructure under their responsibility and provide the required resources from their own members and/or from external sources (e.g. MWRI, Local Government, MSMEDA, etc.).
102. WUAs will be trained in irrigation system operation and management tasks, water use efficient technologies and irrigation practices, and climate change impacts on Nile river flows, crop water requirements, and early warnings for periods with low river flows and crop planning actions to take in years with reduced water allocations. The WUAs will be supported in setting up a water management and fee system. The WUAs may also undertake activities that are indirectly linked to water management such as waste management to reduce the waste dumping in the canal system, which causes high maintenance costs. They may also decide to request training and technical advice from the programme for improving their crop farming (see SC 2.2).
103. *Improved irrigation systems at mesqa and on-farm for more rational use of irrigation water* STAR will finance (credit financing) the installation of electric pumps and pipe delivery systems (replacing open canals, that cause loss of land and water, and individual diesel-based pumping, that increases operation costs and pollution) to serve a group of farmers sharing a mesqa covering between 50-200 feddan. Where solar electricity is

feasible, this will be considered instead of connection to the grid for water pumping. In the periods where the solar energy is not needed for pumping other alternative uses will be considered, such as for cold storage rooms.

104. As much as possible, lands under the improved command areas will be levelled using laser guided equipment. The programme will provide training in water-use efficient technologies and practices. In each WUA willing farmers will be identified as demonstration farmers to make the shift from surface irrigation to more water-use efficient technologies such as drip irrigation, punched holes and others. This will be done as on-farm demonstration plots covering at least 10% of land in each selected command area seeking at least one plot in each mesqa. The willing demonstration farmers will receive technical assistance and a demonstration credit to cover 50% of the price for installing the system on 1.5 feddan. This credit will be channelled through the selected CFI serving the project villages and shall only be repaid based on actual pumping cost savings (maintaining the same yields and as such increasing the income) demonstrated through a data log over water use time per week, crops cultivated, and their yields kept by the farmer and monitored by the WUA. The demonstration credit will facilitate that also risk averse small and extra smallholder farmers can participate as demonstration farmers which is important for creating examples to be taken up by other farmers with the same conditions. With the implementation of digital water meter systems, the whole distribution network can be continuously monitored real time by any specified interval reads. This will allow for an incentive mechanism where WUAs compete against each other in reducing water use and increase use efficiency in their mesqas. The most successful WUAs in a branch canal area will be rewarded (e.g. in form of extra inputs or reduction in their credits).
105. *Investment cost recovery.* STAR investments in mesqa improvements will be fully recoverable. STAR will facilitate the WUAs to partner with CFIs and access credit support to implement the mesqa improvement activities. Where credit linkages are not possible or can be delayed, MWRI is authorized to finance up-front and recover the full capital costs of mesqa improvement from the beneficiaries without interest over a 20 years period. Before any investments, arrangements will be discussed and put in place with the WUA for the full cost recovery and included in the implementation agreement, in accordance with the current legal framework. The WUA should be fully aware of the cost of improvements and the terms of the cost recovery prior to any improvement taking place. To create ownership up-front by the WUAs, a new approach for contracting the works and installation of equipment will be considered where the WUAs are made responsible for managing their own procurement process guided by the MWRI. As mentioned earlier, an implementation agreement will be signed, that clearly outlines the conditions and expectations from all parties. No mesqa improvement should be started without the implementation agreement is in place.

#### 106. Subcomponent 2.2: Improved crop farming practices

107. The objective of this subcomponent is to facilitate smallholder's adoption of improved crop cultivation practices mainly identified in the business plans under SC 1.1. The improvements will consider market product requirements as well as current and future challenges from climate change and the sustainability of the use and management of soil and water resources. This will be achieved through: i) strengthening of public, private and digital extension services; ii) participatory analysis of crop production challenges and identification of options for tolerant crops and varieties and improved practices and technologies; iii) training of 500-750 farmers' groups stimulating their experimental learning; iv) technical and financial support for at least 500 demonstration farmers; and v) improved access to machinery.
108. The intended results are farmers accessing timely and scale adapted advice and technical assistance for improving their cropping systems and produce quality and safety; increasing nutrient and biomass recycling, soil sustainability, and reducing costs for agrochemical inputs; and adopting practices that build resilience against heatwaves and actions responding to early warning of reduced water availability in years with low Nile flow<sup>[22]</sup>. These achievements will be complemented by SC 2.1 results and lead to more stable and increased production and productivity for smallholder farmers increasing their access to food and surplus for marketing. Given the importance of planned training related to conservation agriculture and the high demand for credit for water-efficient irrigation at field level, it is then anticipated that a considerable share of the credit line will be spent on climate-focused activities. Building on the findings of SAIL's MTR mission that confirms that 80% of credit applications were for modern irrigation systems, we can conservatively foresee that at least 40% of activities financed by the credit line and credit guarantee will be climate-focused. The implementation of the subcomponent will be led by the MLAR directorates of agriculture at the governorate level in partnership with the public Agriculture and IAS/MWRI extension services, farmer producer groups (PMAs or WUAs), Agricultural Research Institutions and Universities, and private providers of extension services.
109. The SC will provide training and assistance to farmers through two types of farmers' groups formed and/or selected under SC 1.2 and SC 2.1: 1) PMAs organized under CDAs or CAs and with a business plan (developed under SC 1.1) identifying their main crop production development needs, and where farmers may have their plots in different mesqas in the programme intervention area; and 2) farmers organized in WUAs (supported under SC 2.1) sharing the same mesqa who do not necessarily initially want to do joint marketing but who have a common interest in joint cultivation (land consolidation but conserving individual benefits from their own plots), adopting new crops and agronomic practices, or improving their soil, water and irrigation management technologies and practices. The approach to facilitating farmer's adoption of new crops, practices and technologies will focus on building their analytical and experimental learning skills, knowledge and skills in accessing quality information sources, and mutual sharing as a way to empower them to seek advice and inspiration beyond the public extension system recognizing its limited outreach. The SC will support the following activities:
110. **Strengthening of extension services:** The capacities and outreach of public extension services to smallholder farmers, bringing in innovations and jointly with farmers addressing barriers for adoption of new practices, are limited. With retirements of extension staff and the moratorium on hiring new staff, there are no prospects of generational renewal and improvements in these limitations. The SC will therefore support new and innovative solutions for providing access to extension services and quality, timely and implementable information relevant for smallholder farmers. These will include:
111. *Young professional program.* To expand the capacity of extension service providers and support STAR targeted PMAs in adopting new crops, practices and technologies a SYP program for at least 180 newly agricultural and irrigation graduates from the programme governorates will be established. The program will give the SYPs an opportunity to rapidly gain substantial field experience and build their CV and capacities in working with farmers. An additional advantage of giving this opportunity to SYPs, interested in agriculture and irrigation and linking them to the project, is their ability to bring in new ideas including digital solutions and adapt these to the conditions and needs of smallholder farmers. It is expected that after the program a part of these graduates will be able to establish private extension services or join companies or NGOs providing these services in the three governorates. They may also establish agribusinesses strengthening the agro value chains in Upper Egypt. Each participant will be supported with subsistence allowances and complete a one to two years program with the STAR assigned to and spending most of their time in Star supported villages. They will periodically be gathered in one of the governorate main cities to share experiences and receive complementary training. The first of the programme will be training in facilitation methodologies and simple instruments that can support PMAs in building their analytical and learning skills for adoption of new crops, practices and technologies. Another feature in their training program will be the digital solutions that the programme is proposing to introduce, including their further development as lessons are learned with farmers ensuring their continuous adaptation to farmers' needs and ways of appropriating and using the tools.
112. *Training of CDAs and government extension staff.* To further strengthen the supply of facilitators at least 160 CDA, irrigation and agricultural extension staff will be encouraged to participate in the facilitation training provided to the SYPs. They may also be trained in other modules for PMAs training and experimental learning including in climate resilient cropping systems (see proposed modules later in this section).

113. **Digital Extension Services.** Digital extension services will include i) STAR digital knowledge platform accessible through various digital (smart phones, television) and non-digital means (field schools, CDAs) providing digital content to enable farmers to access critical knowledge and advice on production, marketing and related produce requirement, finance, post-harvest, nutrition and climate change awareness; ii) STAR Mobile App will be developed to provide the farmers with personalized climate-sensitive advisory on good agricultural practices based on the individual farmers data, integrated with feeds like weather, market price, etc; iii) video extension will use low-cost technology (pico/nearest projectors with low cost handycams) to disseminate information through short videos; iv) STAR SMS gateway will be used to push alerts to farmers mainly early warning signals related to weather forecasts; v) IFAD / IFPRI's Agricultural Investment Data Analyzer (AIDA) will be customized to help farmers, entrepreneurs, agri-business and policy makers to make decisions on crop mix; vi) social media and whatsapp will be used to provide moderated digital forums for problem solving using WhatsApp groups and facebook. vii) massive open online courses (MOOCs) will be used to support e-learning- including climate and nutrition awareness courses- to help SYPs and other prospective entrepreneurs and farmers to consult with industry players; vi) climate resilience with digital solutions will be delivered using the STAR platform to provide an inventory of climate resilient crops or varieties available, water allocation and heatwave alerts, contingency advisories; and vii) organise digital hackathons to identify the potential digital agri-start ups with the best ideas nurtured and piloted in target area (refer PIM for details). It is foreseen that one third of digital extension services will directly address climate change, bridging an adaptation gap through enhanced awareness, access to practical skills and weather information including early warning.
114. **Private extension services.** The programme will strengthen the capacity and outreach of private extension services through three main avenues: (i) through agribusiness partnerships, embedded private extension services will be provided to small holder farmers (at subsidized rates) to ensure compliance with market requirements and/or food safety standards; (ii) regulated extension services by input providers and agro-dealers; and (iii) agricultural services provided by rural youth, supported under SC 1.2.
115. **Analysis of challenges and identification of solutions.** Each PMA/WUA will be supported by a SYP and CDA staff backed up by agriculture and irrigation extension staff in a participatory analysis of their production challenges and capacity gaps in terms of: introduction of high value and climate resilient crops and varieties; meeting market standards and producing safe produce; integrated pest management reducing use and costs of agrochemicals; improving the integration of soil quality (salinity, nutrients and physical characteristics) and irrigation management; and reducing production costs by maintaining healthy soils and cropping systems, minimizing the need for chemical fertilizers, and reducing water pumping costs through water use efficiency linked to management of soil salinity. To identify suitable solutions, the groups will be presented and discuss different options using: technical guidelines already developed for different high value crops and crop rotation systems; videos with farmers demonstrating their adoption of different practices, and by visiting or bringing successful demonstration farmers. The groups will be trained in how to do cost/benefit estimates of different practices and crop rotation systems, which will help them to make final decisions on which practices to adopt and in keeping simple logs and monitor their actual cost/benefits as they are applying the practices. This will enable them to adjust the practices or combination of practices as they gain experience.
116. **Modules for PMA/WUA's training and learning.** Depending on needs and demands resulting from the business plans and the exercise analysing crop production challenges and solutions, different modules for PMA/WUA trainings will be developed taking advantage of what already exists, and featuring climate adaptation requirements. The development and implementation of the different modules will mainly be done through specialized service providers and partners from agricultural research institutions and universities, NGOs, and private service providers. (refer PIM for list of modules).
117. **Demonstration farmers.** When challenges and solutions are established in an area, the programme will connect farmers with already successful farmers and demonstrations in the area and support additional demonstration farmers in adoption of a full package of changed cropping system. Like for the demonstration of more efficient irrigation practices and technologies, demonstration farmers will be supported with a special demonstration credit covering the cost for 1.5 feddan. The credit will be channelled through the selected CFI serving project villages and the repayment will be based on actual increase in profits from the introduction of the new practice demonstrated through a data log over crop cultivated, inputs, costs, yields and sales kept by the farmer and monitored by the supporting agricultural extension staff. Different demonstration plots relevant for the different groups (extra small, small and larger landholders) will be developed as well as for livestock activities (animal husbandry practices, fattening, poultry among others). PRIME experience showed that smallholder farmers with limited land available are not willing to use their land for demonstration, due to the potential risk associated. In order to overcome this barrier and have demonstrations relevant for all farmers with different holding sizes, the programme will consider using demonstration crop or animal loss insurance schemes for those willing to be demonstration farmers.
118. **Access to agricultural machinery.** As part of improving crop production practices and overcome productivity barriers, farmers' access to machinery may need to be facilitated, such as tractors and different implements, silage machines, residue cutters for composting, etc. The programme may train PMA and young entrepreneurs in setting up machinery sharing schemes (using digital solutions e.g. 'uber' model) including the development of use, operation and maintenance regulations, and budget and fee systems to cover operation, maintenance, repair and depreciation costs. When these arrangements have been agreed and put in place and cash co-financing from beneficiaries have been raised (minimum 30%) the project may facilitate the CDA in accessing finance through the credit lines channelled through CWs (see SC 1.1) and managing the procurement process.

### 119. Component 3: Programme management and policy engagement

#### 120. Component 3.1: Programme management

121. This SC will support STAR programme management including M&E and Knowledge management.
122. The Government's lead agency will be the MALR. A Programme Steering Committee (PSC) would be set up for overall policy decisions and guidance at the National level. A Governorate Steering Committee (GSC) will be formed in each STAR Governorate. A two-level organisational structure will be established. A National Programme Coordination Unit (NPCU) will be established at the National level (in Cairo) to serve as the unified coordination unit for managing all IFAD projects in Egypt including STAR. A National Programme Manager (NPM) will head the NPCU. The NPCU staff members will be competitively recruited. Three Governorate Programme Coordination Units (GPCU) will be established one in each STAR Governorate. The GPCUs will be separate offices within the Directorate of MALR, headed by a Governorate Programme Coordinator (GPC) and dedicated to the implementation of STAR. Details are presented in section 4. *Implementation*.
123. The STAR programme management structure is based on the management lessons learned from past IFAD projects. For example, in the past projects implementation was carried out by government staff members, who also had other responsibilities and sometime suffered from limited capacities. These factors affected the quality of the results. STAR will overcome this challenge by recruiting all NPCU staff members competitively from the market. Amongst other benefits, this arrangement will address the issue of weak financial management capacity encountered in past projects. A dedicated accountant and an accounts assistant will support the STAR financial controller in all financial management activities. They will be recruited on a competitive basis from the market and offered competitive salaries to reduce the risk of staff turnover. The new implementation structure will also benefit procurement functions. In the past, part-time, seconded, government procurement staff were engaged in managing procurement functions which often led to delays. The NPCU will address this problem by engaging a full time Procurement Manager who will be assisted by two qualified and experienced Procurement Specialists. These positions will be hired from the

open professional jobs market at competitive salaries to ensure quality and prevent turnover.

124. Previous IFAD projects used part time governorate staff to manage governorate level project implementation which led to incoherence between AWPB and implementation. The STAR GPCUs will address this shortcoming by appointing a dedicated Governorate Deputy Manager (GDM), competitively recruited from the professional labour market, to lead STAR implementation in the Governorates. The GDMs will be supported by full-time GPCU staff members operating from separate GPCU offices dedicated to STAR management. In order to ensure that the new management structure responds to the expectations, the NPCU in consultation with the IFAD country office will develop clear management performance indicators during the start-up year to be monitored on an annual basis.

### 125. Component 3.2: Policy engagement

126. IFAD will engage with the Government of Egypt in evidence-based policy dialogue, with key decision makers in MALR, MWRI and Ministry of Supply and Internal Trade (MoSIT). This is in line with the COSOP Strategic Objective 2 supporting the development of enhanced policies for inclusive and sustainable rural transformation. At the request of the government, FAO in cooperation with IFAD are in discussion to revise the National Sustainable Agriculture Strategy (SADS) 2030 for Egypt. Together with the MALR. To this end, 6 thematic working groups have been established. This policy document determine the national agricultural development strategy up to 2030, and together with the a Medium-Term Action Plan to be prepared a 5 year period. More specifically, STAR (and IFADs portfolio in Egypt) can play an influencing role in evidence-policy making specifically on (i) strengthening cooperatives and marketing associations and their regulatory environment, with a particular focus on increasing women's and youth's participation and leadership roles in these institutions; (ii) promoting inclusive rural financial systems for smallholder farmers, addressing the demand and supply side challenges faced by women and youth; and (iii) provide digital solutions for agricultural and rural development. Furthermore, the government has requested that IFAD take a leading role in policy engagement in water management. IFAD was the first development partner tackling water issues in reclaimed lands, and pioneering on-farm irrigation in Upper Egypt. STAR aims to now focus on modernising irrigation systems, and strengthening Water Use associations, for collective water management and planning. Furthermore, policy briefs are to be prepared, based on the analyses and results of programme interventions, and shared in learning and policy dialogue events both nationally and regionally. Developing policy engagement mechanisms and inter-ministerial coordination are a key part of programme management and will be handled by the NPCU in close collaboration with the IFAD Country Director.

## E. Theory of Change

127. As described in section 1 A c *Rationale for IFAD Involvement*, the two key developmental challenges in the programme area are i) high poverty levels, limited economic opportunities for women and youth, moderate levels of malnutrition and lack of dietary diversity in small holder farmer households and ii) Threat of severe water scarcity and groundwater depletion. High level of poverty is caused by the prevalence of traditional farming practices in highly fragmented land areas, weak extension services, deteriorating irrigation infrastructure, limited access to quality agricultural inputs and mechanised services, traditional skills and capacities, lack of access to affordable finance, limited savings habits, limited access to marketing information, limited value addition opportunities, underdeveloped marketing infrastructure, feeble participation in collective marketing initiatives. There are also livelihood risks arising from heat waves, prolonged droughts, pest and diseases, water quality, high post-harvest losses and difficult access to irrigation. These factors lead to low crop productivity, slow adoption of improved practices, lack of nutritious diet, high level of wastage, poor quality of produce, little marketable surplus, weak bargaining power, and dependence on individual selling through middlemen and low income. Threat of severe water scarcity is caused by dam building activities in upstream areas, climate change factors and fluctuating rainfall in the Ethiopian highlands causing shortages in the Nile water flows. Economic marginalisation has limited smallholders' ability and motivation to invest in efficient production and irrigation technologies causing predominance of surface irrigation practices and little preparation or resilience against imminent threats of water scarcity.
128. The STAR will address the above mentioned causes driving high rural poverty rates and vulnerabilities among rural families to achieve the STAR programme goal: to contribute to improved living standards of smallholder farmers and poor and vulnerable women and youth in the rural areas in Upper Egypt. The STAR will do so by building on the important opportunities existing in the Upper Egypt context: i) increasing agribusinesses interest in the Upper Egypt region, which has fertile lands, limited competition and fewer water quality and availability issues compared to the delta region; ii) successfully tested development concepts and techniques (by donor projects e.g. IFAD-PRIME, USAID-Feed the Future, WFP, UNIDO) e.g. agribusinesses for domestic and export markets linkages to farmers, contract farming, developing market places, collective marketing through marketing associations, land consolidation/joint farming, creation of youth and women enterprises, improved irrigation systems, equal voice and balanced workloads; and iii) opportunities for digital solutions for extension, aggregation, market identification, price transparency and financial inclusion supported by increase in telecommunication network, mobile phones and use of social media for agronomic and marketing support.
129. Component 1 will improve the income and resilience of smallholder and landless families through better value addition and marketing linkages supported through promoting smallholders' organization in PMAs to strengthen their bargaining power and business management, strengthened marketing associations, digital marketing, visual agriculture and increased access to marketing infrastructure; strengthening farmer organizations for managing sustainable landscape management; facilitating marketing with a priority on nutrient-dense foods (e.g. fruit, vegetables, lentils, beans) strengthening market access (price, more market channels, value addition); improving access to credit supported through business plans, increasing credit availability, business training and savings habit; reduced wastage, achieved by introducing post-harvest processing, storage and packaging practice, equipment, and infrastructure; supporting women's economic engagement to ensure livelihood diversification of smallholder landless families by introducing income generation activities relevant for women supporting value addition and processing; and developing awareness about family nutrition and dietary diversity. Additionally, supporting equal voice through steps such as increasing women's representation in leadership positions in CIs and simultaneously promoting balanced workloads through technology driven interventions; youth job creation achieved through youth enterprises, youth access to credit, skills training, and the SYP scheme.
130. The increase in quality crop production sustaining many of the activities and benefits generated in component 1 will come from Component 2 supporting improved productivity, sustainability and will improve the resilience of smallholder crop production systems. This will be done by: securing efficient management of and access to water resources, through water system management at governorate level supported by digital solutions and adapting to challenges from increased inter-year variability in Nile water flow; branch canal rehabilitation and investments in water saving equipment and management at mesqas and farmer-field levels, all with active participation of farmers through strengthened WUAs; Secured access to irrigation water - which involves rehabilitation and upgrading of physical infrastructure to minimize losses and improve spatial distribution will serve as a key structural adaptive response to water scarcity; enhancing efficiency and sustainability of water resources through improved irrigation water planning, asset management, efficient irrigation systems at on-farm level; demonstrating and promoting the adoption of a range of innovative services, practices and technologies such as introduction of climate resilient and nutrition friendly cropping practices e.g. beans and lentils (potential strategic crops) that could locally enhance resilience (diversification, inter-cropping, conservation agriculture) and enhance access to plant-based protein-rich food; introduction of adapted varieties of existing crops (e.g. hybrid sorghum or yellow maize) or non-traditional crops (e.g. beans and lentils), introduction of specific nutrition-focused activities for the poorest such as hydroponics,

greenhouses, agricultural services; services that reduce exposure and vulnerability to the impacts of climate change and enhance productivity and profitability of smallholder farming; integrated soil and water management practices; consolidated production, laser levelling, drip irrigation practices; increasing the production of crops with higher potential to contribute to family nutrition; supporting sustainable agricultural intensification by strengthening extension services (public, private and digital) to provide essential technical assistance for adaptive/productive management; Introducing digital agriculture solutions (e.g. targeted weather forecasts, crop-specific technical advisory services, market information, e-finance, etc.) to reduce implementation costs, improve knowledge management, and sustain the transformational impact of the development model; facilitating access to inputs, mechanised services and post-harvest machinery; lowering production costs, training PMAs and WUAs in adaptive actions to be taken on early warnings on reduced water allocations and heatwaves, integrated water, soil fertility and pest management, introduction of heatwave tolerant and less thirsty varieties and crops, enabling financial support, improving access to machinery, and compliance with market standards.

131. The above set of interventions will be implemented in an integrated manner within a coherent landscape to increase marketing of nutritious produce and profits of poor smallholders and facilitate the poorest to develop healthier and resilient livelihoods. Further, STAR will follow a programmatic approach and leverage its credibility to forge partnerships with the government and other donors and achieve transformative impact.

## F. Alignment, ownership and partnerships

132. **Alignment and ownership:** i) Alignment: STAR is aligned with SDG 1 (end poverty) particularly 1.2 (reduce poverty by at least 50%) and 1.5 (build the resilience of the poor); SDG 2 (achieve food security) particularly 2.3 (double agricultural productivity and incomes) and 2.4 (ensure sustainable food production systems); SDG 5 (gender equality) particularly indicator 5.5.a (women's equal rights); SDG 6 (availability and sustainable management of water) particularly 6.4 (increase water-use efficiency); and SDG 15 (sustainable use of terrestrial ecosystems) particularly 15.3 (restore land affected by desertification, drought and floods); ii) Country ownership: STAR is aligned with the development strategies of the GoE SDS 2030 and SADS 2030. It is also aligned with IFAD11 Replenishment commitments and its Strategic Framework. The approach and target area are also in line with the Egypt UNDAF and Rome-based agencies approaches.
133. **Synergies and partnerships:** The STAR partnerships with other donor projects and initiatives will be as follows: i) World Food Programme: WFP's rural development initiatives in upper Egypt focus on community mobilisation to support nutritional systems, lower malnourishment, smallholders land consolidation, CDAs and marketing associations development, women's income generation activities, youth enterprises and revolving financing schemes. WFP will partner with STAR to sensitize and mobilize CDAs, ACs, IEGs and PMAs. It will support demonstrations related to climate resilient microenterprises, women's income generation and youth enterprises focusing on innovative production, processing and post-harvest technologies. It will establish CDA level revolving funds to support the adoption of these technologies by women and youth. These activities will be carried out by the WFP teams at the governorate level in collaboration with the STAR GPCUs; ii) African Development Bank: AfDB will partner with STAR to invest in the design, construction and rehabilitation of the branch canals which define the STAR clusters; support recoverable investments for on-farm irrigation improvement works and support STAR partner SMEs to increase their physical capacities and increase demand pull. AfDB investments will be managed from the STAR NPCU and GPCUs through the deployment of additional human resources (if needed) as assessed by AfDBs detailed design mission.
134. Other STAR partners will be i) OFID: OFID will partner with STAR to support marketing infrastructure investments such as development of market outlets, storages and cold storages. OFID activities will be managed from the NPCU and GPCUs without additional staff; iv) Adaptation Fund (AF): AF will support STAR to carry out climate risks analysis and to develop the capacity of community institutions to respond to these risks. It will support demonstration and adoption of innovative climate resilient microenterprises, water-efficient irrigation, production technologies and digital tools for early warning outreach v) Private Financial Institutions will crowd in financial resources (already available at preferential terms) to support STAR oriented activities through financial products, systems and partnerships catalysed through injection of STAR credit.

## G. Costs, benefits and financing

### a. Project costs

This section describes the assumptions underlying the derivation of costs, estimated costs and financing plan for the programme.

- Total programme costs are based on June 2019 prices.
- The STAR programme will be financed over a seven-year period starting from beginning 2020.
- The base rate of domestic inflation has been set at 8 per cent throughout programme duration while international inflation is estimated at 1.7 per cent during the first year of implementation and increases to 1.8 per cent at programme end.
- The exchange rate was fixed at 1USD = 16.5 EGP as per average market forex rate during 2018/2019.
- The total amount of IFAD climate finance for this project is preliminarily calculated as US\$ 16.57 million, representing 26 per cent of IFAD's total investment.
- Both price and physical contingencies are taken into account in the costing of programme. In particular, the category "works" present a 5 per cent physical contingency in light of the higher degree of uncertainty normally affecting infrastructure interventions.
- Taxes and duties have been considered for each cost item.
- The value added tax (VAT) in Egypt reached 14% and is levied on all imported and locally procured goods and services.

135. **Figure 1: Programme cost by expenditure accounts and components (USD '000)**

	Improvement of smallholders productivity and resilience							Total
	Strengthening Rural Institutions, Enterprises and Markets			Production related investments		Project Management, M&E and KM		
	Strengthening marketing institutions	Micro enterprises development	Investments in irrigation infrastructure and management	investments under business plans	Project Management Unit	M&E and Knowledge Management		
<b>I. Investment Costs</b>								
A. Technical assistance and consultancies /a	3,681	483	15,111	3,016	174	802	23,267	
B. Goods, Services and Inputs	440	3,724	1,770	64,291	562	-	70,777	
C. Trainings, Workshops and Meetings /b	5,456	29	4	1,574	99	277	7,439	
D. Civil Works	3,964	-	124,167	-	-	-	128,131	
E. Grants and subsidies	2,411	31,332	-	1,058	-	-	34,801	
<b>Total Investment Costs</b>	<b>15,953</b>	<b>36,568</b>	<b>141,063</b>	<b>69,938</b>	<b>825</b>	<b>1,079</b>	<b>264,416</b>	
<b>II. Recurrent Costs</b>								
A. Salaries and Allowances	-	-	-	-	3,436	-	3,436	
B. Operating costs /c	-	-	869	-	920	-	1,789	
<b>Total Recurrent Costs</b>	<b>-</b>	<b>-</b>	<b>869</b>	<b>-</b>	<b>4,356</b>	<b>-</b>	<b>5,225</b>	
<b>Total PROJECT COSTS</b>	<b>15,953</b>	<b>36,568</b>	<b>141,922</b>	<b>69,938</b>	<b>5,181</b>	<b>1,079</b>	<b>269,641</b>	
Taxes	1,812	520	329	8,459	212	133	11,265	
Foreign Exchange	2,448	1,798	8,330	29,132	361	352	42,420	

a It includes Technical assistance and studies  
b It includes meetings  
c including maintenance

136. Figure 2: Programme cost by expenditure category and financier ('000 USD)

	(USD'000)																				
	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OPD		WFP		Adaptation Fund		Private R		Total		
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>I. Investment Costs</b>																					
A. Technical assistance and consultancies /a	7,474	32.1	360	1.5	-	-	1,620	7.0	13,404	57.6	-	-	37	0.2	383	1.6	-	-	-	23,267	8.6
B. Goods, Services and Inputs	23,787	33.6	417	0.6	3,722	6.3	9,793	13.8	3,004	4.2	-	-	3,287	4.8	1,442	2.0	25,328	36.8	-	70,777	26.2
C. Trainings, Workshops and Meetings /b	5,144	69.1	539	7.2	-	-	1,116	15.0	-	-	-	-	641	8.6	-	-	-	-	-	7,439	2.8
D. Civil Works	7,100	5.5	-	-	8,363	6.5	633	0.5	71,125	65.5	17,589	13.7	-	-	-	-	23,331	18.2	-	128,131	47.5
E. Grants and subsidies	17,316	49.8	-	-	689	2.0	0	-	2,508	7.2	2,411	6.9	5,910	17.0	52.7	1.5	5,440	15.6	-	34,801	12.9
<b>Total Investment Costs</b>	<b>60,820</b>	<b>23.0</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.8</b>	<b>13,161</b>	<b>6.0</b>	<b>90,041</b>	<b>34.1</b>	<b>20,000</b>	<b>7.6</b>	<b>9,874</b>	<b>3.7</b>	<b>2,362</b>	<b>0.9</b>	<b>54,087</b>	<b>20.5</b>	<b>-</b>	<b>264,416</b>	<b>98.1</b>
<b>II. Recurrent Costs</b>																					
A. Salaries and Allowances	2,405	70.0	-	-	-	-	731	21.3	-	-	-	-	-	-	300	8.7	-	-	-	3,436	1.3
B. Operating costs /c	6	0.3	-	-	-	-	1,665	87.5	-	-	-	-	-	-	21.9	12.3	-	-	-	1,789	0.7
<b>Total Recurrent Costs</b>	<b>2,410</b>	<b>46.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,296</b>	<b>49.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51.9</b>	<b>9.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,225</b>	<b>1.9</b>
<b>Total PROJECT COSTS</b>	<b>63,230</b>	<b>23.4</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.7</b>	<b>15,457</b>	<b>5.7</b>	<b>90,041</b>	<b>33.4</b>	<b>20,000</b>	<b>7.4</b>	<b>9,874</b>	<b>3.7</b>	<b>2,871</b>	<b>1.1</b>	<b>54,087</b>	<b>20.1</b>	<b>-</b>	<b>269,641</b>	<b>100.0</b>

a It includes Technical assistance and studies  
b It includes meetings  
c including maintenance

137. Figure 3: Programme cost by component and by year ('000 USD)

	Totals Including Contingencies (USD'000)							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	1,969	3,176	4,731	4,115	1,826	137	-	15,953
2. Micro enterprises development	1,208	7,354	7,855	6,924	6,288	3,167	2,772	35,568
<b>Subtotal</b>	<b>3,177</b>	<b>10,530</b>	<b>12,586</b>	<b>11,038</b>	<b>8,113</b>	<b>3,304</b>	<b>2,772</b>	<b>51,521</b>
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	764	4,817	50,543	54,081	25,836	5,881	-	141,922
2. Production related investments under business plans	1,872	3,733	7,905	19,357	18,588	13,468	5,016	69,938
<b>Subtotal</b>	<b>2,636</b>	<b>8,549</b>	<b>58,447</b>	<b>73,438</b>	<b>44,424</b>	<b>19,350</b>	<b>5,016</b>	<b>211,860</b>
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	1,572	748	660	630	631	631	309	5,181
2. M&E and Knowledge Management	176	119	139	123	125	146	251	1,079
<b>Subtotal</b>	<b>1,748</b>	<b>866</b>	<b>799</b>	<b>753</b>	<b>756</b>	<b>777</b>	<b>560</b>	<b>6,260</b>
<b>Total PROJECT COSTS</b>	<b>7,561</b>	<b>19,945</b>	<b>71,833</b>	<b>85,230</b>	<b>53,293</b>	<b>23,430</b>	<b>8,348</b>	<b>269,641</b>

#### b. Project financing/co-financing strategy and plan

138. Total programme cost (investment cost and incremental recurrent cost, including physical and price contingencies) is estimated at about USD 270 million, 64.5 million (24% of the total cost) of which will be financed by IFAD through a loan and a grant. The Arab Republic of Egypt (GoE) would provide USD 15.4 million (5.7% of total cost) to the entire programme. Contribution from GoE will mainly finance salaries of programme staff as well as taxes of any related expense. In conformity with the principle that no taxes or duties would be financed out of the proceeds of the IFAD Loan/Grant, any future changes in the rates and/or structures of taxes and duties would have to be met by the Government. The African

Development Bank (AfDB) will co-finance STAR with USD 90 million (33% of total cost) that will be allocated mainly to the financing of infrastructures entailed in component 2 for a total cost of USD 87 million (32% of total cost). The Opec Fund for International Development (OFID) will contribute about 20 million (7.4% of total cost) to the financing of infrastructure development under component 1 and 2. The World Food Programme (WFP) will co-finance the STAR programme with about USD 10 million (3.7% of total cost) supporting the strengthening of rural institution and the development of micro-enterprises. Grant resources of the Adaptation Fund (AF) for about USD 2.8 million (1.1% of total cost) will be allocated across all three components. The STAR programme would also be supported by private financial institutions contributing about USD 5 million (20% of total cost) to be allocated mainly for the co-financing of component 2. Contribution from beneficiaries, both in-kind and in-cash, are expected to amount to USD 12 million (4.7% of total cost). The foreign exchange component is estimated at USD 43 million. Taxes and duties are estimated at USD 11.3 million. Funds allocated to the Programme Management Unit are of USD 6.2 million, equal to 2.3% of the total cost. Tables below summarizes Programme costs and financing. Detailed cost tables and estimates are provided in appendix 3

	(USD'000)																				
	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total		
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>																					
1. Strengthening marketing institutions	5,508	34.5	1,276	8.0	-	-	2,483	15.6	-	-	5,742	36.0	661	4.1	282	1.8	-	-	15,953	5.9	
2. Microenterprises development	16,671	46.9	-	-	689	1.9	520	1.5	2,506	7.1	-	-	9,213	25.9	527	1.5	5,440	15.3	35,566	13.2	
<b>Subtotal</b>	<b>22,179</b>	<b>43.0</b>	<b>1,276</b>	<b>2.5</b>	<b>689</b>	<b>1.3</b>	<b>3,004</b>	<b>5.8</b>	<b>2,506</b>	<b>4.9</b>	<b>5,742</b>	<b>11.1</b>	<b>9,874</b>	<b>19.2</b>	<b>809</b>	<b>1.6</b>	<b>5,440</b>	<b>10.6</b>	<b>51,521</b>	<b>19.1</b>	
<b>B. Improvement of smallholder's productivity and resilience</b>																					
1. Investments in irrigation infrastructure and management	9,662	6.8	30	-	8,353	5.9	1,759	1.2	84,529	59.6	14,258	10.0	-	-	-	-	23,331	16.4	141,922	52.6	
2. Production related investments under business plans	27,665	39.9	-	-	3,722	5.3	8,459	12.1	3,004	4.3	-	-	-	-	1,543	2.2	25,326	36.2	69,936	25.9	
<b>Subtotal</b>	<b>37,327</b>	<b>17.7</b>	<b>30</b>	<b>-</b>	<b>12,075</b>	<b>5.7</b>	<b>10,218</b>	<b>4.8</b>	<b>87,532</b>	<b>41.3</b>	<b>14,258</b>	<b>6.7</b>	<b>-</b>	<b>-</b>	<b>1,543</b>	<b>0.7</b>	<b>48,656</b>	<b>23.0</b>	<b>211,660</b>	<b>78.6</b>	
<b>C. Project Management, M&amp;E and KM</b>																					
1. Project Management Unit	2,577	49.6	-	-	-	-	2,084	40.2	-	-	-	-	-	-	519	10.0	-	-	5,161	1.9	
2. M&E and Knowledge Management	928	66.0	-	-	-	-	151	14.0	-	-	-	-	-	-	-	-	-	-	1,079	0.4	
<b>Subtotal</b>	<b>3,505</b>	<b>56.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,236</b>	<b>35.7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>519</b>	<b>8.3</b>	<b>-</b>	<b>-</b>	<b>6,260</b>	<b>2.3</b>	
<b>Total PROJECT COST \$</b>	<b>62,230</b>	<b>23.4</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.7</b>	<b>15,457</b>	<b>5.7</b>	<b>90,041</b>	<b>33.4</b>	<b>20,000</b>	<b>7.4</b>	<b>9,874</b>	<b>3.7</b>	<b>2,671</b>	<b>1.1</b>	<b>54,097</b>	<b>20.1</b>	<b>269,641</b>	<b>100.0</b>	

### c. Disbursement

139. Funds from IFAD will be disbursed as follows: i) NPCU: Funds from IFAD (IFAD Loan, IFAD Grant, AF and OFID) will be transferred to the MoF Treasury Single Account (TSA) where it will be managed on a ring-fenced basis using unique codes for each source of finance. A dedicated MoF accounting unit based within MALR will make payments electronically from the TSA on behalf of STAR using the Government Payment System, subject to approval by MALR and MoF authorised signatories. Disbursement to the TSA will be managed on an imprest basis. The NPCU will submit quarterly WAs or once 30% of the advance is utilised (whichever occurs earlier); ii) Credit Wholesalers (CW e.g. MSMEDA and ADP): A part of the IFAD Loan will be utilised as credit lines to CAs (e.g. MSMEDA and ADP). IFAD will disburse funds to USD designated accounts (DA), opened at bank(s) suitable to the Borrower. The CWs will disburse to CFIs from the respective DAs. The CFIs will lend to beneficiaries. The DAs will be managed on an imprest basis and all transfers from the DAs will require 2 authorised signatories. The CWs will submit quarterly WAs or once 30% of the advance has been utilised (whichever occurs earlier); iii) Credit Guarantee Company (CGC): A part of the IFAD Loan will be disbursed directly to the CGC. The CGC will open a USD designated account at a bank suitable to the Borrower. Disbursement to CGC will be in tranches, subject to forecasted increase in the volume of credit guaranteed. Flow of funds from the DA will be for settling claims from CFIs. Refer to PIM, Annex 6 for overview of CGC.

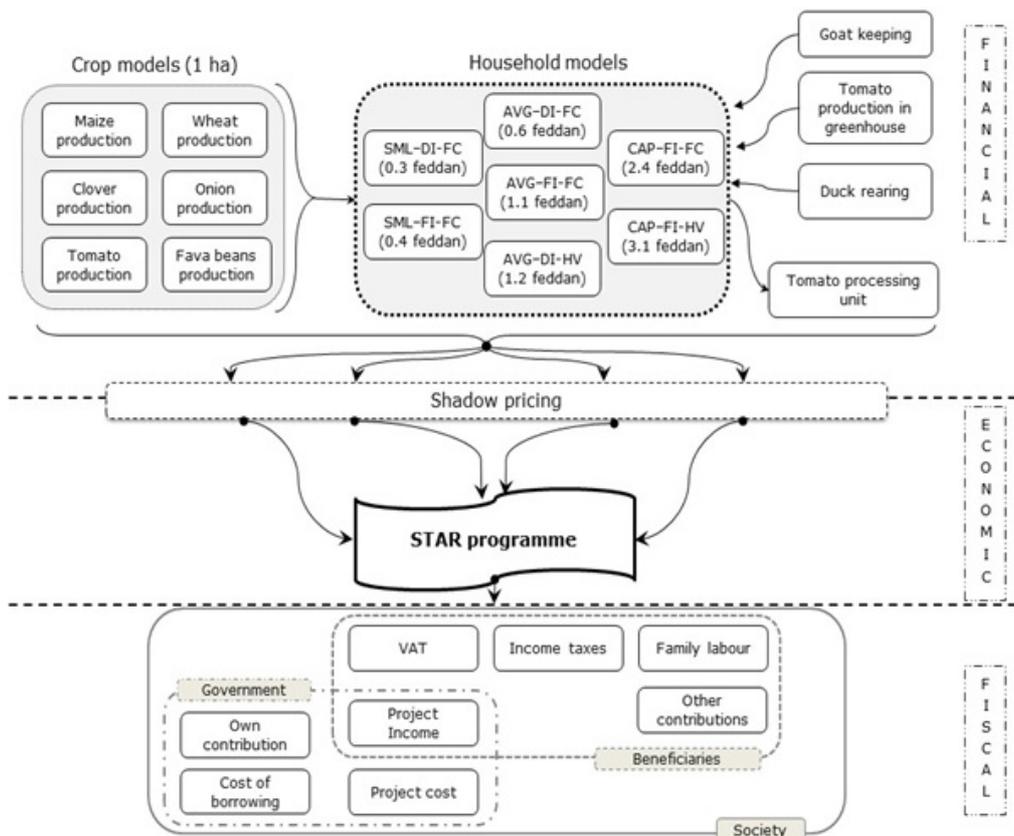
140. Other disbursements will be as follows: i) Counterpart contribution: Counterpart contributions will be disbursed from the National Investment Bank on behalf of the Government into the Ministry of Finance Treasury Single Account and ring-fenced for the project using a unique TSA code. Disbursement is subject to written request from the MALR to the Ministry of Planning in line with pre-approved expense categories; ii) Beneficiary contributions: Beneficiary cash contributions are required for purchase of machinery, irrigation infrastructure, etc. In all instances, beneficiaries will transfer their cash contributions to selected suppliers before CFIs release their credit contribution to the supplier; iii) WFP and AfDB will be responsible for implementing flow of funds arrangements for their respective funds. (use of bank accounts, withdrawal applications etc.); iv) The detailed flow of funds diagram is outlined in the PIM.

### d. Summary of benefits and economic analysis

- Benefits to the STAR target group would accrue from: (i) increased water availability for productive use; (ii) diversification of productive activities and sources of income thanks to access to finance; (iii) increased food availability for rural poor, (iv) increased value-added of agricultural outputs; (v) enhanced processing efficiency through innovative technology and improved infrastructure; (vi) improved quality of processed products, thus attracting higher prices at local market; (vii) increased employment either for hired or family labour, for both on-farm and off-farm activities; and (viii) tax revenues as a result of increased volume of taxable production.
- This section presents the Economic and Financial Analysis (EFA) of project's interventions through the use of indicative activity models. The analysis builds upon the precautionary principle, accounting for programme benefits in a realistic and conservative manner. A cash-flow analysis is finally carried out to present the "with" and "without" programme analysis. The key-indicators used to carry out the analysis are Net Present Values (NPVs), Financial and Economic Internal Rate of Return (FIRR - EIRR), Benefit-cost ratio (BCR), payback periods and switching values for both benefits and costs.
- Financial analysis.** The primary objective of the financial analysis is to determine the financial viability and incentives for the programme target group as a result of their engagement in programme activities, and hence to determine the economic impact on family labour, cash flow and household incomes. A number of indicative economic activities to be supported by programme were identified during the programme design mission. The following activities are considered in the elaboration of household models: (i) Maize production; (ii) Wheat production; (iii) Clover production; (iv) Onion production; (v) Tomato production; (vi) Fava beans production, (vii) Goat keeping and (viii) duck rearing. These production models are used as building blocks for the elaboration of seven household models where differentiation is made both in terms of land holding, source of income and production systems<sup>[1]</sup>. Finally, a tomato processing unit model is also considered to describe the expected benefit related to agro-processing. All the technical assumptions within the models have been elaborated jointly with the team members on the basis of field surveys, national statistics, international and national expert consultation and technical studies. The diagram in

figure 1 provides a logical sketch of the adopted approach while summary results from the financial models are presented in table 1.

141. Figure 1: EFA diagram



142. Table 1: Summary of financial models' results

MODELS	NPV (EGP) @ 12%	Return to family labour (EGP)	IRRf	B/C ratio	Switching value Benefits	Switching value Costs	
SML-DI-FC	4,060	252	25%	1.06	-5%	6%	
SML-FI-FC	3,576	224	23%	1.05	-5%	5%	
AVG-DI-FC	5,408	261	29%	1.07	-7%	7%	
AVG-FI-FC	9,089	296	40%	1.11	-10%	11%	
AVG-DI-HV	18,439	569	39%	1.51	-34%	51%	
CAP-FI-FC	5,758	421	16%	1.08	-7%	8%	
CAP-FI-HV	105,740	582	35%	1.27	-21%	27%	
Tomato processing unit	4,135,160	n/a	33%	1.08	-7%	8%	

143. 4. Project target group and beneficiaries. The primary target group for the Programme will be commercially-orientated smallholder farmers - particularly women and young entrepreneurs. The programme will have a poverty focus and it is estimated that the number of direct beneficiaries will be 160,000 HHs of whom 84,179 HHs are directly accounted for in the production models considered in the EFA. The aggregation for production models is based on the number of HHs directly engaged in the activity. This approach could not be used in the accounting of processing units - given the different nature of the investment. In this case, the aggregation is based primarily on the number of plan/facilities established. The total number of HHs benefitting of the newly formed agro-processing units are finally calculate and based on an estimated outreach of 243 HHs per unit.

144. 5. Overall the programme will benefits women, youth and men directly involved in farm and off-farm activities proposed by the programme as well as indirect beneficiaries employed in the value adding activities and benefitting from the rehabilitated infrastructure. The inclusion pattern of the EFA modes and beneficiary is described the table below.

145. **Table 2: Beneficiaries and investment phasing**

		MODELS	unit	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Total
Production	SML-DI-FC	HHs	313	1,336	5,569	6,580	4,057	1,738	610	20,203	
	SML-FI-FC	HHs	313	1,336	5,569	6,580	4,057	1,738	610	20,203	
	AVG-DI-FC	HHs	313	1,336	5,569	6,580	4,057	1,738	610	20,203	
	AVG-FI-FC	HHs	144	612	2,552	3,016	1,859	797	280	9,260	
	AVG-DI-HV	HHs	144	612	2,552	3,016	1,859	797	280	9,260	
	CAP-FI-FC	HHs	52	223	928	1,097	676	290	102	3,367	
	CAP-FI-HV	HHs	26	111	464	548	338	145	51	1,684	
Processing	Tomato processing unit	unit	2	4	6	6	6	3		27	

146. 6. In the economic analysis of the project we will: (i) examine the overall Project viability; (ii) assess the Project's impact and the overall economic rate of return; and (iii) perform sensitivity analyses upon risks and variables affecting project's results.

147. **7. Key Assumptions.** Production and activity models considered in the financial analysis are used as building blocks for determining the viability of the whole project, once addressing for market distortion and opportunity costs for inputs and outputs. The economic analysis of the programme hinges on the following assumptions: (i) Programme life has been assumed at 20 years in light of investments lifecycle; (ii) programme inputs and outputs are valued at their economic parity prices estimated upon international prices as reported by the World Bank commodity outlook, and on the basis of custom duties and taxes rates as provided by the national bureau of international trade; (iii) an economic discount rate of 10% has been calculate as the weighted average of saving interest rates, long term bonds yields and the real interest rate; (iv) family labour is valued at its opportunity cost; (v) the shadow exchange rate factor (SERF) of 1.02 is calculated upon international trade statistics and applied for the conversion of tradable commodity prices; (vi) conversion factors for main inputs and outputs are calculated starting from international prices and on the basis of import and export taxes and duties in Egypt; and (vii) the shadow exchange rate (SER), estimated upon international trade data, is equal to EGP 17.

148. **8. Economic Profitability.** The programme is a technical and economically viable investment to the economy as a whole. The programme economic NPV of the net benefit stream, discounted at 10%, is EGP 941 million (USD 57 million) producing an EIRR of 18% for the base case scenario.

149. **9. Sensitivity analysis.** Switching values and critical threshold have been identified for key variables. In particular, the project would no longer be viable in case: a) investment cost increases by 38%; b) operating cost increases of 13%; b) benefits decline by 10%; c) input cost increases by 11%; d) output prices fall by 10% e) programme beneficiaries involved in productive activities are less than 38,772 HHs.

150. 10. Finally, the sensitivity analysis allows to examine the effects of a simultaneous variation in some of the pre-identified key variables on the overall project profitability, hence determining all possible combinations of variables' changes that would result in a negative (or positive) NPV.

151. **Figure 2: Simultaneous sensitivity analysis (EGP '000)**

		Investment cost									
		20%	40%	60%	80%	100%	120%	140%	160%	180%	200%
Benefits	20%	(22,428,321)	(12,652,503)	(9,494,717)	(7,991,439)	(7,149,964)	(6,639,391)	(6,317,905)	(6,114,597)	(5,990,076)	(5,920,705)
	40%	(14,023,476)	(8,236,456)	(6,408,270)	(5,569,792)	(5,127,197)	(4,882,543)	(4,750,999)	(4,690,149)	(4,676,428)	(4,695,697)
	60%	(5,618,631)	(3,820,410)	(3,321,822)	(3,148,144)	(3,104,429)	(3,125,895)	(3,184,094)	(3,265,701)	(3,362,780)	(3,470,688)
	80%	2,786,214	595,637	(235,375)	(726,496)	(1,081,661)	(1,368,847)	(1,617,189)	(1,841,253)	(2,049,131)	(2,245,680)
	100%	11,191,059	5,011,684	2,851,072	1,695,152	941,107	388,001	(50,284)	(416,805)	(735,483)	(1,020,672)
	120%	19,595,904	9,427,731	5,937,520	4,116,799	2,963,875	2,144,849	1,516,621	1,007,643	578,165	204,336
	140%	28,000,750	13,843,778	9,023,967	6,538,447	4,986,643	3,901,697	3,083,527	2,432,092	1,891,813	1,429,344
	160%	36,405,595	18,259,825	12,110,415	8,960,095	7,009,411	5,658,545	4,650,432	3,856,540	3,205,461	2,654,353
	180%	44,810,440	22,675,872	15,196,862	11,381,742	9,032,179	7,415,393	6,217,337	5,280,988	4,519,109	3,879,361
	200%	53,215,285	27,091,918	18,283,310	13,803,390	11,054,946	9,172,241	7,784,242	6,705,436	5,832,758	5,104,369
Recurrent cost	20%	34,911,037	17,598,985	11,727,481	8,716,114	6,848,802	5,553,517	4,585,105	3,820,988	3,193,069	2,660,487
	40%	28,981,043	14,452,160	9,508,379	6,960,873	5,371,878	4,262,138	3,426,258	2,761,540	2,210,931	1,740,198
	60%	23,051,048	11,305,335	7,289,277	5,205,633	3,894,954	2,970,759	2,267,411	1,702,092	1,228,793	819,908
	80%	17,121,054	8,158,509	5,070,175	3,450,392	2,418,031	1,679,380	1,108,563	642,644	246,655	(100,382)
	100%	11,191,059	5,011,684	2,851,072	1,695,152	941,107	388,001	(50,284)	(416,805)	(735,483)	(1,020,672)
	120%	5,261,065	1,854,859	631,970	(60,089)	(535,817)	(903,378)	(1,209,131)	(1,476,253)	(1,717,621)	(1,940,962)
	140%	(668,930)	(1,281,966)	(1,587,132)	(1,815,330)	(2,012,740)	(2,194,757)	(2,367,978)	(2,535,701)	(2,699,759)	(2,861,252)
	160%	(6,598,924)	(4,428,792)	(3,806,234)	(3,570,570)	(3,489,664)	(3,486,137)	(3,526,825)	(3,595,150)	(3,681,897)	(3,781,541)
	180%	(12,528,919)	(7,575,617)	(6,025,336)	(5,325,811)	(4,966,588)	(4,777,516)	(4,685,673)	(4,654,598)	(4,664,035)	(4,701,831)
	200%	(18,458,913)	(10,722,442)	(8,244,438)	(7,081,052)	(6,443,511)	(6,068,895)	(5,844,520)	(5,714,046)	(5,646,173)	(5,622,121)

152. **11. Fiscal analysis.** The fiscal analysis also show that the STAR programme is expected to increase social welfare. Further the implementation of the project would represent a sustainable investment opportunity for the GoE. In fact, project cost borne by the Government will be largely offset - over the analysis period - by an increase in tax revenues, hence resulting in a cost recovery index of 66 per cent.

153. **Table 3: Fiscal analysis (EGP '000)**

Category	Society	Government	Farmers
Income	1,938,206		1,938,206
Costs			
Family labour	(713,219)		(713,219)
Taxes on income	-	110,177	(110,177)
VAT	-	175,839	(175,839)
Project costs	(435,630)	(435,630)	-
Net benefit	789,357	(149,614)	938,971
Cost recovery index		66%	

154. [1] The features considered in the elaboration of household models are based on the survey results conducted by IFPRI and described in Nin Pratt et al. (2018), *Farm households in Egypt - A typology for assessing vulnerability to climate change*, IFPRI, Washington DC.

155.

#### e. Exit Strategy and Sustainability

156. STAR's exit strategy and sustainability is built on developing the capacity, readiness and resources of i) the STAR partners, to continue their services in the STAR clusters, driven by market forces, even after Phase 1 and ii) the government, to adopt a programmatic approach and expand the STAR benefits to new clusters and governorates after the current IFAD cycle of 6 years.

157. This will involve i) strengthening MALR's capacity to continue STAR implementation on programmatic basis and strengthen its cooperation with other relevant ministries e.g. MWRI and MoSIT; STAR will establish a separate NPCU/GPCUs offices, deploy full-time staff and use a mix of seconded staff and competitively recruited staff from the market which will develop technical excellence, committed work culture and support the programmatic approach. Young officers from different departments will serve as STAR trainees for 6 to 12 months to develop their capacity to handle STAR responsibilities in the future; standardized, streamlined, documented implementation arrangements for the successful interventions will be identified to guide high performance standards; ii) leverage the STAR credit funds to crowd-in additional finance to support STAR oriented, pro-poor business opportunities; STAR will not interfere with credit risk assessment, ceilings, interest rates and collateral requirements. By maintaining a neutral position, and not distorting the credit market STAR will allow the financial sector to respond positively and crowd-in additional financing resources to support the beneficiaries and sustain the credit-lines for supporting STAR expansion in subsequent phases. The linkage between the CFIs, marketing partners and community institutions (PMAs, CDAs) will continue to function in the Phase 1 clusters driven by market forces even after STAR; iii) strengthen community level institutions and human capacities by supporting institutional development, financial sustainability and technical capacity so that they can continue providing services in the Phase 1 clusters after 6 years and simultaneously mentor other CDAs/ACs in potential clusters for the next phase; iv) widely disseminate success stories and their implementation mechanisms using digital technologies; and vi) develop a network of service providers to continue supporting STAR's achievements in phase 1 clusters and also support STAR development in future clusters (refer Annex 10).

### 3. Risks

#### H. Project risks and mitigation measures

158. The key risks and mitigation measures are presented below. Refer Annex 9, integrated risk framework, for more details.

Risk	Risk Mitigation	Rating

<p><b>Institutional capacity for sustainability and implementation:</b> Weak rural institutional capacities, and weak business capacity of smallholder communities, are major risks, coupled with the reluctance of GoE to include capacity-building support in project designs. Low capacity of government staff implementing previous IFAD projects which also carrying out other duties in the Ministries.</p>	<p>The government is re-evaluating its policy of limited investments for capacity building support. Grants mobilised by STAR from different sources will mitigate this risk. The risk of weak capacity of the programme staff will be addressed by establishment of a separate centralised NPCU will technical staff hired from the open market with competitive salaries to manage STAR. STAR's financial management will be strengthened by appointing a dedicated, competitively recruited, accountant and an accounts assistant to support the Financial Controller. Similarly, procurement functions will be led by a Procurement Manager assisted by two qualified and experienced procurement Specialists, all competitively hired from the professional labour market. In the governorates STAR will mitigate the risk by establishing separate STAR offices (GPCUs) with full-time staff, led by a Deputy Governorate Manager recruited competitively from the professional labour market.</p>	<p>Medium</p>
<p><b>Technical aspects of programme:</b> Previous IFAD projects covered large areas and sometimes failed to develop synergies between irrigation infrastructure, rural finance, market access and community institutions which lowered sustainability. In previous projects the credit wholesaler (MSMEDA) selected CFIs without project participation. The CFIs often operated far from the core project villages and could not respond well to the project needs.</p>	<p>STAR will be implemented in a relatively smaller area (3 contiguous governorates). Joint village implementation plans will be developed participatory by different implementation partners responsible for different components. This will harmonize actions and mitigate the risk. CFIs will be selected by the credit wholesaler from a shortlist already prepared by STAR based on assessment of the suitability of the CFIs in the programme area.</p>	<p>Medium</p>
<p><b>Financial management:</b> reliance on financial management structures (staffing) within the Ministry resulted in weak financial management capacity.  (Refer Annex 9 for detailed financial risk assessment)</p>	<p>This risk is mitigated by the establishment of a centralized, ring-fenced NPCU which will be responsible for overall coordination. The financial management staff in the NPCU will be recruited competitively from the market. The NPCU will also other IFAD projects (e.g. PRIDE) and will be operational before STAR becomes effective. The NPCU accounting software will have a module dedicated to STAR.</p>	<p>Medium</p>
<p><b>Climate Change:</b> Extreme weather events mainly heat waves, pests and diseases, water scarcity can have an impact on agriculture productivity.</p>	<p>This risk is mitigated by a range of measures such as digital early warning systems, introduction of heat and pest and disease resistant varieties, early maturing varieties (details in SECAP review note)</p>	<p>Medium</p>
<p><b>Financial management:</b></p> <p>i) Historical reliance on financial management structures (staffing) within the Ministry resulted in weak financial management capacity.</p> <p>ii) First-time use of MoF Treasury Single Account System for an IFAD project. Potential inability to trace/ring-fence project funds.</p> <p>iii) Reliance on 3<sup>rd</sup> CWs and CFIs increase fiduciary risk.</p> <p>iv) Implementation via 2 Ministries – MALR and MWRI.</p> <p>v) Lack of coordination between MoP and MALR with regards to budget finalisation and access to Government contribution.</p>	<p>i) Establishment of a centralized, ring-fenced NPCU with staff recruited competitively from the market. The NPCU will be operational before STAR becomes effective.</p> <p>ii) MoF confirmed TSA is ready for use and allows and has functionality to ensure traceability of project funds. Allocation of a dedicated MoF controller to NPCU to ensure smooth operation of TSA. <i>Include disbursement condition – MoF to confirm use and suitability of TSA for use by the project.</i></p> <p>iii) Enter into MOUs/Subsidiary agreements with CWs/CFIs once selected which outlines roles and responsibilities.</p> <p>iv) Central project management via NPCU and monthly monitoring of advances to MWRI.</p> <p>v) Introduction of PSC to improve inter-ministerial collaboration. Detailed budget process outlined in PIM.</p>	<p>Medium</p>

## I. Environment and Social category

159. The main environmental challenges identified in Upper Egypt are uncertain water availability in downstream canal areas, varying water quality, and soil salinity in some areas in Asyut and Sohag. On the other hand, the main social issues in the target areas are the exclusion of women from crop production, economic and income generating activities, increasing poverty, moderate malnutrition, youth unemployment and lack of youth interest in traditional agricultural production activities. The proposed rehabilitation of branch canals and on-farm irrigation systems will help to ensure that sufficient water can reach remote lands downstream in addition to enhancing the efficiency of water use and conservation in the system. Marketing interventions will have youth and gender sensitive approaches through targeted financing for small enterprise development and capacity building. The project targets smallholder farmers. It will also invest in large-scale water conservation measures; rehabilitation of damaged irrigation systems; facilitation of adoption of integrated pest and soil fertility management to reduce the use of agrochemicals; and enhancing marketing capacities mainly for smallholders, youth and women. STAR is deliberately intended to address an adaptation gap and prevent irreversible or unprecedented social or environmental adverse impacts. Hence, STAR is classified as **a moderate risk project: category B** according to IFAD's Social, Environmental and Climate Assessment Procedures Guidelines. An Environmental and Social Management Plan is required for each of the project components. In particular branch canal rehabilitation works will need an environmental assessment with mitigation measures included in the design and implementation of the works and subsequent management of the canals.

(Refer to SECAP and PIM annexes).

## J. Climate Risk classification

160. Egypt is vulnerable to climate change impacts mainly due to increasing temperature, sea level rise across coastal areas, inter-annual variability in the Nile flow and increase in the frequency of extreme events in particular heat waves. Historic data shows that for the period between 1901 and 2017, average maximum temperature increased by 0.95%, 1% and 0.93% between May and October in Assiut, Menya and Sohag, respectively. It has also been observed that the frequency of heat waves have increased in the three governorates and are already being felt by the farmers. These changes have negative impacts on agricultural productivity, crop water needs and as such water use, use of pesticides, and livestock health and production and exacerbates the water scarcity challenges in these governorates. STAR's interventions will not increase the vulnerability of target populations and resources to climate hazards. On the contrary, the components will contribute to increasing the adaptive capacity of smallholder farmers and their families through improved water-efficient irrigation systems, economic diversification mainly through investing in women and youth, use of digitalized early warning systems and training of farmers on related adaptation action options, and poverty alleviation through enhanced access to markets. Hence, the STAR project's Climate Risk Classification is Moderate according to IFAD's Social, Environmental and Climate Assessment Procedures Guidelines. The SECAP annex includes a climate risk and vulnerability analysis and design has mainstreamed climate change adaptation measures.

## 4. Implementation

### K. Organizational Framework

#### a. Project management and coordination

161. **Programme management and coordination:** The Government's lead agency will be the Ministry of Agriculture and Land Reclamation (MALR) with close collaboration with the Ministry of Water Resources and Irrigation (MWRI) and the Egyptian Financial Regulatory Agency (FRA), the oversight body for all non-banking institutions (MFIs) and the Ministry of Supply and Internal Trade (MoSIT). STAR implementation will rely on a mix of community, public and private sector and technical service providers. Beneficiary households will play a lead role through community institutions (CDAs, ACs, WUAs, PMA and IEGs).

162. **Programme Steering Committee (PSC):** A high ranking inter-ministerial Programme Steering Committee (PSC) would be set up for overall policy decisions and guidance at the National level. The Minister of MALR will designate the Chair of the PSC. The PSC members will include representatives of the STAR governorates, the Ministry of Investment and International Cooperation (MIC), MWRI, MoSIT, CW, private sector representatives (agribusinesses, exporters). The PSC will meet at least once quarterly, and as and when necessary. Its roles will include ensuring compliance of STAR activities with Government's policies, approving the STAR AWPBs, overseeing effective coordination between different STAR components, ensuring STAR coordination with other development programmes, and recommending changes in STAR implementation where necessary in coordination with IFAD (refer PIM for details). An **Executive Steering Committee (ESC)** will be constituted at the National level comprising members drawn from the PSC. The ESC will serve as a standing committee empowered to meet whenever needed to resolve implementation bottlenecks that cannot be settled at the Governorate level and requires immediate attention.

163. **Governorate Steering Committee:** A Governorate Steering Committee (GSC) will be formed in each STAR Governorate to oversee planning, review progress, facilitate linkages between programme stakeholders and remove bottlenecks affecting smooth implementation. The Head of MALR in the Governorate will Chair the GSC. Other members will include the governorate level representatives of MALR, MWRI, MoSS, partner CWs, representatives from STAR clusters and the private sector. The GSC will meet on a quarterly basis. The GSC will constitute a **GSC Technical Committee (GTC)** from within the GSC members to meet whenever needed to resolve any programme implementation bottlenecks encountered within the Governorates.

164. **Implementation structure:** A two-level organisational structure will be established. The National Programme Coordination Unit (NPCU) and the National level and Governorate Programme Coordination Units (GPCU) (total 3, one in each Governorate) at the Governorate level will be established for implementing STAR (Refer PIM for organizational structure at both levels).

165. **NPCU:** The NPCU will be established in Cairo at the MALR as a unified coordination unit for consolidated management of all IFAD projects/programme in the country. Initially NPCU will oversee the implementation of STAR along with three other IFAD projects (PRIDE, PRIME, SAIL). All NPCU staff members will be competitively recruited from the professional labour market and will work on a full-time basis for managing all the project/programmes in the NPCU. The ESC will designate one of its members as the NPCU National Coordinator (NC) to provide oversight and strategic direction to the NPCU. A National Programme Manager (NPM) will head the NPCU day to day operations. The NPM will be assisted by a National technical support team and a National operations support team with the following composition.

- **National technical support team:** This team will carry out overall technical planning, implementation oversight and technical guidance to the Governorates for STAR implementation. A STAR Technical Specialist (STS) hired from the open market will be dedicated for STAR implementation only at the National level. The rest of the NPCU technical team will manage STAR and other IFAD projects and will comprise: i) one M&E and KM Manager (MKM) assisted by two M&E and KM Specialists (MKS) and one M&E, KM and ICT Specialist (MKIS); ii) one Environment and Climate Manager (ECM); iii) one Gender and Social Inclusion Manager (GSM) and iv) one digital agriculture specialist.
- **National operations support team:** This team will perform financial planning, management and control; programme procurement, contracting and contract management and staff evaluation. It will monitor, record and report community and government levels. The team will manage all NPCU projects including STAR and will consist of i) one Finance Manager (FM) assisted by one Finance Coordinator (FC), an accountant (dedicated to STAR) and an assistant accountant (dedicated to STAR); ii) one Procurement Manager (PM) supported by two Procurement Specialists (PS); and iii) one HR and Administration Manager (HRM) supported by a HR and Administration Assistant (HRA).

166. **Governorate Programme Coordination Unit (GPCU):** STAR will establish three GPCUs, one each in Menya, Sohag, and the Asyut Governorate. The GPCUs will be dedicated only to the implementation of STAR. The GPCUs will be established as separate offices within the Directorate of MALR and will be headed by a Governorate Programme Coordinator (GPC) from the MALR Directorate. A Governorate Deputy Manager (GDM) will be competitively recruited from the professional labour market to manage STAR at the GPCU level on a full time basis. The GPC and GDM will be supported by a set of seven full-time staff members seconded by the MALR with IFAD's final approval. These positions will be i) one GPCU Agronomist (GA); ii) one Business Development and Marketing Specialist (BMS); iii) one Infrastructure Engineer (IE); iv) one Social and Community Mobilisation Specialist (SCS) v) one Financial Services Specialist (FSS) vi) one M&E Focal point/data collection officer (MFP) and vii) one STAR Accountant (SA).

167. IFAD has a Complaints Procedure to receive and facilitate resolution of concerns and complaints with respect to alleged sexual exploitation and abuse (SEA). More information can be obtained from IFAD webpage: <https://www.ifad.org/en/document-detail/asset/40738506>.
168. **Village level implementation:** The GPCUs will carry out programme implementation at the village level with the support of partner CDAs, YCF and SYP. STAR will train (through ToTs) a pool of 5-10 YCFs in each village. Based on needs, the partner CDAs will engage the YCFs to support STAR implementation at the village level and pay allowances supported by STAR. Additionally, STAR will train young graduates and deploy one SYP in each village to support STAR implementation in coordination with the partner CDAs and the YCFs. The SYPs will be capacitated through training and technical assistance support, paid allowances, and provided with SYP certificate at the end of the programme. The support to the SYPs will contribute to IFAD's youth inclusion priority. After their engagement with STAR the SYPs can join the CDAs to continue community level services, become independent service providers or join agribusinesses and enterprises in the programme area. The GPCU with the support of the SYPs and YCFs will facilitate the development of a Village Implementation Plan (VIP) in each village on an annual basis through participation of all the implementing partners. The GPCU will monitor and ensure that implementation is coordinated in each village according to these plans leading to harmonisation of resources and interconnectivity of the components.
169. **Programmatic orientation of the NPCU and GPCUs:** The NPCU and the GPCUs will be capacitated and oriented to support the continuation of the STAR activities on programmatic basis. Towards this objective the NPCU and the GPCU will adopt a set of specific initiatives such as: i) contract short-term technical specialists in specific areas (rural finance, marketing, community mobilisation) from the open market to join the STAR implementation teams periodically with the responsibility to assist with work volumes, examine and improve the existing technical work processes, share knowledge, suggest improvements, and upgrade the knowledge and skills of the GPCU staff; ii) operate a "STAR programme support" initiative in the NPCU and GPCUs which will involve the MALR deputing young officers from different departments to these Units for 6 to 12 months on a rotational basis for orientation and hands-on experience of STAR implementation and iii) establish standardised, well documented implementation procedures regularly update the PIM, including staff roles, responsibilities and decision making authorities, to enable the smooth continuation of these units on programmatic basis.

## b. Financial Management, Procurement and Governance

170. The NPCU will be established to remove the reliance on past PMU structures that delivered weak financial management results. The NPCU Finance Manager, with assistance from a Finance Coordinator, will oversee all NPCU projects (PRIDE, STAR, SAIL and PRIME). The NPCU will also appoint an accountant and an accounts assistant dedicated to STAR. Each of the 3 GPCUs will have an accountant. NPCU finance staff will be recruited on a competitive basis from the market and offered competitive salaries to reduce the risk of staff turnover. GPCU staff will be seconded from the government. The STAR finance function will be supported by a dedicated MoF Controller at the NPCU, creating a linkage with the MoF accounting unit (based at MALR) which will process payments on behalf of the NPCU via the Government Payment System. In addition, a MARL internal auditor will be involved in the payment cycle, reviewing payment requests on a sample basis before processing.
171. The financial management in other implementing partners will be as follows: i) Rural finance implementing partners: MSMEDA, ADP (managed via CIB as fund manager) and CGC have existing financial management structures with capacity to manage project funds. They will receive disbursements directly from IFAD (IFAD Loan) and operate independently from the NPCU. They will contribute to the consolidated AWPB and submit interim/annual financial reports to NPCU. Arrangements for other CWs and CFIs selected after project start-up will be considered and detailed roles/responsibilities outlined in MOUs/Subsidiary agreements entered into at that time. ii) MWRI: MWRI will lead implementation of subcomponent 2.1 in close collaboration with MALR. In order to maintain centralised financial management, MWRI will receive advances via the NPCU. Monthly reporting on advances will be required for the purposes of justifying related expenditures (refer PIM for details).
172. Budgeting, accounting and reporting: These include, i) budget preparation and monitoring The NPCU Financial Coordinator will be overall responsible for AWPB preparation using a bottom-up approach for all sources of finance (IFAD, WFP, AfDB). The AWPB template will be disseminated to all implementing partners for preparing inputs to the AWPB. The financial coordinator will monitor monthly budget to actual performance and prepare monthly/ quarterly budget reporting (refer PIM for details); ii) Accounting policies, procedures and software: The NPCU will develop an accounting software with separate modules for each project on a stand-alone basis. The TOR for procurement of the software is included in the PIM. MSMEDA and CIB (ADP) currently have fully automated, centrally managed, accounting systems with the ability to generate suitable financial reports, for consolidation at the NPCU. MWRI and other implementing partners' transactions will be recorded directly by the NPCU; iii) Financial reporting: The NPCU will prepare and submit consolidated quarterly Interim Financial Reports and Annual Financial Statements. STAR will adopt the IPSAS Cash Basis of Accounting. IFAD will take play a central role in managing financial reporting from the NPCU to financiers. All financiers' specific financial reporting requirements will be incorporated into a single reporting template (refer PIM).
173. Audit systems will involve: i) Internal audit: The NPCU will not have a dedicated internal audit function. To mitigate the related risk, reliance will be placed on the MALR internal auditor who is responsible for review of payment requests on a sample basis. In addition, the Central Auditing Organisation (CAO) is responsible for auditing Government projects. The NPCU Finance Manager will refer to CAO reports with regards to control weaknesses identified and implement recommendations for improvement of the internal control environment. MSMEDA and CIB (ADP) have dedicated internal audit functions which follow a risk-based approach and include donor-funded projects in the scope of the internal audit function. ;ii) Statutory Audit arrangements: A private sector auditor will audit the Project on an annually in line with International Standards on Auditing and the IFAD Handbook for Financial Reporting and Auditing of IFAD-financed projects. The auditor will provide an audit opinion on the consolidated project financial report (including all sources and uses of funds). The auditor draft TOR is outlined in the PIM. The draft TOR (in PIM) outlines agreed upon procedures which are specifically required by IFAD to 1) place reliance on IFAD-specific disclosures in the financial report, and 2) confirm eligibility of expenditure of a sample of rural finance expenses incurred via CFIs/CWs.
174. Other financial management aspects: These include, i) Reliance on country systems: STAR's reliance on country systems will involve mainly the reliance on the MoF controller and MALR internal auditor in NPCU; NPCU flow of funds managed via the TSA and reliance on CAO reports with regards to identification of internal control weaknesses. Reliance on country systems are significant, specifically in relation to the mandatory use of the TSA system for management for NPCU flow of funds; ii) Implementation readiness and disbursement conditions: The disbursement conditions in the financing agreement will include, the need for implementation of the STAR accounting software module; appointment of the NPCU Finance Manager and STAR NPCU Accountant; MoF confirmation that the TSA is ready for use by STAR and allocation of dedicated MoF controller at the NPCU iii) Anticorruption and good governance framework: IFAD's anticorruption and good governance framework will be applicable to the Project. Details thereof are outlined in the PIM.
175. **Procurement:** The STAR procurement features will be; i) Organisational structure: The NPCU will be established to remove the reliance on past PMU structures with part-time seconded government procurement staff and 'high risk' procurement functions. The NPCU will have a Procurement Manager who will be assisted by two qualified and experienced Procurement Specialists. These positions will be hired from the open professional jobs market at competitive salaries to ensure quality and prevent turnover. The procurement staff will receive training on IFAD and other relevant procurement procedures. Procurement planning will be integrated during budgeting and STAR Procurement Plan will be prepared using the IFAD new template; ii) A STAR procurement committee (SPC) will be established to support planning, fast tracking,

monitoring, following up and take corrective action on the overall procurement processes to assure accuracy and timely procurement; iii) Procurement Plan will be continuously updated and monitored for quality control; iv) A contract management and monitoring team will be led by the NPCU PM, for contract supervision and monitoring; v) A Third-Party Quality Assurance/Quality Control service provider (consultant) will be hired to provide independent assurance of the quality of civil works; vi) training on FIDIC contracts and contract management will be conducted to build implementation capacity for works and consultancy contracts; vii) IFAD will undertake reviews to ensure that the procurement process is carried out in conformity with IFAD procurement guidelines.

176. *Thresholds for Procurement Methods*: While eventually the specific thresholds for procurement financed under the Programme will be stipulated in the Letter to the Recipient (LTR), following are the recommended thresholds:

	Type of procurement	Thresholds	Procurement method
1	Works	- More than USD 200,000	- ICB*
		- USD 50,000-200,000	- NCB
		- Less than USD 50,000	- National shopping
2	Goods	- More than EUR 100,000	- ICB*
		- USD 25,000-100,000	- NCB
		- Less than USD 25,000	- National shopping
3a	Consulting services (firms)	- More than USD 100,000	- International request for proposal
		- Less than USD 100,000	- National request for proposal
3b	Consulting services (individual)		- Individual consultant selection procedures

177. \*using the WB's standard bidding documents; Refer PIM for details

178. **Procurement Regulations applicable to STAR**: STAR will adopt the new Egypt Public Procurement Law No 182 for 2018, the Procurement Regulations (to be issued soon), and the IFAD Procurement Guidelines 2010. National systems will apply to all procurement except international competitive bidding (ICB). ICB procurement will follow World Bank procedures. Egyptian national procurement systems will be followed for procurement below ICB thresholds.

## L. Planning, M&E, Learning, KM and Communication

### a. Planning, M&E, Learning, Knowledge Management and Communication

179. **Planning**: The main planning tool for STAR will be the Annual Work Plan and Budget (AWPB) prepared using a participatory bottom-up approach within the clusters. Once the priorities have been set at the cluster level and activities defined, the AWPB will be compiled for each governorate and the 3 GPCUs will combine the drafted AWPBs for their respective governorates and submit to the NPCU. The NPCU will consolidate and streamline the three AWPBs and submit it to PSC for review and approval. The PSC will insure the inclusion of STAR under the national budget. The draft AWPB will be sent to IFAD for review and no-objection 60 days prior to start of each year of implementation. The AWPB will be in line with the logical framework and guide implementation of activities in the clusters against benchmarks for measuring annual implementation progress (refer PIM for contents of AWPB).

180. **M&E**: The results-based approach will be adopted through the M&E system. This will be through accounting for progress against AWPB targets; and periodic assessments of movement towards achievement of beneficiary impact. The key responsibilities of the M&E system will rely on the M&E unit at the NPCU, while all other implementation agencies at governorate, district and cluster level will play important roles in collecting and analysing data to assess outcomes and impact of programme activities. The Operational and Results Management System (ORMS) will be incorporated within the M&E system along with the Annual Outcome Survey (AOS) tool which would allow for effective monitoring of the different programme indicators. The M&E activities will take into consideration the following: i) a resilience index develop based on the context specific vulnerabilities for rural families in Upper Egypt and capacities the project is building to reduce these vulnerabilities and increase the resilience of rural smallholder households (index to be included in the PIM); ii) data will be disaggregated by sex, age category, governorate, and targeting groups; iii) progress reporting will be in comparison with appraisal targets and the AWPB; iv) monthly meeting at the NPCU with the presence of GPCU M&E focal points to discuss implementation progress versus targets; v) regular field visits from M&E specialist and component officers; vi) documenting of stories from the field for different component beneficiaries; and vii) reporting on lessons learned and best practices and working on scaling-up.

181. Key M&E activities will comprise the i) PIM; ii) baseline survey will provide baseline data for the programme M&E indicators, cover both beneficiary villages and control villages (representative sample size), be updated on an annual basis to track the different project indicators over time and support analysis to ensure that STAR activities are on the right directions to achieve the target indicators. The baseline and impact surveys will employ the Programme -level Women Empowerment in Agriculture Index (Pro-WEAI) which measures women's empowerment relative to that of men within their households (details is presented under the M&E section in the PIM). iii) progress reports, involving physical

and financial progress reporting tied to the AWPB targets. Quarterly progress reports will be prepared by each GPCU and send to the NPCU for consolidating the STAR quarterly progress report. The reports will compare actual achievements against planned, including expenditures, and explain variations. Semi-annual physical progress will be recorded in tabular spreadsheet form activities, quantitative inputs and outputs, number of beneficiaries disaggregated by sex and activities they have participated in. The consolidated progress report will identify the implementation constraints and corrective actions taken. The progress reports will serve as knowledge products; iv) mid-term review; v) programme completion survey (impact evaluation) using the same questionnaires used for the baseline to allow for comparison against baseline results, enable qualitative analysis (by beneficiary status, region and gender of household head) of programme impact by interviewing a panel of households; vi) a programme beneficiaries database will be established by NPCU with detailed information about each beneficiary. The database will be consolidated at the NPCU by the M&E unit and utilized for different purposes including sampling for the different surveys, tracking the beneficiaries outreach as well as selection of beneficiaries to visit during the supervision missions; vii) Geo-referencing will support implementation and M&E processes;

182. **Learning, KM and Communication:** Building on lessons from IFAD country programme, STAR will ensure that: (i) programme launch is effective for visibility (ii) KM indicators are included in the M&E system; (iii) solid information management systems (e.g. electronic archives) are set up; (iv) KM related roles and responsibilities are clear in the NPCU and GPCUs; (v) internal programme learning and cross-project exchanges are facilitated; (vi) organising exchanges occur with other projects and agencies through SSTC, organising targeted workshops, and other activities to disseminate results, attract interest of other partners, replicate and scale up tested and documented innovations. A KM and communication strategy will be developed and integrated into STAR management. The strategy will include which thematic areas of learning (e.g. economic development cluster approach, multi-stakeholders platforms, access to markets, credit guarantee schemes, etc). and outline how the knowledge generated will be disseminated through appropriate channels. Knowledge management will play a central role in the programme. Both GoE and IFAD perceive STAR as a significant learning and KM investment in addressing economic and social imbalances between urban and rural areas. STAR has the potential to bring immense field experience into the policy discourse on digital agriculture, rural youth and women agribusiness development in Egypt and disseminate that to a wider international audience. Knowledge generated by this programme will contribute significantly to the design and implementation of youth empowerment agricultural interventions within the agriculture sector as a whole with support from the GoE. Therefore, knowledge generation will be the main scaling up pathway. STAR will help GoE to generate knowledge on the impact of cluster investment partnerships and inform programme pipeline development and best use of subsidies to benefit rural upland farmers.

## b. Innovation and scaling up

183. STAR will introduce a set of process innovations, technical innovations, and partnership innovations to overcome past challenges, increase employment, increase profitability and support the scaling-up and programmatic approach. Process innovations will include establishment of the NPCU and GPCUs, deployment of full-time technical staff (in NPCU) hired from the market, command-areas based clustering of villages to prevent scattering of resources, CWs selecting CFIs from a STAR prepared shortlist to ensure CFI services in STAR villages, development of village implementation plans for harmonised implementation of different components and financing on-farm irrigation through CFIs to avoid confusing about the credit nature of support; Technical innovations will support STAR digital market platform; visual agricultural marketing, on-line produce ordering, rural e-commerce, digital finance, digital water meters, digital pump starters, digital extension (STAR mobile app, video extension, STAR SMS gateway, social media and what's app, digital climate resilience solutions). The digital technologies will increase target groups' opportunities and incomes, scaling-up and programmatic approach. STAR will introduce competitions of WUAs on water use efficiency and rewarding the best performers, post-harvest technologies, youth skilling (in digital solutions, SYP program, YCFs) for skills building of young graduates, youth enterprises along the agricultural value chains, microenterprise graduation and women's savings schemes; Partnership innovations will include coordination partnerships with other ministries such as MWRI, MoSIT; co-financing partnerships with other donors; 'STAR programme support' to develop capacity of MALR young officers to manage STAR as a programme; and avoiding credit market distortion to crowd-in financial resources to support STAR scaling-up.

## M. Implementation plans

### a. Implementation readiness and start-up plans.

184. The IFAD country office (ICO) will take the following steps to ensure STAR readiness for implementation: i) NPCU establishment will be completed including securing office space, furnishing and office equipment procurement, competitively recruiting and training all staff members; ii) Office space for the GPCUs will be secured and identification of seconded staff will be completed; iii) Command areas based village clusters will be selected for STAR implementation in coordination with partners such as MALR, MWRI, OFIDO, PRIME complete the; iv) Partner Ministries at all levels will be oriented to the command area based clustering approach, programme implementation and coordination details; v) The branch canals and command areas which are to be rehabilitated in year 1 will be selected in coordination with AFDB and all technical studies related to their rehabilitation will be completed; vi) The STAR villages for year 1 will be selected in the command areas (point v above) in coordination with WFP; vii) The credit wholesalers (MSMEDA, ADP, ABE) will be oriented to the partnership modalities and process for selecting CFIs; viii) Accounting software procurement/implementation will commence once the financing agreements enter into force. A proposed ToR for the accounting software is included as an annexure to the Financial Manual section of the PIM and specifies the requirement for ongoing technical support and software updates.

### b. Supervision, Mid-term Review and Completion plans.

185. i) Supervision: STAR supervision will be carried out directly by IFAD. One supervision mission and one follow-up mission will be undertaken every year. Implementation support will focus on planning, gender and targeting, procurement, financial management, M&E, partnerships, integration of activities within the governance framework. Such support will be a continuous process with frequent communication and engagement with the MALR, the NPCU and other relevant stakeholders. The first implementation support mission will occur soon after start-up. The frequency, composition of supervision and implementation support missions will be based on implementation requirements and MALR requests; ii) Mid-term Review (MTR): The MALR, as the lead project agency, IFAD and implementing partners will jointly carry out the MTR of at the end of year Four. The MTR will be based on, inter-alia, the PDR, SECAP, Procurement Plans, Reports of Supervision and Follow Up Missions, AWPBs, Progress Reports, Financing Agreements, evolving government policies and strategies, and additional data from commissioned studies. The MTR findings will be promptly communicated to the implementing agencies and in consultation with the GOE and partners, necessary design and financing agreements adjustments, if needed, will be made to remove constraints and achieve the STAR objectives. The GoE will ensure that the MTR recommendations are implemented within the specified time and to the satisfaction of IFAD; iii) Project Completion Review: The MALR, as the lead project agency will be responsible for organizing the preparation of a PCR and submit to the Fund, after the Project Completion Date but in any event no later than the Financing Closing Date. At STAR conclusion a completion evaluation would be conducted, as an input into the PCR through a formal survey preferably undertaken by a neutral agency with no previous involvement

in project implementation. The PCR should address STAR costs and benefits, achievement of objectives, impact on beneficiaries, and partner performance, and lessons learned.

## Footnotes

- [1] The mission consisted of Ms. Rikke Grand Olivera (Project Technical Lead, PMI/IFAD); Ms. Ms. Myriam Fernando (Senior Regional Rural Finance, Markets and Enterprise Specialist, PMI/IFAD); Mr. Swandip Sinha (Team Leader and Rural Development Specialist); Mr. Mohamed El Ghazaly (Country Programme Officer, NEN/IFAD); Mr. Nicolas Tremblay (Lead Regional Environment and Climate Specialist, ECG/IFAD); Mr. Mawira Chitima (Lead Global Rural Infrastructure Specialist, PMI/IFAD); Mr. Tarek Abdel Monem (Environment and Climate Specialist, IFAD); Ms. Chiara Romano (Gender and Targeting Specialist); Mr. George Polenakis (Rural Finance Specialist, Consultant); Mr. Enrico Mazzoli (Economic and Financial Analyst); Mr. Shaik N Meera (Agriculture Digitalization Specialist); Mr. Mohamed Abdelatif (Procurement Specialist); Ms Bianca Van Vuuren (Financial Management Specialist); GOVT PARTICIPANTS Ms. Dina Saleh (Director, IFAD sub-regional hub) supervised the mission and provided overall guidance to the design team.
- [2] CAPMAS, 2019
- [3] Atlantic Council, Issue brief, June 2016
- [4] Central Bank of Egypt, Monthly Statistical Bulletin February, 2019
- [5] <https://tradingeconomics.com/egypt/external-debt>
- [6] Central Bank of Egypt, Monthly Statistical Bulletin June, 2019
- [7] FAO estimate, 2016
- [8] ICARDA working paper, water and agriculture in Egypt, 2011
- [9] <https://data.worldbank.org/topic/poverty?locations=EG>
- [10] CAPMAS 2012
- [11] CAPMAS, Income expenditure and Consumption Survey, 2015
- [12] <https://tradingeconomics.com/egypt/employment-in-agriculture-percent-of-total-employment-wb-data.html>
- [13] <https://www.usaid.gov/egypt/agriculture-and-food-security>
- [14] International Trade Center Statistics 2018
- [15] <http://uis.unesco.org/country/EG>
- [16] World Bank (2017)
- [17] CAMPAS census 2017
- [18] Educated but Unemployed: The Challenge facing Egypt's Youth; Brookings Policy Brief, July 2016
- [19] <https://documents.wfp.org/stellent/groups/public/documents/ena/wfp257981.pdf>
- [20] Egyptian Environmental Affairs Agency. Cairo, 2016.
- [21] Egyptian Environmental Affairs Agency, 2014.
- [22] <https://www.egypttoday.com/Article/2/73285/Egypt%E2%80%99s-annual-water-share-declines-by-5-billion-cubic-meter>
- [23] The features considered in the elaboration of household models are based on the survey results conducted by IFPRI and described in Nin Pratt et al. (2018), *Farm households in Egypt - A typology for assessing vulnerability to climate change*, IFPRI, Washington DC.
- [24] This includes interest charges for loans repayments

## **Egypt**

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# **Sustainable Transformation for Agricultural Resilience in Upper Egypt Project Design Report**

## **Annex 1: Logframe**

Document Date: 29/10/2019  
Project No. 2000002202  
Report No. 5141-EG

Near East, North Africa and Europe Division  
Programme Management Department



## Sustainable Transformation for Agricultural Resilience in Upper Egypt

### Logical Framework

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Outreach</b>	1.b Estimated corresponding total number of households members							Political stability, Macro-economic conditions remain stable or improve.No major political shocks in the region
	Household members	0	400000	800000				
	1.a Corresponding number of households reached				Programme Reports	Annual	NPCU M&E unit and GPCU M&E focal points	
	Households	0	80000	160000				
	1 Persons receiving services promoted or supported by the project				Programme Reports	Annual	NPCU M&E unit and GPCU M&E focal points	
	Females	0	72000	144000				
	Males	0	88000	176000				
	Young	0	65600	131200				
	Not Young	0	94400	188800				
	Total number of persons receiving services	0	160000	320000				
<b>Project Goal</b> Contribute to improved living standards of smallholder farmers and poor and vulnerable women and youth in the rural areas in upper Egypt	Percentage reduction in the number of rural households living below the poverty line in the Programme supported Governorates				CAPMAS/ Baseline and completion surveys	Baseline, MTR and completion	NPCU M&E unit	
	Reduction % of HH living below poverty line	0	10	20				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Development Objective</b> Improve the income and resilience of smallholder and landless families through better marketing linkages, sustainable and climate change adapted agricultural intensification, small rural businesses and inclusive policies	2.2.1 New jobs created				Baseline and completion surveys	Baseline, mid-term and Completion survey, Annual outcome surveys	NPCU M&E unit	
	New jobs	0	4000	12555				
	Percentage increase in Pro-WEAI score over baseline				Baseline MTR and completion surveys	MTR and completion	NPCU M&E officer	
	Increase	0	10	20				
	Percentage increase in average HH income as a result of services provided by the programme				Baseline and completion surveys	Baseline, MTR and completion	NPCU M&E unit	
Increase in average HH incomes	0	30	50					
<b>Outcome</b> Outcome 1. Increased marketing of produce and profits to smallholder farmers	2.2.5 Rural producers' organizations reporting an increase in sales				Baseline, midterm and Completion survey/ Annual outcome surveys	MTR and completion	NPCU M&E unit	Positive framework conditions for investment into agriculture and rural institutions
	Percentage of rural POs	0	20	50				
	1.2.8 Women reporting improved quality of their diets				Baseline and completion survey/ Annual outcome survey	Annually	NPCU M&E unit	
	Percentage	0	10	30				
<b>Output</b> Output 1.1 Marketing institutions strengthened	2.1.3 Rural producers' organizations supported				M&E Data Component reports	Quarterly	GPCU M&E focal points	
	Rural POs supported	0	580	1160				
	2.1.4 Supported rural producers that are members of a rural producers' organization				M&E Data Component reports	Quarterly	GPCU M&E focal points	
	Males	0	46500	93000				
	Females	0	28500	57000				
	Young	0	30750	61500				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
					M&E Data / Component reports	Semi-annually	M&E officer /Component officer	
	Not Young	0	44250	88500				
	1.1.8 Households provided with targeted support to improve their nutrition							
	Males	0	46500	93000				
	Females	0	28500	57000				
	Young	0	30750	61500				
	Not Young	0	44250	88500				
<b>Output</b> Output 1.2 Microenterprises developed	2.1.1 Rural enterprises accessing business development services				M&E Data Component reports	Quarterly	GPCU M&E focal points	Active participation of women and youth in programme activities and willingness to engage in microenterprise development
	Rural enterprises		800	1650				
	2.1.2 Persons trained in income-generating activities or business management				M&E Data and Training reports	Quarterly	GPCU M&E focal points	
	Females	0	15000	30000				
	Males	0	5000	10000				
	Young	0	10000	20000				
	Not Young	0	10000	20000				
	Persons trained in IGAs or BM (total)	0	20000	40000				
	Number of persons reporting improved knowledge, attitudes and practices on nutrition							
	Males	0	10000	25000				
	Females	0	30000	50000				
	Young	0	20000	40000				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Total number of people	0	40000	75000				
<b>Outcome</b> Outcome 2 Improved resilience of smallholder crop producers	1.2.4 Households reporting an increase in production				Baseline, mid-term and Completion Survey/Annual outcome survey	MTR and completion	NPCU M&E unit	Sufficient implementation capacity to develop infrastructure in Upper Egypt - Substantial improvements in climate resilient production as foundations of growth.
	Households	0	30	60				
	1.2.3 Households reporting reduced water shortage vis-à-vis production needs				Baseline, mid-term and Completion survey/ Annual outcome survey	MTR and completion		
	Households	0	20	60				
<b>Output</b> Output 2.1 Improved irrigation infrastructure and management	1.1.2 Farmland under water-related infrastructure constructed/rehabilitated				M&E Data Component reports	Annually	GPCU M&E focal points	
	Hectares of land	0	6000	12600				
	3.1.1 Groups supported to sustainably manage natural resources and climate-related risks				M&E Data Component reports	Annually		
	Groups supported	0	190	320				
<b>Output</b> Output 2.2 Improved crop farming practices	1.1.4 Persons trained in production practices and/or technologies				M&E Data and Training reports	Quarterly	GPCU M&E focal points	
	Men trained in crop	0	15500	31000				
	Women trained in crop	0	9500	19000				
	Young people trained in crop	0	10250	20500				
	Not young people trained in crop	0	14750	29500				
	1.1.3 Rural producers accessing production inputs and/or technological packages				M&E Data Component reports	Annually		
	Females	0	9500	19000				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Males	0	15500	31000				
	Young	0	10250	20500				
	Not Young	0	14750	29500				
	Total rural producers	0	25000	50000				
<b>Output</b> Output 3.1 Engagement in Policy dialogue and knowledge management	Policy 1 Policy-relevant knowledge products completed				Knowledge products	Annually	NPCU KM and ICT specialist	
	Number	0	2	5				



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**Sustainable Transformation for Agricultural Resilience in Upper Egypt**

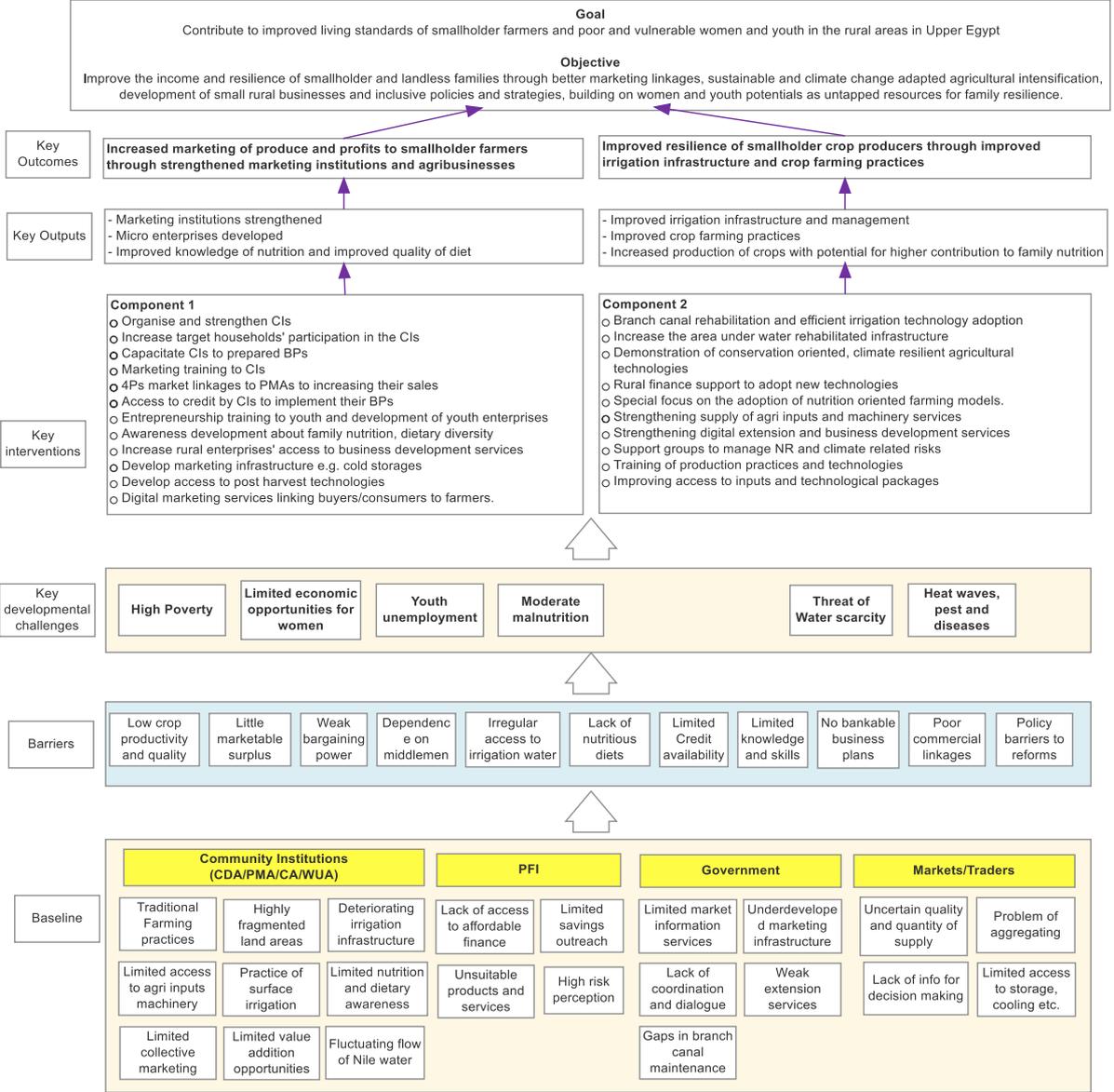
**Project Design Report**

**Annex 2: Theory of change**

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Near East, North Africa and Europe Division  
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**Sustainable Transformation for Agricultural Resilience in Upper Egypt**

**Project Design Report**

**Annex 3: Project cost and financing: Detailed costs tables**

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Programme Management Department



## Appendix 3: Programme Cost and Financing

### A. Programme Costs

#### Main assumptions

- 1. Introduction.** This annex describes the assumptions underlying the derivation of costs, estimated costs and financing plan for the programme. Total programme costs are based on June 2019 prices.
- 2. Programme Period.** The programme will be financed over a seven-year period starting from beginning 2020.
- 3. Inflation.** The base rate of domestic inflation has been set at around 8 per cent throughout programme duration while international inflation is estimated at 1.7 per cent during the first year of implementation and reaches 1.8 percent at programme end.

**Table 1: International Inflation (%)**

	2020	2021	2022	2023	2024	2025	2026
Domestic Inflation Rate	1.7	1.7	1.8	1.8	1.8	1.8	1.8

- 4. Exchange Rate.** The exchange rate was fixed at 1USD = 16.5 EGP as per average market fluctuation in 2018/2019. Programme costs are presented in both EGP and USD currency.
- 5. Physical and price contingencies.** Both types of contingencies have been taken into account and included in the costing of programme. In particular, in the category "works" a 5 per cent physical contingency is considered.
- 6. Taxes and Duties.** There is VAT of 14% levied on all imported and locally procured goods and services. The Government would finance the cost of all taxes on goods and services procured under the programme. Most items procured under the programme would be purchased locally.
- 7. Expenditure Accounts.** Programme 's expenditure accounts will be the following:
  - Technical Assistance and Consultancies
  - Goods, Services and inputs
  - Trainings, Workshops and Meetings
  - Civil Works
  - Grants and Subsidies
  - Salaries and Allowances
  - Operating costs
- 8. Total cost and Financing.** Total programme cost (investment cost and incremental recurrent cost, including physical and price contingencies) is estimated at about USD 270 million, 64.5 million (24% of the total cost) of which will be financed by IFAD through a loan and a grant. Ifad contribution will finance all programme components as follows: USD 23.4 million (9% of total cost) to finance Component 1, USD 37.5 million (14% of total cost) for Component 2, and USD 3.5 million for component 3 (1% of total cost).

9. The Arab Republic of Egypt (GoE) would provide USD 15.4 million (5.7% of total cost) to the entire programme. Resources amounting to around USD 2 million (0.8% of total costs) will be used to finance component 1. About USD 10 million (almost 4% of total cost) will be financing component 2, while USD 2.2 million (0.8% of total cost) will be dedicated to Component 3. Contribution from GoE will mainly finance salaries of programme staff as well as taxes of any related expense.

10. In conformity with the principle that no taxes or duties would be financed out of the proceeds of the IFAD Loan/Grant, any future changes in the rates and/or structures of taxes and duties would have to be met by the Government. The estimate of taxes and duties was based on the rates prevailing at the time of the design.

11. The African Development Bank (AfDB) will co-finance STAR with USD 90 million (34% of total cost) that will be allocated mainly to the financing of infrastructures entailed in component 2 for a total cost of USD 87 million (32% of total cost). Another USD 2.5 million (1% of total cost) will support the financing of micro-enterprises under component 1.

12. The Opec Fund for International Development (OFID) will contribute to financing of infrastructure development under component 1 and 2. Contribution from OFID will amount to about 20 million (7.4% of total cost).

13. The World Food Programme (WFP) will co-finance STAR programme with about USD 10 million (3.7% of total cost) supporting the strengthening of rural institution and the development of micro-enterprises.

14. Grant resources of the Adaptation Fund (AF) for about USD 2.8 million (1.1% of total cost) will be allocated across all three components with a financing of about USD 0.8 million to component 1, USD 1.5 million to component 2 and 0.5 million to component 3 (10% of total programme costs) while the remainder USD 0.5 million will be absorbed in component 3.

15. The STAR programme would also be supported by private financial institutions contributing about USD 54 million (20% of total cost), allocated mainly to the co-financing of component 2. Contribution from beneficiaries, both in-kind and in-cash, are expected to amount to USD 12 million (4.7% of total cost).

16. The foreign exchange component is estimated at USD 43 million. Taxes and duties are estimated at USD 11.3 million. Funds allocated to the Programme Management Unit are of USD 6.2 million, equal to 2.3% of the total cost. Tables below summarizes Programme costs and financing. Detailed cost estimates are provided in annex A and B to this appendix.

**Table 1: Programme cost by components (EGP '000 / USD '000)**

	(EGP '000)			(USD '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	254,742	47,453	302,194	12,737	2,373	15,110	16	6
2. Micro enterprises development	673,202	34,750	707,952	33,660	1,738	35,398	5	14
<b>Subtotal</b>	<b>927,944</b>	<b>82,203</b>	<b>1,010,146</b>	<b>46,397</b>	<b>4,110</b>	<b>50,507</b>	<b>8</b>	<b>20</b>
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	2,410,802	158,020	2,568,822	120,540	7,901	128,441	6	51
2. Production related investments under business plans	775,743	552,165	1,327,907	38,787	27,608	66,395	42	26
<b>Subtotal</b>	<b>3,186,545</b>	<b>710,185</b>	<b>3,896,729</b>	<b>159,327</b>	<b>35,509</b>	<b>194,836</b>	<b>18</b>	<b>77</b>
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	96,253	7,140	103,393	4,813	357	5,170	7	2
2. M&E and Knowledge Management	13,705	6,610	20,315	685	331	1,016	33	-
<b>Subtotal</b>	<b>109,958</b>	<b>13,750</b>	<b>123,708</b>	<b>5,498</b>	<b>688</b>	<b>6,185</b>	<b>11</b>	<b>2</b>
<b>Total BASELINE COSTS</b>	<b>4,224,446</b>	<b>806,137</b>	<b>5,030,583</b>	<b>211,222</b>	<b>40,307</b>	<b>251,529</b>	<b>16</b>	<b>100</b>
Physical Contingencies	115,170	-	115,170	5,759	-	5,759	-	2
Price Contingencies	1,623,462	337,350	1,960,813	10,240	2,113	12,353	17	5
<b>Total PROJECT COSTS</b>	<b>5,963,078</b>	<b>1,143,488</b>	<b>7,106,566</b>	<b>227,221</b>	<b>42,420</b>	<b>269,641</b>	<b>16</b>	<b>107</b>

**Table 2: Programme expenditure accounts by components (USD '000)**

	Improvement of smallholders productivity and resilience						Total
	Strengthening Rural Institutions, Enterprises and Markets		Investments in irrigation infrastructure and management		Production related investments under business plans	Project Management, M&E and KM	
	Strengthening marketing institutions	Micro enterprises development	irrigation infrastructure and management	investments under business plans	Project Management Unit	M&E and Knowledge Management	
<b>I. Investment Costs</b>							
A. Technical assistance and consultancies /a	3,681	483	15,111	3,016	174	802	23,267
B. Goods, Services and Inputs	440	3,724	1,770	64,291	552	-	70,777
C. Trainings, Workshops and Meetings /b	5,456	29	4	1,574	99	277	7,439
D. Civil Works	3,964	-	124,167	-	-	-	128,131
E. Grants and subsidies	2,411	31,332	-	1,058	-	-	34,801
<b>Total Investment Costs</b>	<b>15,953</b>	<b>35,568</b>	<b>141,053</b>	<b>69,938</b>	<b>825</b>	<b>1,079</b>	<b>264,416</b>
<b>II. Recurrent Costs</b>							
A. Salaries and Allowances	-	-	-	-	3,436	-	3,436
B. Operating costs /c	-	-	869	-	920	-	1,789
<b>Total Recurrent Costs</b>	<b>-</b>	<b>-</b>	<b>869</b>	<b>-</b>	<b>4,356</b>	<b>-</b>	<b>5,225</b>
<b>Total PROJECT COSTS</b>	<b>15,953</b>	<b>35,568</b>	<b>141,922</b>	<b>69,938</b>	<b>5,181</b>	<b>1,079</b>	<b>269,641</b>
Taxes	1,612	520	329	8,459	212	133	11,265
Foreign Exchange	2,448	1,798	8,330	29,132	361	352	42,420

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 3: Financing Plan by Components (USD '000)**

(USD '000)																				
	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>																				
1. Strengthening marketing institutions	5,508	34.5	1,276	8.0	-	-	2,483	15.6	-	-	5,742	36.0	661	4.1	282	1.8	-	-	15,953	5.9
2. Micro enterprises development	16,671	46.9	-	-	689	1.9	520	1.5	2,508	7.1	-	-	9,213	25.9	527	1.5	5,440	15.3	35,568	13.2
<b>Subtotal</b>	<b>22,178</b>	<b>43.0</b>	<b>1,276</b>	<b>2.5</b>	<b>689</b>	<b>1.3</b>	<b>3,004</b>	<b>5.8</b>	<b>2,508</b>	<b>4.9</b>	<b>5,742</b>	<b>11.1</b>	<b>9,874</b>	<b>19.2</b>	<b>809</b>	<b>1.6</b>	<b>5,440</b>	<b>10.6</b>	<b>51,521</b>	<b>19.1</b>
<b>B. Improvement of smallholders productivity and resilience</b>																				
1. Investments in irrigation infrastructure and management	9,662	6.8	30	-	8,353	5.9	1,759	1.2	84,529	59.6	14,258	10.0	-	-	-	-	23,331	16.4	141,922	52.6
2. Production related investments under business plans	27,885	39.9	-	-	3,722	5.3	8,459	12.1	3,004	4.3	-	-	-	-	1,543	2.2	25,326	36.2	69,938	25.9
<b>Subtotal</b>	<b>37,546</b>	<b>17.7</b>	<b>30</b>	<b>-</b>	<b>12,075</b>	<b>5.7</b>	<b>10,218</b>	<b>4.8</b>	<b>87,532</b>	<b>41.3</b>	<b>14,258</b>	<b>6.7</b>	<b>-</b>	<b>-</b>	<b>1,543</b>	<b>0.7</b>	<b>48,658</b>	<b>23.0</b>	<b>211,860</b>	<b>78.6</b>
<b>C. Project Management, M&amp;E and KM</b>																				
1. Project Management Unit	2,577	49.8	-	-	-	-	2,084	40.2	-	-	-	-	-	-	519	10.0	-	-	5,181	1.9
2. M&E and Knowledge Management	928	86.0	-	-	-	-	151	14.0	-	-	-	-	-	-	-	-	-	-	1,079	0.4
<b>Subtotal</b>	<b>3,505</b>	<b>56.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,236</b>	<b>35.7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>519</b>	<b>8.3</b>	<b>-</b>	<b>-</b>	<b>6,260</b>	<b>2.3</b>
<b>Total PROJECT COSTS</b>	<b>63,230</b>	<b>23.4</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.7</b>	<b>15,457</b>	<b>5.7</b>	<b>90,041</b>	<b>33.4</b>	<b>20,000</b>	<b>7.4</b>	<b>9,874</b>	<b>3.7</b>	<b>2,871</b>	<b>1.1</b>	<b>54,097</b>	<b>20.1</b>	<b>269,641</b>	<b>100.0</b>

**Table 4: Financing Plan by Expenditure Accounts (USD '000)**

(USD '000)																				
	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
<b>I. Investment Costs</b>																				
A. Technical assistance and consultancies /a	7,474	32.1	350	1.5	-	-	1,620	7.0	13,404	57.6	-	-	37	0.2	383	1.6	-	-	23,267	8.6
B. Goods, Services and Inputs	23,787	33.6	417	0.6	3,722	5.3	9,793	13.8	3,004	4.2	-	-	3,287	4.6	1,442	2.0	25,326	35.8	70,777	26.2
C. Trainings, Workshops and Meetings /b	5,144	69.1	539	7.2	-	-	1,116	15.0	-	-	-	-	641	8.6	-	-	-	-	7,439	2.8
D. Civil Works	7,100	5.5	-	-	8,353	6.5	633	0.5	71,125	55.5	17,589	13.7	-	-	-	-	23,331	18.2	128,131	47.5
E. Grants and subsidies	17,316	49.8	-	-	689	2.0	0	-	2,508	7.2	2,411	6.9	5,910	17.0	527	1.5	5,440	15.6	34,801	12.9
<b>Total Investment Costs</b>	<b>60,820</b>	<b>23.0</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.8</b>	<b>13,161</b>	<b>5.0</b>	<b>90,041</b>	<b>34.1</b>	<b>20,000</b>	<b>7.6</b>	<b>9,874</b>	<b>3.7</b>	<b>2,352</b>	<b>0.9</b>	<b>54,097</b>	<b>20.5</b>	<b>264,416</b>	<b>98.1</b>
<b>II. Recurrent Costs</b>																				
A. Salaries and Allowances	2,405	70.0	-	-	-	-	731	21.3	-	-	-	-	-	-	300	8.7	-	-	3,436	1.3
B. Operating costs /c	5	0.3	-	-	-	-	1,565	87.5	-	-	-	-	-	-	219	12.3	-	-	1,789	0.7
<b>Total Recurrent Costs</b>	<b>2,410</b>	<b>46.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,295</b>	<b>43.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>519</b>	<b>9.9</b>	<b>-</b>	<b>-</b>	<b>5,225</b>	<b>1.9</b>
<b>Total PROJECT COSTS</b>	<b>63,230</b>	<b>23.4</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.7</b>	<b>15,457</b>	<b>5.7</b>	<b>90,041</b>	<b>33.4</b>	<b>20,000</b>	<b>7.4</b>	<b>9,874</b>	<b>3.7</b>	<b>2,871</b>	<b>1.1</b>	<b>54,097</b>	<b>20.1</b>	<b>269,641</b>	<b>100.0</b>

a It includes Technical assistance and studies

b It includes meetings

c including maintenance

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Table 6AA: Disbursement Accounts by Financiers (USD `000)

**Table 1A: Components Programme Cost Summary (EGP '000 / USD '000)**

	(EGP '000)			(USD '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	254,742	47,453	302,194	12,737	2,373	15,110	16	6
2. Micro enterprises development	673,202	34,750	707,952	33,660	1,738	35,398	5	14
<b>Subtotal</b>	927,944	82,203	1,010,146	46,397	4,110	50,507	8	20
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	2,410,802	158,020	2,568,822	120,540	7,901	128,441	6	51
2. Production related investments under business plans	775,743	552,165	1,327,907	38,787	27,608	66,395	42	26
<b>Subtotal</b>	3,186,545	710,185	3,896,729	159,327	35,509	194,836	18	77
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	96,253	7,140	103,393	4,813	357	5,170	7	2
2. M&E and Knowledge Management	13,705	6,610	20,315	685	331	1,016	33	-
<b>Subtotal</b>	109,958	13,750	123,708	5,498	688	6,185	11	2
<b>Total BASELINE COSTS</b>	4,224,446	806,137	5,030,583	211,222	40,307	251,529	16	100
Physical Contingencies	115,170	-	115,170	5,759	-	5,759	-	2
Price Contingencies	1,623,462	337,350	1,960,813	10,240	2,113	12,353	17	5
<b>Total PROJECT COSTS</b>	5,963,078	1,143,488	7,106,566	227,221	42,420	269,641	16	107

**Table 2A: Expenditure Accounts by Components – Total Including Contingencies (USD '000)**

	Strengthening Rural Institutions, Enterprises and Markets		Improvement of smallholders productivity and resilience				Total
	Strengthening marketing institutions	Micro enterprises development	Investments in irrigation infrastructure and management	Production related investments under business plans	Project Management, M&E and KM		
					Project Management Unit	M&E and Knowledge Management	
<b>I. Investment Costs</b>							
A. Technical assistance and consultancies /a	3,681	483	15,111	3,016	174	802	23,267
B. Goods, Services and Inputs	440	3,724	1,770	64,291	552	-	70,777
C. Trainings, Workshops and Meetings /b	5,456	29	4	1,574	99	277	7,439
D. Civil Works	3,964	-	124,167	-	-	-	128,131
E. Grants and subsidies	2,411	31,332	-	1,058	-	-	34,801
<b>Total Investment Costs</b>	<b>15,953</b>	<b>35,568</b>	<b>141,053</b>	<b>69,938</b>	<b>825</b>	<b>1,079</b>	<b>264,416</b>
<b>II. Recurrent Costs</b>							
A. Salaries and Allowances	-	-	-	-	3,436	-	3,436
B. Operating costs /c	-	-	869	-	920	-	1,789
<b>Total Recurrent Costs</b>	<b>-</b>	<b>-</b>	<b>869</b>	<b>-</b>	<b>4,356</b>	<b>-</b>	<b>5,225</b>
<b>Total PROJECT COSTS</b>	<b>15,953</b>	<b>35,568</b>	<b>141,922</b>	<b>69,938</b>	<b>5,181</b>	<b>1,079</b>	<b>269,641</b>
Taxes	1,612	520	329	8,459	212	133	11,265
Foreign Exchange	2,448	1,798	8,330	29,132	361	352	42,420

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 2AA: Expenditure Accounts by Components – Total Including Contingencies (EGP `000)**

	Improvement of smallholders productivity and resilience						Total
	Strengthening Rural Institutions, Enterprises and Markets		Production related investments		Project Management, M&E and KM		
	Strengthening marketing institutions	Micro enterprises development	Investments in irrigation infrastructure and management	under business plans	Project Managemen Unit	M&E and Knowledge Managemen	
<b>I. Investment Costs</b>							
A. Technical assistance and consultancies /a	87,157	11,178	414,461	63,735	3,976	19,707	600,214
B. Goods, Services and Inputs	11,360	94,522	44,771	1,757,212	11,874	-	1,919,738
C. Trainings, Woskshops and Meetings /b	142,276	618	117	42,220	2,496	5,938	193,665
D. Civil Works	109,227	-	3,448,896	-	-	-	3,558,123
E. Grants and subsidies	64,129	630,356	-	29,202	-	-	723,688
<b>Total Investment Costs</b>	<b>414,149</b>	<b>736,675</b>	<b>3,908,245</b>	<b>1,892,369</b>	<b>18,346</b>	<b>25,644</b>	<b>6,995,428</b>
<b>II. Recurrent Costs</b>							
A. Salaries and Allow ances	-	-	-	-	68,712	-	68,712
B. Operating costs /c	-	-	24,025	-	18,402	-	42,426
<b>Total Recurrent Costs</b>	<b>-</b>	<b>-</b>	<b>24,025</b>	<b>-</b>	<b>87,114</b>	<b>-</b>	<b>111,138</b>
<b>Total PROJECT COSTS</b>	<b>414,149</b>	<b>736,675</b>	<b>3,932,269</b>	<b>1,892,369</b>	<b>105,460</b>	<b>25,644</b>	<b>7,106,566</b>
Taxes	42,095	13,057	8,554	228,810	4,469	3,149	300,134
Foreign Exchange	60,174	45,078	226,821	794,908	7,863	8,643	1,143,488

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 3A: Programme Components by Year – Totals Including Contingencies (EGP '000)**

	Totals Including Contingencies (EGP '000)							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	41,954	74,226	123,868	115,286	54,474	4,341	-	414,149
2. Micro enterprises development	25,521	152,075	167,686	144,589	126,998	64,356	55,449	736,675
<b>Subtotal</b>	67,476	226,301	291,555	259,875	181,473	68,696	55,449	1,150,824
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	16,435	116,482	1,326,406	1,515,282	770,819	186,845	-	3,932,269
2. Production related investments under business plans	39,851	82,455	192,147	507,154	518,527	398,103	154,131	1,892,369
<b>Subtotal</b>	56,287	198,937	1,518,553	2,022,436	1,289,346	584,948	154,131	5,824,638
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	32,478	15,365	13,270	12,695	12,720	12,748	6,183	105,460
2. M&E and Knowledge Management	3,558	2,457	2,933	2,658	2,764	3,299	7,975	25,644
<b>Subtotal</b>	36,036	17,822	16,203	15,353	15,485	16,047	14,158	131,104
<b>Total PROJECT COSTS</b>	159,798	443,060	1,826,311	2,297,663	1,486,303	669,692	223,739	7,106,566

**Table 3AA: Programme Components by Year – Totals Including Contingencies (USD '000)**

	Totals Including Contingencies (USD '000)							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	1,969	3,176	4,731	4,115	1,826	137	-	15,953
2. Micro enterprises development	1,208	7,354	7,855	6,924	6,288	3,167	2,772	35,568
<b>Subtotal</b>	<b>3,177</b>	<b>10,530</b>	<b>12,586</b>	<b>11,038</b>	<b>8,113</b>	<b>3,304</b>	<b>2,772</b>	<b>51,521</b>
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	764	4,817	50,543	54,081	25,836	5,881	-	141,922
2. Production related investments under business plans	1,872	3,733	7,905	19,357	18,588	13,468	5,016	69,938
<b>Subtotal</b>	<b>2,636</b>	<b>8,549</b>	<b>58,447</b>	<b>73,438</b>	<b>44,424</b>	<b>19,350</b>	<b>5,016</b>	<b>211,860</b>
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	1,572	748	660	630	631	631	309	5,181
2. M&E and Knowledge Management	176	119	139	123	125	146	251	1,079
<b>Subtotal</b>	<b>1,748</b>	<b>866</b>	<b>799</b>	<b>753</b>	<b>756</b>	<b>777</b>	<b>560</b>	<b>6,260</b>
<b>Total PROJECT COSTS</b>	<b>7,561</b>	<b>19,945</b>	<b>71,833</b>	<b>85,230</b>	<b>53,293</b>	<b>23,430</b>	<b>8,348</b>	<b>269,641</b>

**Table 4A: Expenditure Accounts by Year – Totals Including Contingencies (EGP '000)**

	Totals Including Contingencies (EGP '000)							
	2020	2021	2022	2023	2024	2025	2026	Total
<b>I. Investment Costs</b>								
A. Technical assistance and consultancies /a	55,308	50,680	194,159	187,993	87,184	10,937	13,953	600,214
B. Goods, Services and Inputs	38,220	116,146	233,670	505,178	494,918	383,452	148,153	1,919,738
C. Trainings, Woskshops and Meetings /b	27,732	34,676	43,858	39,366	35,299	12,734	-	193,665
D. Civil Works	10,253	94,624	1,169,599	1,383,902	716,113	183,631	-	3,558,123
E. Grants and subsidies	10,501	129,421	167,040	163,405	134,513	63,359	55,449	723,688
<b>Total Investment Costs</b>	<b>142,015</b>	<b>425,546</b>	<b>1,808,326</b>	<b>2,279,844</b>	<b>1,468,028</b>	<b>654,113</b>	<b>217,555</b>	<b>6,995,428</b>
<b>II. Recurrent Costs</b>								
A. Salaries and Allow ances	11,676	10,752	10,752	10,152	10,152	10,152	5,076	68,712
B. Operating costs /c	6,107	6,762	7,233	7,667	8,123	5,427	1,107	42,426
<b>Total Recurrent Costs</b>	<b>17,783</b>	<b>17,514</b>	<b>17,985</b>	<b>17,819</b>	<b>18,275</b>	<b>15,579</b>	<b>6,183</b>	<b>111,138</b>
<b>Total PROJECT COSTS</b>	<b>159,798</b>	<b>443,060</b>	<b>1,826,311</b>	<b>2,297,663</b>	<b>1,486,303</b>	<b>669,692</b>	<b>223,739</b>	<b>7,106,566</b>

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 4AA: Expenditure Accounts by Year – Totals Including Contingencies (USD '000)**

	Totals Including Contingencies (USD '000)							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>I. Investment Costs</b>								
A. Technical assistance and consultancies /a	2,619	2,264	7,498	6,812	3,041	483	550	23,267
B. Goods, Services and Inputs	1,776	5,074	9,416	19,201	17,698	12,896	4,717	70,777
C. Trainings, Workshops and Meetings /b	1,291	1,441	1,680	1,416	1,196	415	-	7,439
D. Civil Works	477	3,913	44,568	49,392	24,002	5,780	-	128,131
E. Grants and subsidies	510	6,417	7,831	7,595	6,540	3,136	2,772	34,801
<b>Total Investment Costs</b>	<b>6,672</b>	<b>19,109</b>	<b>70,993</b>	<b>84,416</b>	<b>52,476</b>	<b>22,710</b>	<b>8,039</b>	<b>264,416</b>
<b>II. Recurrent Costs</b>								
A. Salaries and Allowances	584	538	538	508	508	508	254	3,436
B. Operating costs /c	305	299	302	306	309	212	55	1,789
<b>Total Recurrent Costs</b>	<b>889</b>	<b>837</b>	<b>840</b>	<b>813</b>	<b>817</b>	<b>720</b>	<b>309</b>	<b>5,225</b>
<b>Total PROJECT COSTS</b>	<b>7,561</b>	<b>19,945</b>	<b>71,833</b>	<b>85,230</b>	<b>53,293</b>	<b>23,430</b>	<b>8,348</b>	<b>269,641</b>

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 5A: Programme Components by Financiers (USD '000)**

(USD'000)

	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total		
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>																					
1. Strengthening marketing institutions	5,508	34.5	1,276	8.0	-	-	2,483	15.6	-	-	5,742	36.0	661	4.1	282	1.8	-	-	15,953	5.9	
2. Micro enterprises development	16,671	46.9	-	-	689	1.9	520	1.5	2,508	7.1	-	-	9,213	25.9	527	1.5	5,440	15.3	35,568	13.2	
<b>Subtotal</b>	<b>22,178</b>	<b>43.0</b>	<b>1,276</b>	<b>2.5</b>	<b>689</b>	<b>1.3</b>	<b>3,004</b>	<b>5.8</b>	<b>2,508</b>	<b>4.9</b>	<b>5,742</b>	<b>11.1</b>	<b>9,874</b>	<b>19.2</b>	<b>809</b>	<b>1.6</b>	<b>5,440</b>	<b>10.6</b>	<b>51,521</b>	<b>19.1</b>	
<b>B. Improvement of smallholders productivity and resilience</b>																					
1. Investments in irrigation infrastructure and management	9,662	6.8	30	-	8,353	5.9	1,759	1.2	84,529	59.6	14,258	10.0	-	-	-	-	23,331	16.4	141,922	52.6	
2. Production related investments under business plans	27,885	39.9	-	-	3,722	5.3	8,459	12.1	3,004	4.3	-	-	-	-	1,543	2.2	25,326	36.2	69,938	25.9	
<b>Subtotal</b>	<b>37,546</b>	<b>17.7</b>	<b>30</b>	<b>-</b>	<b>12,075</b>	<b>5.7</b>	<b>10,218</b>	<b>4.8</b>	<b>87,532</b>	<b>41.3</b>	<b>14,258</b>	<b>6.7</b>	<b>-</b>	<b>-</b>	<b>1,543</b>	<b>0.7</b>	<b>48,658</b>	<b>23.0</b>	<b>211,860</b>	<b>78.6</b>	
<b>C. Project Management, M&amp;E and KM</b>																					
1. Project Management Unit	2,577	49.8	-	-	-	-	2,084	40.2	-	-	-	-	-	-	519	10.0	-	-	5,181	1.9	
2. M&E and Knowledge Management	928	86.0	-	-	-	-	151	14.0	-	-	-	-	-	-	-	-	-	-	1,079	0.4	
<b>Subtotal</b>	<b>3,505</b>	<b>56.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,236</b>	<b>35.7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>519</b>	<b>8.3</b>	<b>-</b>	<b>-</b>	<b>6,260</b>	<b>2.3</b>	
<b>Total PROJECT COSTS</b>	<b>63,230</b>	<b>23.4</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.7</b>	<b>15,457</b>	<b>5.7</b>	<b>90,041</b>	<b>33.4</b>	<b>20,000</b>	<b>7.4</b>	<b>9,874</b>	<b>3.7</b>	<b>2,871</b>	<b>1.1</b>	<b>54,097</b>	<b>20.1</b>	<b>269,641</b>	<b>100.0</b>	

**Table 5AA: Programme Components by Financiers (EGP '000)**

	(EGP '000)																			
	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>																				
1. Strengthening marketing institutions	138,276	33.4	31,935	7.7	-	-	65,668	15.9	-	-	155,917	37.6	16,276	3.9	6,076	1.5	-	-	414,149	5.8
2. Micro enterprises development	334,561	45.4	-	-	13,778	1.9	13,057	1.8	50,168	6.8	-	-	202,058	27.4	14,256	1.9	108,797	14.8	736,675	10.4
<b>Subtotal</b>	<b>472,837</b>	<b>41.1</b>	<b>31,935</b>	<b>2.8</b>	<b>13,778</b>	<b>1.2</b>	<b>78,725</b>	<b>6.8</b>	<b>50,168</b>	<b>4.4</b>	<b>155,917</b>	<b>13.5</b>	<b>218,334</b>	<b>19.0</b>	<b>20,332</b>	<b>1.8</b>	<b>108,797</b>	<b>9.5</b>	<b>1,150,824</b>	<b>16.2</b>
<b>B. Improvement of smallholders productivity and resilience</b>																				
1. Investments in irrigation infrastructure and management	264,240	6.7	651	-	232,886	5.9	46,515	1.2	2,339,990	59.5	397,513	10.1	-	-	-	-	650,474	16.5	3,932,269	55.3
2. Production related investments under business plans	743,569	39.3	-	-	102,691	5.4	228,810	12.1	80,815	4.3	-	-	-	-	37,385	2.0	699,099	36.9	1,892,369	26.6
<b>Subtotal</b>	<b>1,007,808</b>	<b>17.3</b>	<b>651</b>	<b>-</b>	<b>335,577</b>	<b>5.8</b>	<b>275,325</b>	<b>4.7</b>	<b>2,420,805</b>	<b>41.6</b>	<b>397,513</b>	<b>6.8</b>	<b>-</b>	<b>-</b>	<b>37,385</b>	<b>0.6</b>	<b>1,349,573</b>	<b>23.2</b>	<b>5,824,638</b>	<b>82.0</b>
<b>C. Project Management, M&amp;E and KM</b>																				
1. Project Management Unit	52,009	49.3	-	-	-	-	43,064	40.8	-	-	-	-	-	-	10,386	9.8	-	-	105,460	1.5
2. M&E and Knowledge Management	22,089	86.1	-	-	-	-	3,555	13.9	-	-	-	-	-	-	-	-	-	-	25,644	0.4
<b>Subtotal</b>	<b>74,098</b>	<b>56.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46,620</b>	<b>35.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10,386</b>	<b>7.9</b>	<b>-</b>	<b>-</b>	<b>131,104</b>	<b>1.8</b>
<b>Total PROJECT COSTS</b>	<b>1,554,744</b>	<b>21.9</b>	<b>32,586</b>	<b>0.5</b>	<b>349,355</b>	<b>4.9</b>	<b>400,670</b>	<b>5.6</b>	<b>2,470,973</b>	<b>34.8</b>	<b>553,430</b>	<b>7.8</b>	<b>218,334</b>	<b>3.1</b>	<b>68,104</b>	<b>1.0</b>	<b>1,458,370</b>	<b>20.5</b>	<b>7,106,566</b>	<b>100.0</b>

**Table 6A: Disbursement Accounts by Financiers (EGP '000)**

(EGP '000)

	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Technical assistance and Consultancies	173,423	28.9	8,182	1.4	-	-	39,493	6.6	369,920	61.6	-	-	949	0.2	8,246	1.4	-	-	600,214	8.4
Goods, Services and inputs DA	675,181	33.5	10,830	0.5	102,691	5.1	261,731	13.0	80,815	4.0	64,129	3.2	83,379	4.1	35,215	1.7	699,099	34.7	2,013,070	28.3
Grants and subsidies	325,162	51.6	-	-	13,778	2.2	-	-	50,168	8.0	-	-	118,195	18.8	14,256	2.3	108,797	17.3	630,356	8.9
Training, workshops and meetings	134,829	69.6	13,574	7.0	-	-	29,450	15.2	-	-	-	-	15,811	8.2	-	-	-	-	193,665	2.7
Civil Works_DA	197,953	5.6	-	-	232,886	6.5	17,440	0.5	1,970,070	55.4	489,300	13.8	-	-	-	-	650,474	18.3	3,558,123	50.1
Salaries and Allowances_DA	48,096	70.0	-	-	-	-	14,616	21.3	-	-	-	-	-	-	6,000	8.7	-	-	68,712	1.0
Operating costs_DA /a	100	0.2	-	-	-	-	37,940	89.4	-	-	-	-	-	-	4,386	10.3	-	-	42,426	0.6
<b>Total PROJECT COSTS</b>	<b>1,554,744</b>	<b>21.9</b>	<b>32,586</b>	<b>0.5</b>	<b>349,355</b>	<b>4.9</b>	<b>400,670</b>	<b>5.6</b>	<b>2,470,973</b>	<b>34.8</b>	<b>553,430</b>	<b>7.8</b>	<b>218,334</b>	<b>3.1</b>	<b>68,104</b>	<b>1.0</b>	<b>1,458,370</b>	<b>20.5</b>	<b>7,106,566</b>	<b>100.0</b>

/a including maintenance

**Table 6AA: Disbursement Accounts by Financiers (USD '000)**

(USD '000)

	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Technical assistance and Consultancies	7,474	32.1	350	1.5	-	-	1,620	7.0	13,404	57.6	-	-	37	0.2	383	1.6	-	-	23,267	8.6
Goods, Services and inputs DA	24,845	33.5	417	0.6	3,722	5.0	9,793	13.2	3,004	4.0	2,411	3.2	3,287	4.4	1,442	1.9	25,326	34.1	74,246	27.5
Grants and subsidies	16,258	51.9	-	-	689	2.2	0	-	2,508	8.0	-	-	5,910	18.9	527	1.7	5,440	17.4	31,332	11.6
Training, workshops and meetings	5,144	69.1	539	7.2	-	-	1,116	15.0	-	-	-	-	641	8.6	-	-	-	-	7,439	2.8
Civil Works_DA	7,100	5.5	-	-	8,353	6.5	633	0.5	71,125	55.5	17,589	13.7	-	-	-	-	23,331	18.2	128,131	47.5
Salaries and Allowances_DA	2,405	70.0	-	-	-	-	731	21.3	-	-	-	-	-	-	300	8.7	-	-	3,436	1.3
Operating costs_DA /a	5	0.3	-	-	-	-	1,565	87.5	-	-	-	-	-	-	219	12.3	-	-	1,789	0.7
<b>Total PROJECT COSTS</b>	<b>63,230</b>	<b>23.4</b>	<b>1,306</b>	<b>0.5</b>	<b>12,764</b>	<b>4.7</b>	<b>15,457</b>	<b>5.7</b>	<b>90,041</b>	<b>33.4</b>	<b>20,000</b>	<b>7.4</b>	<b>9,874</b>	<b>3.7</b>	<b>2,871</b>	<b>1.1</b>	<b>54,097</b>	<b>20.1</b>	<b>269,641</b>	<b>100.0</b>

/a including maintenance



## **Annex B: Detailed Cost Tables**

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Table 2B: Microenterprise development (USD `000)

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Table 5B: Programme management (USD `000)

Table 6B: M&E and knowledge management (USD `000)

**Table 1B: Strengthening marketing institutions (USD '000)**

Detailed Costs	Unit	Quantities							Unit Cost (USD)	Totals Including Contingencies (USD '000)							
		2020	2021	2022	2023	2024	2025	2026		Total	2020	2021	2022	2023	2024	2025	2026
<b>I. Investment Costs</b>																	
<b>A. Studies and training material developed by service providers</b>																	
Service provider for preparation of training material /a	lumpsum									30	-	-	-	-	-	-	30
Community mobilization, awareness package, training material preparation and guidelines /b	lumpsum									76	-	39	-	-	-	-	115
Institutional need assessment /c	no. of studies	3	-	-	-	-	-	-	3	5,000	15	-	-	-	-	-	15
Market studies /d	no. of studies	3	-	3	-	-	-	-	6	5,000	15	-	16	-	-	-	31
Agribusiness landscape and opportunities /e	no. of studies	3	-	3	-	-	-	-	6	5,000	15	-	16	-	-	-	31
Quantitative assessment on access to finance, demand and supply	no. of studies	1	-	-	-	-	-	-	1	8,000	8	-	-	-	-	-	8
Analysis of climate risks	local VC	40	-	-	-	-	-	-	40	2,000	80	-	-	-	-	-	81
<b>Subtotal</b>										240	-	70	-	-	-	-	310
<b>B. Sensitisation and mobilisation for CDAs, cooperatives, women groups and MAs</b>																	
Training of trainers /f	training sessions	3	4	4	4	-	-	-	15	5,000	15	21	21	21	-	-	78
Communication and mobilisation campaign /g	lumpsum									15	15	8	8	-	-	-	46
Community mobilisation meetings and training roll-out /h	no of meetings/trainings	18	24	70	48	-	-	-	160	500	9	12	37	25	-	-	83
Community mobilisation meetings for women	no of meetings/trainings	25	-	-	-	-	-	-	25	1,000	25	-	-	-	-	-	25
Sensitisation events and exposure meetings /i	no. of visits	2	3	6	8	8	-	-	27	3,000	6	9	19	25	26	-	86
Targeting and gender Training of Gender and Social Inclusion experts / Social Focal Points at CDAs	people	100	-	100	-	-	-	-	200	30	3	-	3	-	-	-	6
Development of training material for TOT trainings on targeting and gender /j	lumpsum									3	-	-	-	-	-	-	3
Exchange for Women's groups /k	no. of people	-	60	-	60	-	60	-	180	60	-	4	-	4	-	4	11
Women's leader participate to exhibition ( agri-food product )	no. of people	-	25	-	25	-	25	-	75	60	-	2	-	2	-	2	5
Gender / targeting / Nutrition mainstreaming training for Gender and Social Development expert at Governorate level	no. of people	3	-	3	-	-	-	-	6	40	0	-	0	-	-	-	0
Leadership training for Women in VSC&L Groups	no. of people	500	-	500	-	-	-	-	1,000	40	20	-	21	-	-	-	41
Finance Literacy Training /l	no. of people	2,000	-	2,000	-	-	-	-	4,000	40	81	-	83	-	-	-	164
Women enterprise development trainings ( 10 per villages ) /m	no. of people	1,000	1,000	-	-	-	-	-	2,000	40	40	41	-	-	-	-	81
Institutional support to partner CDAs and Ag coops (office refurbishment, and equipment)	no.	18	24	70	48	-	-	-	160	2,500	45	62	183	127	-	-	417
Support registration costs for new businesses	lumpsum	0.05	0.05	0.4	0.4	0.05	0.05	-	1	100,000	5	5	42	42	5	6	105
Other specialized training	lumpsum									13	26	52	53	-	-	-	144
<b>Subtotal</b>										281	196	468	309	31	11	-	1,296
<b>C. Market related investments under the business plans</b>																	
Certification costs /n	lumpsum	-	2	10	10	2	-	-	24	12,000	-	28	143	145	30	-	346
Participation to Expos, trade fairs and other fora	lumpsum									-	70	71	73	74	-	-	288
Post-harvest specialized technical assistance	lumpsum									29	29	119	121	62	-	-	360
Financing of post-harvest equipment /o	no. of business plan	150	150	1,000	1,000	-	-	-	2,300	1,000	151	154	1,044	1,062	-	-	2,411
Market structures and outlets	no. of structures	-	2	2	2	-	-	-	6	20,000	-	51	52	53	-	-	157
Collection centres /p	no. of centres	-	2	12	8	2	-	-	24	20,000	-	51	313	212	54	-	631
(Cold) storage facilities /q	no. of facilities	-	2	6	10	6	-	-	24	100,000	-	256	782	1,327	811	-	3,177
<b>Subtotal</b>										180	640	2,524	2,994	1,030	-	-	7,369
<b>D. Demonstration plots</b>																	
Nutrition Demo Plot ( Roof-Garden) established at cluster level	no. of demos	10	10	-	-	-	-	-	20	1,000	11	12	-	-	-	-	23
Home ( roof top) garden demonstrations	no. of demos	10	10	-	-	-	-	-	20	500	6	6	-	-	-	-	12
<b>Subtotal</b>										17	18	-	-	-	-	-	35
<b>E. Capacity development of rural institution</b>																	
Capacity building on climate change issues	lumpsum									230	-	-	-	-	-	-	230
<b>F. Digital agriculture setup</b>																	
Development of Digital market Platform and Customization of Bashaier of KEF	lumpsum									137	483	70	-	-	-	-	690
Digital Finance STAR Wallet and Mobile Money - Platform Integration	lumpsum									137	483	70	-	-	-	-	690
Visual agriculture marketing Module, Uber Model and Aggregation	lumpsum									23	444	469	-	-	-	-	936
Mobile Interface of Digital Market Platform	lumpsum									-	-	119	-	-	-	-	119
Content development and inventory on digital agriculture /r	no. of trainings/ meetings	30	30	30	30	30	10	-	160	10,000	345	351	357	363	370	126	1,911
Business Meetings, Hackathon for Digital market Solutions, Handholding /s	meetings	-	1	2	-	-	-	-	3	10,000	-	12	24	-	-	-	35
Implementation of Digital Solutions at village level	no.	10	40	40	40	40	-	-	170	8,000	92	374	381	388	395	-	1,629
MOOCs platform	lumpsum									115	-	-	-	-	-	-	115
Certified courses for operationalising capacity building on digital technology	no	30	30	30	10	-	-	-	100	5,000	172	175	178	61	-	-	587
<b>Subtotal</b>										1,021	2,322	1,668	811	764	126	-	6,712
<b>Total</b>										1,969	3,176	4,731	4,115	1,826	137	-	15,953

<sup>a</sup> Responsible also for the training of trainer

<sup>b</sup> Done by the service provider; related to community mobilisation, development of rural institutions, business plan development; including farming as a business and crop budget module, marketing modules, business modules, financial management modules; revisi

<sup>c</sup> One per governorate

<sup>d</sup> One per governorate

<sup>e</sup> One per governorate

<sup>f</sup> Training workshop 30 members per w/s, SP trains Yps, and CDTs.

<sup>g</sup> Per cluster; carried out by the mobilisers in CDTs, CDT and Yps based on awareness package developed by the service provider

<sup>h</sup> Per village; roll out carried out by the CDAs and Yps and CDTs

<sup>i</sup> 20 women per village; this will also include buyers orientation workshops

<sup>j</sup> this includes guidance on Wealth ranking Exercise

<sup>k</sup> Learning village to village on different topics: agriculture/off-farm enterprise

<sup>l</sup> 20 women per village

<sup>m</sup> 10 people per village

<sup>n</sup> per cluster

<sup>o</sup> Machinery and equipment

<sup>p</sup> Estimated one collection centre per cluster

<sup>q</sup> One per cluster

<sup>r</sup> Including campaigns, publicity, group discussions

<sup>s</sup> Mentoring 3 pilot projects

**Table 2B: Microenterprises development (USD '000)**

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt [STAR]

Table 1.2. Micro enterprises development

**Detailed Costs**

Unit	Quantities							Total	Unit Cost (USD)	Totals Including Contingencies (USD '000)							Total	
	2020	2021	2022	2023	2024	2025	2026			2020	2021	2022	2023	2024	2025	2026		
<b>I. Investment Costs</b>																		
<b>A. Studies</b>																		
Gender / nutrition sensitive Value Chain analysis as part of VC / Market analysis	no. of studies	1	-	-	-	-	-	-	1	5,000	6	-	-	-	-	-	6	
Gender Impact Assessment /a	no. of studies	1	-	1	-	-	-	1	3	5,000	6	-	6	-	-	6	18	
Poverty Impact Assessment /b	no. of studies	1	-	1	-	-	-	1	3	5,000	6	-	6	-	-	6	18	
<b>Subtotal</b>											17	-	12	-	-	13	42	
<b>B. Demonstrations</b>																		
Small income generation activity by women (innovative businesses) /c	no.	45	105	150	60	-	-	-	360	600	31	74	107	44	-	-	255	
Collective youth enterprises (processing and agro-residue based enterprises) /d	no.	6	14	20	8	-	-	-	48	25,000	172	409	595	242	-	-	1,419	
Individual youth loans through youth groups (innovative technology adoption) /e	no.	15	35	50	20	-	-	-	120	1,250	22	51	74	30	-	-	177	
Collective VC enterprises through MAs, CDAs Etc (energy saving technology etc) /f	no.	3	7	10	4	-	-	-	24	50,000	172	409	595	242	-	-	1,419	
Support to individual farmers in the MAs (innovative production technologies, climate resistant varieties etc) /g	no.	80	185	265	110	-	-	-	640	600	55	130	189	80	-	-	454	
<b>Subtotal</b>											453	1,073	1,560	638	-	-	3,724	
<b>C. Financial support for MSME</b>																		
Credit line for small income generation by women	lumpsum										156	3,110	3,110	3,110	3,110	1,555	1,400	15,552
Credit line for collective youth enterprises	lumpsum										26	521	521	521	521	261	235	2,607
Credit line for individual youth loans through youth groups	lumpsum										113	2,267	2,267	2,267	2,267	1,133	1,020	11,333
Credit line for collective VC enterprises through MAs, CDAs Etc	lumpsum										13	263	263	263	263	131	118	1,313
Entrepreneurship and financing specialist	pers.year	3	3	3	3	3	3	-	18	5,000	17	18	18	18	18	19	-	108
Training in business management to beneficiaries	lumpsum										29	-	-	-	-	-	-	29
Study on opportunities for microinsurance	lumpsum										80	-	-	-	-	-	-	80
Assessment and mapping of the demand for credit	lumpsum										80	-	-	-	-	-	-	80
International technical assistance on rural finance issues /h	lumpsum										172	-	-	-	-	-	-	172
<b>Subtotal</b>											687	6,179	6,179	6,179	6,179	3,099	2,772	31,275
<b>D. Support to innovations for climate adaptation</b>																		
Development of innovative climate-resilient micro-enterprises	no. of grants	10	20	20	20	20	10	-	100	5,000	50	103	104	106	108	55	-	527
<b>Total</b>											1,208	7,354	7,855	6,924	6,288	3,167	2,772	35,568

ia At start, mid-term and completion

ib At start, mid-term and completion

ic 15 demos per cluster identified

id 2 demos per cluster identified

ie 5 demos per cluster identified

if 1 demo per cluster identified

ig 15 demos per cluster identified

ih expertise on insurance, credit guarantee, secured transactions

**Table 3B: Investments in irrigations infrastructure and management (USD '000)**

Egypt  
Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)  
Table 2.1. Investments in irrigation infrastructure and management

Detailed Costs	Unit	Quantities							Total	Unit Cost (USD)	Totals Including Contingencies (USD '000)							Total
		2020	2021	2022	2023	2024	2025	2026			2020	2021	2022	2023	2024	2025	2026	
<b>I. Investment Costs</b>																		
<b>A. Technology demonstration</b>																		
Irrigation rehabilitation (use of modern technology) /a	no	30	70	100	40	-	-	-	240	2,500	79	188	274	112	-	-	-	653
<b>B. Irrigation related investments under the business plans</b>																		
Irrigation rehabilitation	no of HH	150	1,250	9,750	11,100	5,750	2,000	-	30,000	2,500	397	3,365	26,710	30,955	16,324	5,780	-	83,531
Development of Water User Associations /b	no.	50	50	90	90	40	-	-	320	5,000	252	256	470	478	216	-	-	1,673
Rehabilitation of branch canals	no. of branches	-	-	10	10	4	-	-	24	1,500,000	-	-	16,437	16,733	6,813	-	-	39,983
Branch canal design	no of branches	-	-	10	10	4	-	-	24	264,000	-	-	2,755	2,805	1,142	-	-	6,702
Branch canal construction and supervision	no of branches	-	-	10	10	4	-	-	24	264,000	-	-	2,755	2,805	1,142	-	-	6,702
<b>Subtotal</b>											649	3,622	49,126	53,775	25,638	5,780	-	138,590
<b>C. Digital solutions to water management</b>																		
Digital water DashBoard, server and software	lumpsum										34	-	-	-	-	-	-	34
Digital water meters /c	no. of units	-	200	200	-	-	-	-	400	3,500	-	818	833	-	-	-	-	1,651
Irrigation automation with Smart Phone based automated Pump Starters /d	no. of units	-	-	100	-	-	-	-	100	1,000	-	-	119	-	-	-	-	119
Workshops, meetings, group discussions /e	no. of meetings	6	6	6	6	6	6	-	36	100	1	1	1	1	1	1	-	4
<b>Subtotal</b>											35	819	952	1	1	1	-	1,809
<b>Total Investment Costs</b>											764	4,629	50,352	53,887	25,639	5,781	-	141,053
<b>II. Recurrent Costs</b>																		
<b>A. Operational expenses</b>																		
Implementing digital strategies for water management	lumpsum	-	40	40	40	40	20	-	180	4,000	-	187	190	194	197	100	-	869
<b>Total Recurrent Costs</b>											-	187	190	194	197	100	-	869
<b>Total</b>											764	4,817	50,543	54,081	25,836	5,881	-	141,922

/a 10 demos per cluster identified

/b This involves, mobilisation, training, capacity building and institutional development support to WUAs

/c Electromagnetic flow meter model ex: FM600 / 6", IoT master control RTU, communication booster, servo Stabilizer and an online UPS

/d Electromagnetic flow meter model ex: FM600 / 6", IoT master control RTU, communication booster, servo Stabilizer and an online UPS

**Table 4B: Production related investments under business plans (USD '000)**

Egypt  
Sustainable Transformation for Agricultural Resilience in Upper Egypt [STAR]  
Table 2.2. Production related investments under business plans

Detailed Costs	Unit	Quantities							Total	Unit Cost (USD)	Totals Including Contingencies (USD '000)							Total
		2020	2021	2022	2023	2024	2025	2026			2020	2021	2022	2023	2024	2025	2026	
<b>I. Investment Costs</b>																		
<b>A. Demonstrations</b>																		
Establishment of demonstration plot for climate resilience businesses	of demo pl	25	25	-	-	-	-	-	50	12,000	345	351	-	-	-	-	696	
<b>B. Production related investments</b>																		
Credit line for collective youth enterprises ( direct agricultural production and marketing related)	no.	-	10	15	20	20	10	6	81	50,000	-	575	877	1,190	1,211	616	377	4,846
Credit line for individual youth loans through youth groups ( direct agricultural production and marketing related)	no.	-	500	1,500	4,500	4,000	3,000	500	14,000	1,250	-	719	2,192	6,692	6,056	4,623	784	21,066
Credit line for collective VC enterprises through MAs, CDAs Etc( direct agricultural production and marketing related)	no.	-	2	4	6	6	6	3	27	75,000	-	172	351	535	545	555	282	2,441
Credit line for support to individual farmers in the MAs	no.	-	2,000	6,000	20,000	20,000	14,000	6,127	68,127	400	-	920	2,806	9,518	9,689	6,904	3,076	32,913
Production related training and capacity building	lumpsum										14	15	59	61	31	16	-	196
Establishment of water efficient irrigation at plot level	o. of fedda	150	150	250	250	-	-	-	800	1,000	172	175	297	303	-	-	-	948
Contribution to credit guarantee funds	lumpsum	-	-	0.5	0.25	0.25	-	-	1	1,000,000	-	-	522	266	270	-	-	1,058
<b>Subtotal</b>											187	2,576	7,105	18,564	17,802	12,715	4,519	63,467
<b>C. Digital solutions to support production</b>																		
Digital Platform development ( STAR Platform), Dashboard, Databases, Design, Development, Hosting	lumpsum										196	197	197	197	197	197	197	1,381
Data logging systems for Project Staff and the Collaborators (Tabs)	lumpsum										0	-	-	-	-	-	-	0
Video extension strategy, digital green model	lumpsum										299	299	299	299	299	299	299	2,092
STAR integrated app development design development and content development	lumpsum										345	-	-	-	-	-	-	345
SMS Gateway - Customising the Existing gateway of WFP or development afresh	lumpsum										34	-	-	-	-	-	-	34
Overall implementation of digital strategies in production component	o. of meetin	16	16	16	16	16	16	-	96	10,000	184	187	190	194	197	201	-	1,153
MOOCs platform development and course development execution. Input dealer certified training	lumpsum										57	58	-	-	-	-	-	116
Social media and whatsapp components - Content development and network graph theory implementation	lumpsum										52	53	54	55	55	56	-	324
AIDA tool customization and implementation	lumpsum										57	-	-	-	-	-	-	57
Digital hackathon for pitching 3 ideas - POC to pilot and handholding	lumpsum										-	12	24	12	-	-	-	48
Input dealer certified courses - private extension model - linking it to input supply - extension performance /a	lumpsum	-	-	15	15	15	-	-	45	2,000	-	-	36	36	37	-	-	109
Development of digital tools for early warning outreach	lumpsum										115	-	-	-	-	-	-	115
<b>Subtotal</b>											1,341	806	800	793	786	754	496	5,776
<b>Total</b>											1,872	3,733	7,905	19,357	18,588	13,468	5,016	69,938

via Piloted in 5 locations in each governorate every year

**Table 5B: Project management (USD '000)**

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt [S

Table 3.1. Project Management

Detailed Costs

Unit	Quantities							Total	Unit Cost (USD)	Totals Including Contingencies (USD '000)							Sum
	2020	2021	2022	2023	2024	2025	2026			2020	2021	2022	2023	2024	2025	2026	
<b>I. Investment Costs</b>																	
<b>A. Office supplies</b>																	
MIS System & Installation	no.	1	-	-	-	-	-	1	40,000	46	-	-	-	-	-	46	
STAR specific accounting software /a	no.	1	-	-	-	-	-	1	10,000	11	-	-	-	-	-	11	
Vehicles	vehicle	10	-	-	-	-	-	10	20,000	230	-	-	-	-	-	230	
Laptops	no.	30	-	-	-	-	-	30	400	14	-	-	-	-	-	14	
Printers	no.	5	-	-	-	-	-	5	500	3	-	-	-	-	-	3	
Photocopier	No	2	-	-	-	-	-	2	1,000	2	-	-	-	-	-	2	
Fax / telephone	No	10	-	-	-	-	-	10	100	1	-	-	-	-	-	1	
Tablets with open data kits	no.	400	-	-	-	-	-	400	300	138	-	-	-	-	-	138	
Handicam and video production equipments	no.	160	-	-	-	-	-	160	400	74	-	-	-	-	-	74	
Pico projectors / neat projectors	no.	80	-	-	-	-	-	80	300	28	-	-	-	-	-	28	
Other office equipment	sets	30	-	-	-	-	-	30	150	5	-	-	-	-	-	5	
<b>Subtotal</b>										552	-	-	-	-	-	552	
<b>B. Meetings and workshops</b>																	
Project startup	lumpsum	1	-	-	-	-	-	1	15,000	17	-	-	-	-	-	17	
Financial management training workshops /b	lumpsum	1	1	1	1	1	1	6	9,000	10	11	11	11	11	11	65	
<b>Subtotal</b>										28	11	11	11	11	11	82	
<b>C. Advisory services</b>																	
Digital technology advisor /c	Lumpsum	1	1	-	-	-	-	2	75,000	86	88	-	-	-	-	174	
<b>D. Policy dialogue</b>																	
Policy dialogue platforms	lumpsum	1	-	-	-	-	-	1	15,000	17	-	-	-	-	-	17	
<b>Total Investment Costs</b>										683	98	11	11	11	11	825	
<b>II. Recurrent Costs</b>																	
<b>A. National Programme Coordination Unit - NPCU</b>																	
National programme manager	person.month	6	12	12	12	12	12	6	72	1,000	6	12	12	12	12	6	72
STAR programme technical specialist	person.month	6	12	12	12	12	12	6	72	2,500	15	30	30	30	30	15	180
Adaptation Fund Programme management	lumpsum									300	-	-	-	-	-	-	300
M&E and KM manager	person.month	6	12	12	12	12	12	6	72	1,800	11	22	22	22	22	11	130
M&E and KM specialist	person.month	12	24	24	24	24	24	12	144	1,400	17	34	34	34	34	17	202
M&E and ICT specialist	person.month	6	12	12	12	12	12	6	72	1,400	8	17	17	17	17	8	101
Gender and social development manager	person.month	6	12	12	12	12	12	6	72	1,600	10	19	19	19	19	10	115
Digital agriculture specialist	person.month	12	12	12	-	-	-	-	36	2,500	30	30	30	-	-	-	90
Financial manager	person.month	6	12	12	12	12	12	6	72	2,200	13	26	26	26	26	13	158
Financial coordinator	person.month	6	12	12	12	12	12	6	72	1,600	10	19	19	19	19	10	115
Procurement manager	person.month	6	12	12	12	12	12	6	72	2,000	12	24	24	24	24	12	144
Procurement coordinator	person.month	6	12	12	12	12	12	6	72	1,500	9	18	18	18	18	9	108
Accountant	person.month	6	12	12	12	12	12	6	72	2,000	12	24	24	24	24	12	144
Accountant assistant	person.month	6	12	12	12	12	12	6	72	1,200	7	14	14	14	14	7	86
Human resources and administrative manager	person.month	6	12	12	12	12	12	6	72	1,800	11	22	22	22	22	11	130
Human resources and administrative assistant	person.month	6	12	12	12	12	12	6	72	1,000	6	12	12	12	12	6	72
Office assistant	person.month	6	12	12	12	12	12	6	72	800	5	10	10	10	10	5	58
Office clerk	person.month	6	12	12	12	12	12	6	72	200	1	2	2	2	2	1	14
Driver	person.month	6	12	12	12	12	12	6	72	400	2	5	5	5	5	2	29
<b>Subtotal</b>										485	340	340	310	310	310	155	2,248
<b>B. Governorate Programme Coordination Unit - GPCU</b>																	
Governorate Programme Coordinator	person.month	18	36	36	36	36	36	18	216	500	9	18	18	18	18	9	108
Deputy manager	person.month	18	36	36	36	36	36	18	216	1,000	18	36	36	36	36	18	216
Agronomist	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Gender and social development experts	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Business development, marketing and M&E	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Digital agriculture specialist	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Digital agriculture facilitators / volunteers	person.month	36	72	72	72	72	72	36	432	100	4	7	7	7	7	4	43
Infrastructure Engineer specialist	person.month	18	36	36	36	36	36	18	216	450	8	16	16	16	16	8	97
Accountant	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Social and community mobilization specialist	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Young professionals	person.month	90	180	180	180	180	180	90	1,080	250	23	45	45	45	45	23	270
<b>Subtotal</b>										99	198	198	198	198	198	99	1,188
<b>C. Operating costs</b>																	
Car fuel and maintenance	lumpsum	5	10	10	10	10	10	5	60	5,000	29	57	57	57	57	29	342
Office supplies	lumpsum	0.5	1	1	1	1	1	0.5	6	2,500	1	3	3	3	3	1	17
Office operating costs	lumpsum	0.5	1	1	1	1	1	0.5	6	42,000	24	48	48	48	48	24	287
Travel allowances	lumpsum	0.5	1	1	1	1	1	0.5	6	3,000	2	3	3	3	3	2	18
Annual maintenance of softwares	lumpsum	-	1	1	1	1	1	-	5	1,000	-	1	1	1	1	-	6
Adaptation Fund agency fees	lumpsum									250	-	-	-	-	-	-	250
<b>Subtotal</b>										305	112	112	112	112	112	55	920
<b>Total Recurrent Costs</b>										889	649	649	619	619	619	309	4,356
<b>Total</b>										1,572	748	660	630	631	631	309	5,181

a Access to 5 users

b Attended by 6 project staff and 1 IFAD employee /consultant - in Cairo

c International consultant

**Table 6B: M&E and knowledge management (USD '000)**

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt [S1]

Table 3.2. M&E and Knowledge Management

Detailed Costs

**I. Investment Costs**

**A. M&E studies and activities**

Unit	Quantities								Unit Cost (USD)	Totals Including Contingencies (USD '000)								Sum
	2020	2021	2022	2023	2024	2025	2026	Total		2020	2021	2022	2023	2024	2025	2026	Total	
Baseline survey	1	-	-	-	-	-	-	-	1	100.000	115	-	-	-	-	-	-	115
Completion survey	-	-	-	-	-	-	-	1	1	100.000	-	-	-	-	-	-	126	126
Annual Outcome surveys	-	1	1	1	1	1	1	-	5	25.000	-	29	30	30	31	31	-	151
Annual M&E and planning workshop	-	1	1	1	1	1	1	-	5	10.000	-	12	12	12	12	13	-	61
Knowledge management activities	-	1	1	1	1	1	1	-	5	20.000	-	23	24	24	25	25	-	121
M&E data collection activities	1	1	1	1	1	1	1	-	6	5.000	6	6	6	6	6	6	-	36
Technical assistance	1	-	1	-	-	-	1	-	3	15.000	17	-	18	-	-	19	-	54
Website and social media	1	1	1	1	1	1	1	-	6	3.000	3	4	4	4	4	4	-	22
Impact assessment study	-	-	-	-	-	-	-	1	1	100.000	-	-	-	-	-	-	126	126
Communication and KM products on success stories	3	3	3	3	3	3	3	-	18	10.000	34	35	36	36	37	38	-	216
Audit	-	1	1	1	1	1	1	-	5	8.600	-	10	10	10	11	11	-	52
<b>Total</b>											176	119	139	123	125	146	251	1,079



Investing in rural people

**Egypt**

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**Sustainable Transformation for Agricultural Resilience in Upper Egypt**

**Project Design Report**

**Annex 4: Economic and Financial Analysis**

Document Date: 29/10/2019  
Project No. 2000002202  
Report No. 5141-EG

Near East, North Africa and Europe Division  
Programme Management Department



## **APPENDIX 4: ECONOMIC AND FINANCIAL ANALYSIS**

### **A. Introduction**

1. The STAR programme is expected to generate substantial benefits for farmers, rural entrepreneurs and rural households in the programme area. Benefits would directly accrue to farmers, women and youth through activities aimed at: i) diversifying productive activities for rural poor, ii) boosting agriculture production and productivity through increased access to water; iii) strengthening climate adaptation capacity, iv) facilitating access to market and access to finance v) promoting entrepreneurship and value-addition in agriculture. The programme would be applying a holistic and systematic approach to the enhancement and improvement of the several sectors and productive activities identified during the programme design mission.

2. Benefits to the STAR target group would accrue from: (i) increased water availability for productive use; (ii) diversification of productive activities and sources of income thanks to access to finance; (iii) increased food availability for rural poor, (iv) increased value-added of agricultural outputs; (v) enhanced processing efficiency through innovative technology and improved infrastructure; (vi) improved quality of processed products, thus attracting higher prices at local market; (vii) increased employment either for hired or family labour, for both on-farm and off-farm activities; and (viii) tax revenues as a result of increased volume of taxable production.

3. Increase in income would be largely dependent on rural household and producers groups adopting improved technologies which the programme will promote through technical assistance, development plans and infrastructure investments, thereby improving market access, supporting marketing linkages and generally creating a favourable economic environment that encourages farmers/rural entrepreneurs to produce more competitive products and expand production.

4. This annex presents the Economic and Financial Analysis (EFA) of project's interventions through the use of indicative activity models. The analysis builds upon the precautionary principle, accounting for programme benefits in a realistic and conservative manner. A cash-flow analysis is finally carried out to present the "with" and "without" programme analysis. The key-indicators used to carry out the analysis are Net Present Values (NPVs), Financial and Economic Internal Rate of Return (FIRR - EIRR), Benefit-cost ratio (BCR), payback periods and switching values for both benefits and costs.

### **B. Methodology, assumptions and data**

5. Financial analysis. The primary objective of the financial analysis is to determine the financial viability and incentives for the programme target group as a result of their engagement in programme activities, and hence to determine the economic impact on family labour, cash flow and household incomes. A number of indicative economic activities to be supported by programme were identified during the programme design mission. The following activities are considered in the elaboration of household models: (i) Maize production; (ii) Wheat production; (iii) Clover production; iv) Onion production; v) Tomato production; vi) Fava beans production, vii) Goat keeping and viii) Duck rearing. These production models are used as building blocks for the elaboration of seven household models where differentiation is made both in terms of land holding, source of income and

production systems<sup>1</sup>. The table below summarizes the key characteristics of each household model. Finally, a tomato processing unit model is also considered to describe the expected benefit related to agro-processing.

**Table 1: Key characteristics of household models**

<b>HHs type<sup>2</sup></b>	<b>Feddan<sup>3</sup></b>	<b>Summer crop</b>	<b>Winter crop</b>	<b>Other summer/winter crop</b>	<b>Livestock</b>
SML-DI-FC	0.3	Clover	Wheat	Maize	Goat & duck
SML-FI-FC	0.4	Maize	Wheat	Clover	Goat & duck
AVG-DI-FC	0.6	Maize	Wheat	Clover	Goat & duck
AVG-FI-FC	1.1	Clover	Wheat	Maize	Goat & duck
AVG-DI-HV	1.2	Maize	Wheat	Onion, tomato, fava beans	-
CAP-FI-FC	2.4	Maize	Wheat	Clover	-
CAP-FI-HV	3.1	Clover	Wheat	Onion, tomato, fava beans	-

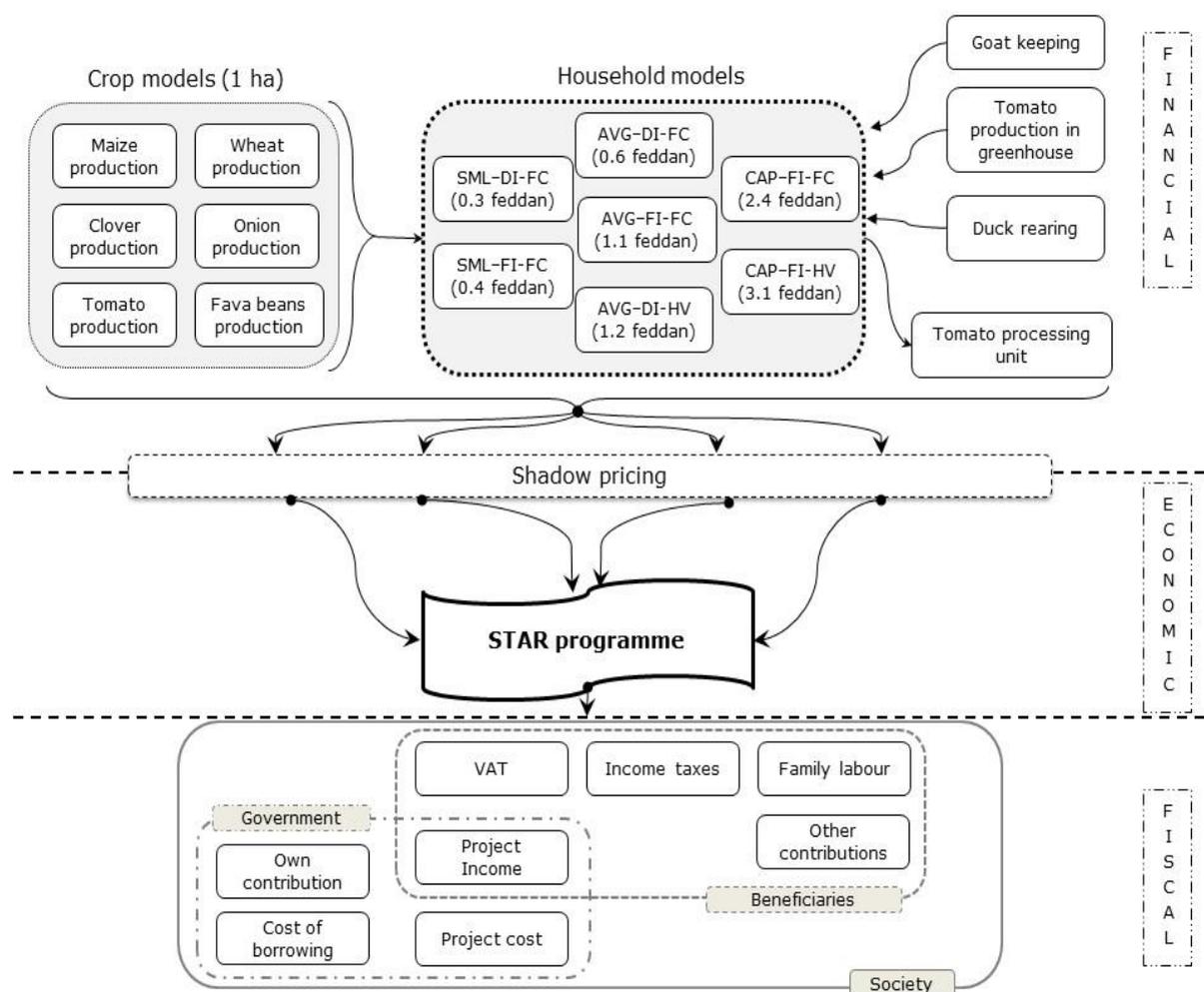
6. The economic evaluation of the entire programme is based on the aggregated net incremental benefits for the target population. All the technical assumptions considered in the models are sourced from field surveys, national statistics, international and national expert consultation and technical studies. The diagram in figure 1 **Error! Reference source not found.** provides a logical sketch of the adopted approach while summary results from the financial models are presented in Table 2.

<sup>1</sup> The features considered in the elaboration of household models are based on the survey results conducted by IFPRI and described in Nin Pratt et al. (2018), *Farm households in Egypt - A typology for assessing vulnerability to climate change*, IFPRI, Washington DC.

<sup>2</sup> SML-DI-FC = Small producer, diversified income, producing field crop; SML-FI-FC = Small producer, farm income, producing field crop; AVG-DI-FC = Average producer, diversified income, producing field crops; AVG-FI-FC = Average producer, farm income, producing field crops; AVG-DI-HV= Average producer, diversified income, producing high-value crops; CAP-FI-FC = Capitalized producer, farm income, producing field crops; CAP-FI-HV = Capitalized producer, farm income, producing field crops;

<sup>3</sup> One feddan is equivalent to 1.037 acres or 0.42 hectares

**Figure 1: EFA diagram**



**Table 2: Summary of financial models' results**

MODELS	NPV (EGP) @ 12%	Return to family labour (EGP)	IRRf	B/C ratio	Switching value Benefits	Switching value Costs
SML-DI-FC	4,060	252	25%	1.06	-5%	6%
SML-FI-FC	3,576	224	23%	1.05	-5%	5%
AVG-DI-FC	5,408	261	29%	1.07	-7%	7%
AVG-FI-FC	9,089	296	40%	1.11	-10%	11%
AVG-DI-HV	18,439	569	39%	1.51	-34%	51%
CAP-FI-FC	5,758	421	16%	1.08	-7%	8%
CAP-FI-HV	105,740	582	35%	1.27	-21%	27%
Tomato processing unit	4,135,160	n/a	33%	1.08	-7%	8%

7. Programme target group and beneficiaries. The primary target group for the Programme will be commercially-orientated smallholder farmers - particularly women and young entrepreneurs. The programme will have a poverty focus and it is estimated that the number of direct beneficiaries will be 160,000 HHs of whom 843,179 HHs are directly accounted for in the production models considered in the EFA. The aggregation for

production models is based on the number of HHs directly engaged in the activity. This approach could not be used in the accounting of processing units - given the different nature of the investment. In this case, the aggregation is based primarily on the number of plan/facilities established. The total number of HHs benefitting of the newly formed agro-processing units are finally calculate and based on an estimated outreach of 243 HHs per unit.

8. Overall the programme will benefits women, youth and men directly involved in farm and off-farm activities proposed by the programme as well as indirect beneficiaries employed in the value adding activities and benefitting from the rehabilitated infrastructure. The inclusion pattern of the EFA modes and beneficiary is described the table below.

**Table 3: Beneficiaries and investment phasing**

	MODELS	unit	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Total
Production	SML-DI-FC	HHs	313	1,336	5,569	6,580	4,057	1,738	610	20,203
	SML-FI-FC	HHs	313	1,336	5,569	6,580	4,057	1,738	610	20,203
	AVG-DI-FC	HHs	313	1,336	5,569	6,580	4,057	1,738	610	20,203
	AVG-FI-FC	HHs	144	612	2,552	3,016	1,859	797	280	9,260
	AVG-DI-HV	HHs	144	612	2,552	3,016	1,859	797	280	9,260
	CAP-FI-FC	HHs	52	223	928	1,097	676	290	102	3,367
	CAP-FI-HV	HHs	26	111	464	548	338	145	51	1,684
Processing	Tomato processing unit	unit	2	4	6	6	6	3		27

9. Key assumptions. The following source of information gathered during the design mission have been used to set up the analysis: a) interviews with farmers and entrepreneurs; b) official statistics and surveys from the Egyptian Bureau of statistics, c) academic papers, d) technical reports and; e) mission estimates. In particular, information on labour and input requirements for various operations, capital costs, prevailing wages, yields, farm gate and market prices of commodities, input and farm-to-market transport costs were collected during the field visit. Conservative assumptions were made both for inputs and outputs, and take account of possible risks.

10. Exchange rate. The exchange rate used in the analysis is fixed at 1 USD = 16.5 EGP computed as an average of the exchange rate prevailing during the design mission.

11. Numeraire and Prices. The adopted numeraire for the EFA is the domestic price level expressed in local currency unit. The financial prices for programme inputs and outputs represent average market prices and were collected in the field during the design mission (June 2019). Prices used represent estimates of the average seasonal prices and the analysis is carried out using nominal constant prices.

12. Labour. Family labour has been valued both in financial and economic analysis. It has been assumed that farm labour is provided by the households and is valued at EGP 75 day<sup>-1</sup> (USD 4.5). Hired labour (skilled) is priced at EGP 100 day<sup>-1</sup> (USD 6), which is the prevailing market rate for on-farm activities.

13. Opportunity cost of capital. A discount rate of 12% has been used in this analysis to assess the viability and robustness of the investments. In order to consider the

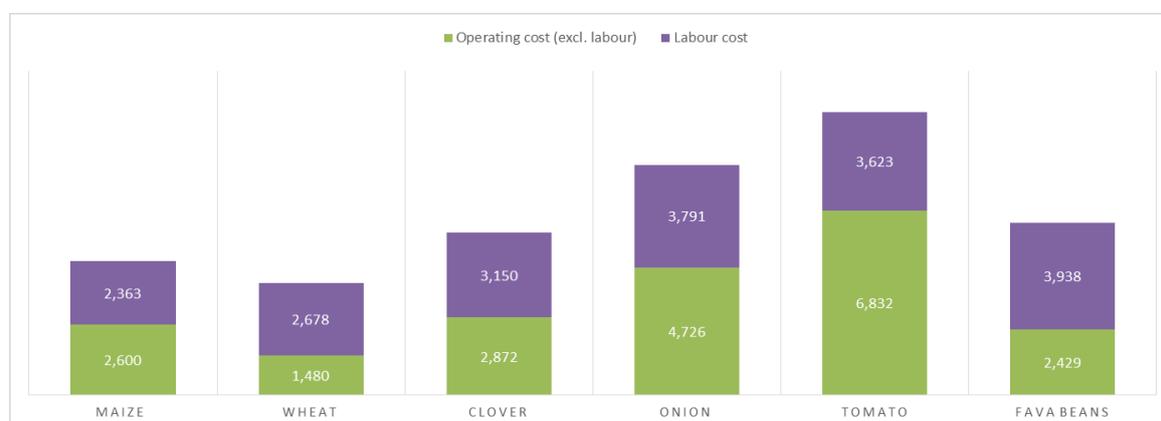
profitability of the foreseen investments with market alternatives, the selected value is calculated as an average of the lending, deposit and money market interest rates.

### C. Food crops and high-value crops production cost

14. Crop budgets for main food crops and high-value crops were prepared in order to support the elaboration of household models that were representative of the programme target group. Main field crops cultivated in Upper Egypt are maize, wheat and clover whose production would span over the winter and summer season. High value crop considered in the analysis are onions, tomatoes and fava beans. Each model - based on standard field units (1 ha or 1 feddan) - is later rescaled based on land size and cropping patterns described in Table 4 below.

15. Among the crops considered, tomato production is comparably more expensive than other crops due to higher costs related to pest management. Similarly, labour intensity and cost vary according to commodities and access to mechanization. The most labour-intensive activity is fava beans farming due to the higher amount of labour required during harvest season.

**Figure 2: Crop production cost per feddan (EGP)**



### D. Households and processing models

16. Several households and processing models were elaborated to determine the economic aptness of programme interventions. The underlying assumption is that, thanks to increased access water and to finance, promotion of water saving technologies and technical assistance, farmers will be able and keen to expand production, consolidate farm land and engage in new farming practices. The table below shows the key assumptions concerning cropping patters and income distribution based on landholding. In order to provide a comprehensive analysis of programme impact on the target group, household models are diversified accounting for land size (small - SML; average - AVG; large - CAP), main source of income (diversified - DI; farm income - FI) and production systems (food crops - FC; high-value crops - HV).

**Table 4: Assumptions related to HHs models**

SHARE OF CROPS IN TOTAL AREA						
HHs type	Feddan	Wheat	Clover	Maize	Onion, tomato, fava beans	Total
SML-DI-FC	0.3	46.6%	40.4%	13.0%	-	100%
SML-FI-FC	0.4	48.7%	31.3%	19.9%	-	99.9%
AVG-DI-FC	0.6	38.1%	32.3%	20.2%	-	90.6%
AVG-FI-FC	1.1	39.1%	31.3%	22.1%	-	92.5%
AVG-DI-HV	1.2	32.2%	21.8%	16.4%	27.8%	98.2%
CAP-FI-FC	2.4	37.9%	23.8%	34.5%	-	96.2%
CAP-FI-HV	3.1	33.1%	28.3%	16.3%	14.2%	91.9%

SHARE OF CROPS IN CROP REVENUES						
HHs type	Feddan	Wheat	Clover	Maize	Onion, tomato, fava beans	Total
SML-DI-FC	0.3	55.3%	16.2%	28.5%	-	100%
SML-FI-FC	0.4	46.1%	21.8%	32.0%	-	99.9%
AVG-DI-FC	0.6	45.7%	15.7%	28.6%	-	90.0%
AVG-FI-FC	1.1	45.6%	15.0%	21.7%	-	82.3%
AVG-DI-HV	1.2	21.7%	8.0%	10.7%	40.5%	80.9%
CAP-FI-FC	2.4	40.0%	23.0%	26.2%	-	89.2%
CAP-FI-HV	3.1	25.6%	11.9%	7.3%	41.8%	86.6%

17. Small household farming model. Two HHs models are prepared to determine programme economic effects on smallholder farmers (i.e. SML-DI-FC and SML-FI-FC). These models describe the production capacity of households with small landholdings and limited capital relative to their total available labour. Cultivated areas are of 0.3-0.4 Feddan<sup>4</sup> and they are mainly dedicated to food crop production (maize, wheat, clover). Both type of HHs are assumed to intensify production through the adoption of hybrid, heat-tolerant seed varieties able to withstand prolonged drought and heat. Simultaneously, farmers will engage in livestock activities, purchasing an initial flock of four goats and four ducks.

18. Initial investment cost concerns the purchase of new seed varieties, four goats, four ducks and the construction of a small shed for keeping the animals. The average investment cost in year one ranges from EGP 9,524 to EGP 9,784 (USD 577 - 593). Operating costs concern mainly the buying of inputs, fertilizers, pesticides, vaccination, labour cost (family only), water expenses and allowances for O&M for the shed. The annual operating cost range from EGP 12,772 to EGP 14,000 (USD 774 - 848).

19. Technical reports show potential increase in yields in the range of 10-40%, assuming water is available in the required amount and inputs as well as farming technics are properly employed<sup>5-6-7</sup>. The adoption of new practices and climate-resilient seeds are assumed to bring a conservative increase in yields of 14%. Maize, wheat and clover are assumed to reach yields of 2.2 tons, 2 tons and 22.8 tons feddan<sup>-1</sup> respectively. Annual

<sup>4</sup> One feddan is equivalent to 1.037 acres or 0.42 hectares

<sup>5</sup> Ouda et al. (2009), *Determination of water productivity on maize yield under deficit irrigation in middle Egypt*, The Africa journal of plant science and biotechnology 3 (1) 80-85,

<sup>6</sup> Dhehibi et al., (2016), *Impacts of Irrigation on Agricultural Productivity in Egypt*, Annals of arid zones 55 (3&4): 67-78

<sup>7</sup> Osama, (2017), *Optimization of the cropping pattern in Egypt*, Alexandria Engineering journal 56, 557-566

gross revenues from crops and animal sales for smallholder farmers involved in this new practices would range from EGP 21,783 to EGP 22,908 (USD 1,320-1,388). In the “Without programme scenario” (WoP), the actual performances of crop production is considered as the counterfactual.

20. The cash flows of the two models are compared to their respective counterfactuals’ cash flows in the WoP scenarios to avoid overestimating programme impacts. Later, the net incremental cash flow (the difference in cash flows of the “with” and WoP models) is calculated. Profitability indicators (i.e. NPV, FIRR, BCR and payback periods) are then calculated upon the net incremental cash flow.

21. The cash-flow over the period of ten years, discounted at 12%, yields positive NPVs of EGP 4,060 and EGP 3,576 (USD 246 and USD 216) with FIRRs of 25% and 23%. BCRs are equal to 1.06 and 1.05. Return to family labour are of EGP 252 day<sup>-1</sup> and EGP 224 day<sup>-1</sup>. The sensitivity analysis in the model shows that activity results would turn negative in case of benefits declines or costs increase of ± 5-6%. The payback period for both activities is equal to one year. The table below summarises the pre-financing and post-financing results of the models.

**Table 5: Summary of small household farming results**

	<i>Pre-financing results</i>			<i>Post-financing results</i>		
	NPV (EGP)	FIRR (%)	BCR	NPV (EGP)	FIRR (%)	BCR
SML-DI-FC	4,060	25	1.06	17,696	n/a	1.28
SML-FI-FC	3,576	23	1.05	17,529	n/a	1.27

22. Average household farming model. The average producers in Upper Egypt are characterized by landholdings of 0.6-1.2 Feddan, mainly devoted to food crop production and in some cases to high value crop production (i.e. tomato, onion, fava beans). Three HHs models (i.e. AVG-DI-FC, AVG-FI-FC and AVG-DI-HV) are prepared to demonstrate programme economic effects on the target group featuring such characteristics. As summarized in Table 1 above, two types of households will be engaged in crop production and livestock activities (goats and ducks) whereas one type of household will opt to invest in high value crop production rather than livestock. In all three scenarios, households are assumed to intensify production of food crops.

23. Initial investment costs concern the purchase of new seed varieties, and either small flock of goats / ducks and the related shed or the rehabilitation/construction works of irrigation canals (mesqa) for high-value crop producers. Outlays would range from EGP 10,039 to EGP 21,544 (USD 608 - 1,305), where the latter estimate includes expenses related to the irrigation infrastructure. On average, yearly operating costs for inputs, labour, O&M for infrastructures in the three models range from EGP 7,682 to EGP 22,254 (USD 465 - 1,348).

24. Annual gross revenues from sales would vary depending on the crops produced. Traditional farmers producing food crops would earn from EGP 27,903 to EGP 40,325 (USD 1,691-2,444) while high-value crop producers would earn an average EGP 42,374 (USD

2,568) annually. All models are compared to WoP scenarios to account for the incremental effect of the programme only.

25. Profitability indicators are positive in all three models. The NPVs are equal to EGP 5,408, EGP 9,089 and EGP 18,439 (USD 327, USD 550 and USD 1,117) for AVG-DI-FC, AVG-FI-FC, and AVG-DI-HV respectively. Following the same order, FIRRs are equal to 29%, 40% and 39% and BCRs are equal to 1.07, 1.11 and 1.51. Return to family labour are of EGP 261 day<sup>-1</sup>, EGP 296 day<sup>-1</sup> and EGP 569 day<sup>-1</sup>. Sensitivity analyses on models' results show thresholds for a decline in benefits from -7% to -34% and limits in cost increase from 7% to 51%. The maximum payback period is equal to one year. The table below summarises the pre-financing and post-financing results of the models.

**Table 6: Summary of average households farming results**

	<i>Pre-financing results</i>			<i>Post-financing results</i>		
	NPV (EGP)	FIRR (%)	BCR	NPV (EGP)	FIRR (%)	BCR
AVG-DI-FC	5,408	29	1.07	19,579	n/a	1.29
AVG-FI-FC	9,089	40	1.11	23,828	n/a	1.33
AVG-DI-HV	18,439	39	1.51	34,989	203	2.13

26. Large household farming model. Large household models are not subdivided by income diversification as this group of households receives most of its income from agriculture. Capitalized producers use a higher levels of capital and land per worker when compared to average producers and have landholdings of 2.4-3.1 feddan. Fields are cultivated both with food crops and high-value crops. Two models (i.e. CAP-FI-FC and CAP-FI-HV) are prepared to showcase the economic return for this group of farmers. Both models foresee an intensified production thanks to increased access to water and adoption of climate resilient varieties and practices meanwhile none of the farmers from this group will engage in livestock activity. In the case of the high-value crop producer, tomato production is foreseen to be carried out in a greenhouse structure covering one feddan. In order to sustain the initial investment cost, a shifting in the current cropping pattern towards a more intense production of tomato is foreseen.

27. Investment cost amounting to EGP 45,481 and EGP 274,237 (USD 2,756 and USD 16,620) - for the CAP-FI-FC and CAP-FI-HV respectively - would cover the expenses for the irrigation canal rehabilitation/construction, the construction of the greenhouse structure (for CAP-FI-HV producer only) and the acquisition of new seed varieties. Operating costs related to agro-inputs, fertilizers, pesticides, labour and O&M would range from EGP 14,454 to EGP 31,212 (USD 876 - 1,891). Annual sales would range from EGP 59,338 to EGP 167,241 (USD 3,596 - 10,135). Also in this case, WoP scenarios describing actual performances on crop production are considered as counterfactuals.

28. The NPVs are positive and equal to EGP 5,758 and EGP 105,740 (USD 348 and USD 6,408) with FIRRs of 16% and 25%. BCRs are equal to 1.08 and 1.27. Return to family labour are of EGP 421 day<sup>-1</sup> and EGP 582 day<sup>-1</sup>. The sensitivity analyses identified threshold in benefits decrease of -7 % and -21% or limits in cost increase of +8% and +27%. The payback period for CAP-FI-FC producer is slightly less than one year while the investment

cost for the CAP-FI-HV producer will be repaid in 2.38 years. The table below summarises the pre-financing and post-financing results of the models.

**Table 7: Summary of smallholder farming results**

	<i>Pre-financing results</i>			<i>Post-financing results</i>		
	NPV (EGP)	FIRR (%)	BCR	NPV (EGP)	FIRR (%)	BCR
CAP-FI-FC	5,758	16	1.08	35,504	69	1.54
CAP-FI-HV	105,740	25	1.27	282,059	109	1.81

29. Tomato processing unit model. The programme will support young entrepreneurs, producers groups and cooperatives to invest in small processing facilities. Increase in value-addition will be pursued through the use of efficient technology and technical knowledge aimed at transforming raw materials into high-value products, preserving produce for longer periods and marketing final products to higher segments of the domestic market. Profitability and sustainability for this type of initiative will be also pursued through business mentoring, management support by qualified managers and trained staff. In order to account for such benefits in the EFA, one tomato processing unit model is presented.

30. The processing facility will consist of the technology required for cleaning, sorting and processing operations. The main production line consist of a: a) washer, b) crusher; c) pre-heating machine; d) pulping/ refining machine; e) holding tank; f) juice extractor; g) vacuum concentrator; h) tube-in-tube sterilizer; i) bulk aseptic filter. The maximum processing capacity of the machinery is equal to 20 tons of tomato/day and requires a power supply of about 58 kW cycle<sup>-1</sup> or 155 kW ton<sup>-1</sup>. The area required for hosting the production line is 6,000 m<sup>2</sup>.

31. The processing capacity at full regime is assumed to reach 2,600 tons of fresh product per year - half of its maximum running capacity. The lower capacity assumed accounts for uncertainty regarding the stable supply of fresh product to the factory and the shorter growing season of tomato. The investment cost for the production line, land, office space and building structure is estimated at EGP 977,880 (USD 59,265). Operating costs at full development stage would reach about EGP 9.5 M (USD 578,000). Labour costs for six specialized workers would sum up to EGP 99,312 (USD 6,018). Administrative staff, a managers would instead cost EGP 58,800 (USD 3,563).

32. With an assumed input-to-output extraction rate of 15%-20%, the facility is expected to produce tomato concentrate that could sell on the market at EGP 30 kg<sup>-1</sup>. Gross revenues from sales are expected to reach EGP 11 M (USD 898,000 M). Considering the lack of a proper counterfactual and given this is assumed to be a newly established facility for people not currently engaged in similar economic activities, then the foregone income opportunity for all the people employed in the facility has been considered in the WoP scenario to avoid an overestimation of the activity benefits.

33. The cash-flow over the period of ten years, discounted at 12%, yields a NPV of EGP 4 M (USD 250,000) with an FIRR of 33%. In addition, for every dollar invested, this activity

generates an eight cents of extra worth (BCR ratio equal to 1.08) and investments could be repaid within the four years. Finally, the activity profitability could be at risk in the events of a benefits decline or cost increase of  $\pm$  7-8%. The first years in the cash flow are characterized by a deficit which would need to be off-set by accessing a loan. Nonetheless, after the loan repayment is considered, profitability indicators will increase and the NPV will amount to EGP 6.4 M (USD 389,000), a FIRR of 44% and a BCR of 1.12. The switching values would also increase to -11% (decline in benefits) and +12% (increase in costs).

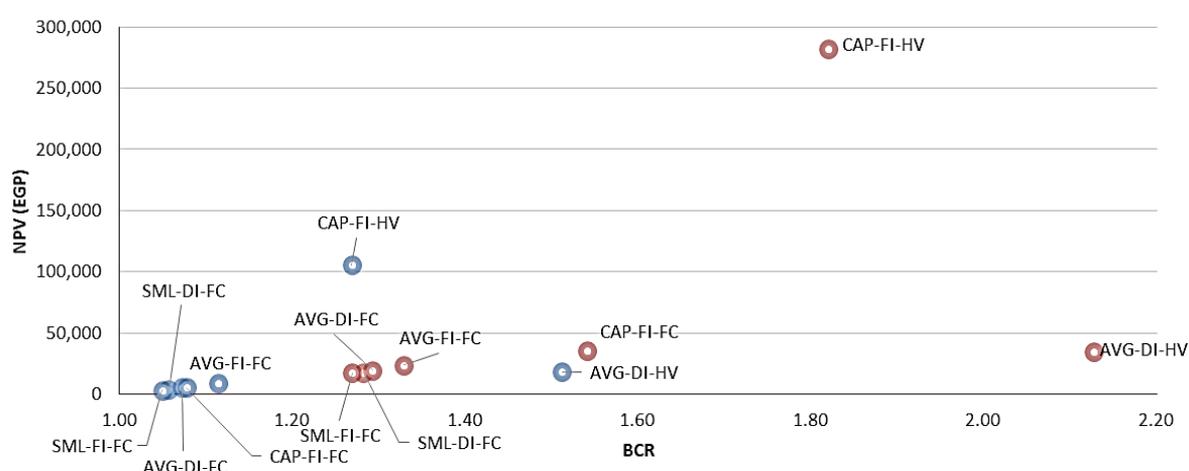
### E. Impact on household income

34. The HHS' models described so far present positive returns in both the pre- and the post-financing scenarios. Therefore, we can conclude that the activities proposed in the STAR programme are technical viable (pre-financing results are positive) and are likely to be taken up by farmers in light of the financial support provided by the programme (post-financing results are positive and higher than pre-financing results). Table 8 and Figure 3 below provide a comparison of the results.

**Table 8: Annual household income before and after the project (EGP)**

MODELS	Feddan	Net income <sup>8</sup> , EGP (WoP)	Net income <sup>9</sup> , EGP (WP)	D (%)
SML-DI-FC	0.3	4,211	7,120	69%
SML-FI-FC	0.4	3,884	6,707	73%
AVG-DI-FC	0.6	5,820	9,063	56%
AVG-FI-FC	1.1	10,223	14,348	40%
AVG-DI-HV	1.2	23,258	30,769	32%
CAP-FI-FC	2.4	28,613	37,786	32%
CAP-FI-HV	3.1	56,327	119,768	113%

**Figure 3: Comparison of pre-financing (blue) and post-financing (red) results**



<sup>8</sup> Income values considered for both scenarios are the after-tax net incomes. These values do not include extra incomes derived from remittances and social security programmes.

<sup>9</sup> Net income values after tax at full development stage

#### D. Economic analysis

35. The objectives of the economic analysis are: (i) to examine the overall Programme viability; (ii) to assess the Project's impact and the overall economic rate of return; and (iii) to perform sensitivity analyses upon risks and variables affecting project's results.

36. Key Assumptions. Production and activity models considered in the financial analysis are used as building blocks for determining the viability of the whole project, once addressing for market distortion and opportunity costs for inputs and outputs. The economic analysis of the programme hinges on the following assumptions: (i) Programme life has been assumed at 20 years in light of investments lifecycle; (ii) programme inputs and outputs are valued at their economic parity prices estimated upon international prices as reported by the World Bank commodity outlook, and on the basis of custom duties and taxes rates as provided by the national bureau of international trade; (iii) an economic discount rate of 10% has been calculate as the weighted average of saving interest rates, long term bonds yields and the real interest rate; (iv) family labour is valued at its opportunity cost; (v) the shadow exchange rate factor (SERF) of 1.02 is calculated upon international trade statistics and applied for the conversion of tradable commodity prices; vi) conversion factors for main inputs and outputs are calculated starting from international prices and on the basis of import and export taxes and duties in Egypt; and (vii) the shadow exchange rate (SER), estimated upon international trade data, is equal to EGP 17.

37. Programme Economic Costs. The economic analysis includes the investment and incremental recurrent costs of programme components. Programme financial costs have been converted to economic values by removal of taxes, duties and subsidies. In order to avoid double counting, the final aggregation considered only those costs that were not included in financial models. Specifically, the estimation of economic costs considered: (a) all investments costs deducted from taxes; (b) the recurrent costs of the program; and (c) the use of a conversion factor of 1.02 (SERF) to correct market costs to economic costs into Costab.

38. Benefits Estimation. The incremental benefits stream comprises the economic net values of all the models developed in the financial analysis. These benefits are then aggregated following the inclusion phasing foreseen for targeted households and cooperatives (**Error! Reference source not found.**).

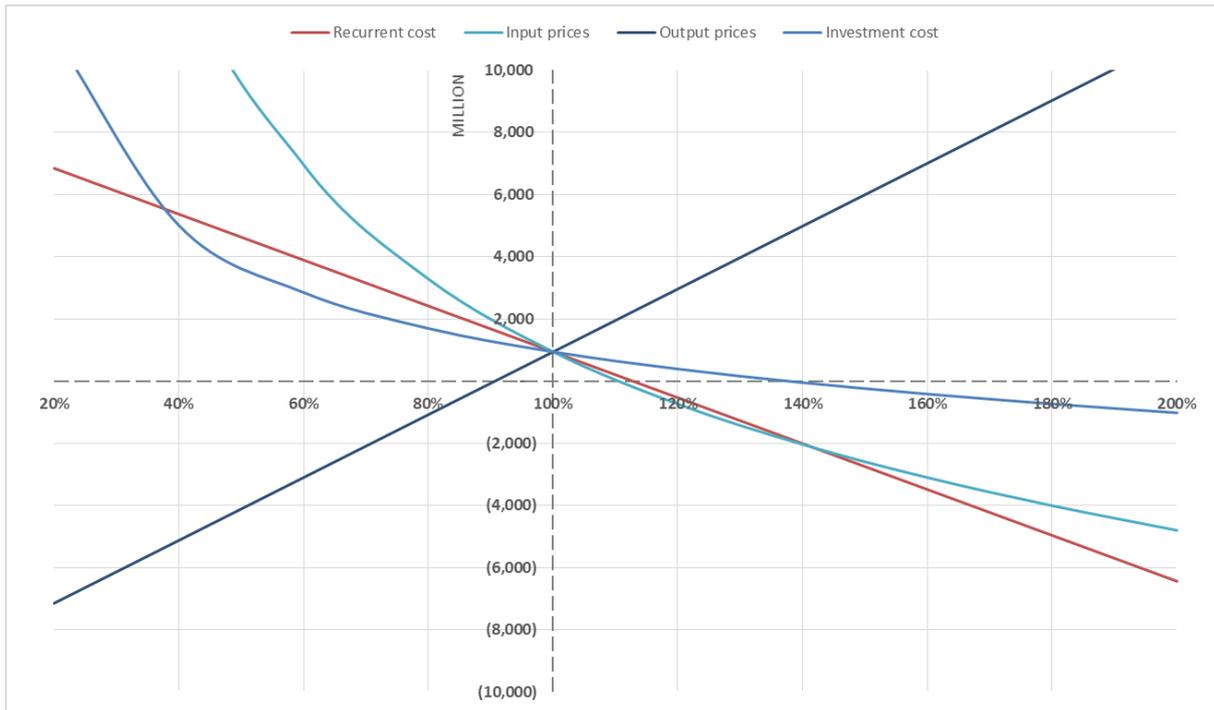
39. Economic Profitability. The programme is a technical and economically viable investment to the economy as a whole. The programme economic NPV of the net benefit stream, discounted at 10%, is EGP 941 million (USD 57 million) producing an EIRR of 18% for the base case scenario and resulting in a payback period of ten years. The summary of economic analysis is presented in Table 9.

**Table 9: Programme economic cash flow (EGP '000)**

	Total incremental benefits	Total costs		Total net incremental benefits
		Investment	Operating	
Year 1	(17,245)	77,975	-	(95,220)
Year 2	(68,945)	117,460	-	(186,405)
Year 3	(275,123)	277,179	-	(552,303)
Year 4	(259,631)	301,414	-	(561,045)
Year 5	(5,959)	179,805	-	(185,765)
Year 6	223,002	78,644	-	144,357
Year 7	357,418	35,140	-	322,277
Year 8	436,093	-	17,037	419,056
Year 9	483,876	-	17,037	466,839
Year 10	522,023	-	17,037	504,986
Year 11	544,863	-	17,037	527,826
Year 12	553,603	-	17,037	536,566
Year 13	553,092	-	17,037	536,055
Year 14	549,939	-	17,037	532,902
Year 15	548,405	-	17,037	531,368
Year 16	547,525	-	17,037	530,488
Year 17	547,525	-	17,037	530,488
Year 18	547,525	-	17,037	530,488
Year 19	547,525	-	17,037	530,488
Year 20	547,525	-	17,037	530,488
		NPV (EGP '000) @ 10%		941,107
		NPV (USD '000) @ 10%		57,037
		IRR		18.1%

40. **Sensitivity Analysis.** The section presents the effect of variations in Programme benefits and costs. Programme results were tested to sensitivity analysis so as to measure variations due to unforeseen factors, hence identifying those variables affecting final results the most. Figure 4 **Error! Reference source not found.** depicts the extent to which a change in key variables (the change is marked on the horizontal axis) would induce a change to the programme NPV (reported on vertical axis). The steeper the curve of a specific variable, the higher the impact and the change this variable would bring to the NPV. As a result, the programme is more sensitive to changes in output prices and recurrent costs, rather than investment costs.

**Figure 4: Sensitivity of NPV to changes in key variables**



41. However, only the variability and uncertainty around specific variables could put at risk the overall viability of the project, and therefore need to be monitored more closely than others. Threshold values in variables changes are identified in Figure 5. For instance, an increase in investment cost of 40% (from 100% to 140%) would bring the NPV down to EGP -50 million. Similarly, the programme would no longer be viable if output prices drop by 20% (from 100% to 80%).

**Figure 5: Sensitivity of NPV to changes in key variables - detailed (EGP '000)**

Investment cost		Recurrent cost		Benefits	
20%	11,191,059	20%	6,848,802	20%	(7,149,964)
40%	5,011,684	40%	5,371,878	40%	(5,127,197)
60%	2,851,072	60%	3,894,954	60%	(3,104,429)
80%	1,695,152	80%	2,418,031	80%	(1,081,661)
100%	941,107	100%	941,107	100%	941,107
120%	388,001	120%	(535,817)	120%	2,963,875
140%	(50,284)	140%	(2,012,740)	140%	4,986,643
160%	(416,805)	160%	(3,489,664)	160%	7,009,411
180%	(735,483)	180%	(4,966,588)	180%	9,032,179
200%	(1,020,672)	200%	(6,443,511)	200%	11,054,946

Input prices		Output prices	
20%	34,256,436	20%	(7,149,964)
40%	13,961,209	40%	(5,127,197)
60%	6,961,976	60%	(3,104,429)
80%	3,286,742	80%	(1,081,661)
100%	941,107	100%	941,107
120%	(739,728)	120%	2,963,875
140%	(2,040,677)	140%	4,986,643
160%	(3,104,198)	160%	7,009,411
180%	(4,009,434)	180%	9,032,179
200%	(4,803,869)	200%	11,054,946

42. More in detail, switching values and critical threshold have been identified for key variables. In particular, the programme would no longer be viable in case: a) investment cost increases by 38%; b) operating cost increases of 13%; b) benefits decline by 10%; c) input cost increases by 11%; d) output prices fall by 10% e) programme beneficiaries involved in productive activities are less than 38,772 HHs.

43. Finally, the sensitivity analysis allows to examine the effects of a simultaneous variation in some of the pre-identified key variables on the overall programme profitability, hence determining all possible combinations of variables' changes that would result in a negative (or positive) NPV.

**Figure 6: Simultaneous sensitivity analysis (EGP '000)**

		Investment cost									
		20%	40%	60%	80%	100%	120%	140%	160%	180%	200%
Benefits	20%	(22,428,321)	(12,652,503)	(9,494,717)	(7,991,439)	(7,149,964)	(6,639,391)	(6,317,905)	(6,114,597)	(5,990,076)	(5,920,705)
	40%	(14,023,476)	(8,236,456)	(6,408,270)	(5,569,792)	(5,127,197)	(4,882,543)	(4,750,999)	(4,690,149)	(4,676,428)	(4,695,697)
	60%	(5,618,631)	(3,820,410)	(3,321,822)	(3,148,144)	(3,104,429)	(3,125,695)	(3,184,094)	(3,265,701)	(3,362,780)	(3,470,688)
	80%	2,786,214	595,637	(235,375)	(726,496)	(1,081,661)	(1,368,847)	(1,617,189)	(1,841,253)	(2,049,131)	(2,245,680)
	100%	11,191,059	5,011,684	2,851,072	1,695,152	941,107	388,001	(50,284)	(416,805)	(735,483)	(1,020,672)
	120%	19,595,904	9,427,731	5,937,520	4,116,799	2,963,875	2,144,849	1,516,621	1,007,643	578,165	204,336
	140%	28,000,750	13,843,778	9,023,967	6,538,447	4,986,643	3,901,697	3,083,527	2,432,092	1,891,813	1,429,344
	160%	36,405,595	18,259,825	12,110,415	8,960,095	7,009,411	5,658,545	4,650,432	3,856,540	3,205,461	2,654,353
	180%	44,810,440	22,675,872	15,196,862	11,381,742	9,032,179	7,415,393	6,217,337	5,280,988	4,519,109	3,879,361
	200%	53,215,285	27,091,918	18,283,310	13,803,390	11,054,946	9,172,241	7,784,242	6,705,436	5,832,758	5,104,369

		Investment cost									
		20%	40%	60%	80%	100%	120%	140%	160%	180%	200%
Recurrent cost	20%	34,911,037	17,598,985	11,727,481	8,716,114	6,848,802	5,553,517	4,585,105	3,820,988	3,193,069	2,660,487
	40%	28,981,043	14,452,160	9,508,379	6,960,873	5,371,878	4,262,138	3,426,258	2,761,540	2,210,931	1,740,198
	60%	23,051,048	11,305,335	7,289,277	5,205,633	3,894,954	2,970,759	2,267,411	1,702,092	1,228,793	819,908
	80%	17,121,054	8,158,509	5,070,175	3,450,392	2,418,031	1,679,380	1,108,563	642,644	246,655	(100,382)
	100%	11,191,059	5,011,684	2,851,072	1,695,152	941,107	388,001	(50,284)	(416,805)	(735,483)	(1,020,672)
	120%	5,261,065	1,864,859	631,970	(60,089)	(535,817)	(903,378)	(1,209,131)	(1,476,253)	(1,717,621)	(1,940,962)
	140%	(668,930)	(1,281,966)	(1,587,132)	(1,815,330)	(2,012,740)	(2,194,757)	(2,367,978)	(2,535,701)	(2,699,759)	(2,861,252)
	160%	(6,598,924)	(4,428,792)	(3,806,234)	(3,570,570)	(3,489,664)	(3,486,137)	(3,526,825)	(3,595,150)	(3,681,897)	(3,781,541)
	180%	(12,528,919)	(7,575,617)	(6,025,336)	(5,325,811)	(4,966,588)	(4,777,516)	(4,685,673)	(4,654,598)	(4,664,035)	(4,701,831)
	200%	(18,458,913)	(10,722,442)	(8,244,438)	(7,081,052)	(6,443,511)	(6,068,895)	(5,844,520)	(5,714,046)	(5,646,173)	(5,622,121)

## E. Fiscal analysis

51. Presenting a fiscal analysis helps describing the fiscal impact of the project on the government budget and it provides an insight into the incentives that each of the stakeholders might have in seeing the project through.

52. Project costs for the GoE are of EGP 435 M (USD 26 M)<sup>10</sup> and incremental project taxes - direct and indirect - levied through the project are of EGP 286 M (USD 17 M), hence resulting in a cost recovery index of the resources used in the project of 66 per cent. This means that about two-thirds of government resources dedicated to the project are directly paid back through incremental taxation. Further, this result is obtained based on a conservative assumption that fiscal enforcement in rural area of Egypt would ensure the payment of taxes by at least 20 per cent of the target population. Table 10 shows the estimated present value of the income, costs, and taxes of STAR and the distribution of wealth across the various stakeholders.

<sup>10</sup> This includes interest charges for loans repayments

**Table 10: Fiscal analysis (EGP '000)**

Category	Society	Government	Farmers
Income	1,938,206		1,938,206
Costs			
Family labour	(713,219)		(713,219)
Taxes on income	-	110,177	(110,177)
VAT	-	175,839	(175,839)
Project costs	(435,630)	(435,630)	-
Net benefit	789,357	(149,614)	938,971
Cost recovery index		66%	

## **Annex A**

### **PRICES AND MODELS**

**Figure A 1: Conversion factors and prices (EGP)**

	Unit	Financial Prices (EGP)	Conversion factors	Economic Prices (EGP)		Unit	Financial Prices (EGP)	Conversion factors	Economic Prices (EGP)	
<b>OUTPUTS</b>					<b>Equipment</b>					
<b>Commodities sold</b>					Fans, Fertilization system, harvesting equipment					
Maize	kg	3.8	0.89	3		per feddan	57,717	1.00	57,717	
Maize by product (stalks)	kg	1	0.89	0		per feddan	61,215	1.00	61,215	
Wheat	kg	4.6	0.89	4		per feddan	26,235	1.00	26,235	
Wheat straw	kg	0.8	0.89	1		Infrastructure O&M	lumpsum	11,019	1.00	11,019
Clover	kg	3	0.89	3		Goat for breeding	head	800	1.02	819
Fava beans	kg	14	1.07	15		Shed/housing	lumpsum	6,600	1.00	6,600
Fava beans straw	kg	1	1.07	1		Shed/housing maintenance	lump sum	330	1.00	330
Onion	kg	4	1.07	4		Green leguminous fodder	kg	3	1.00	3
Tomato	kg	3	1.07	3		Grasses/tender leave trees	kg	1	1.00	1
Tomato concentrate	kg	30	1.07	32		Water/electricity	lump sum	900	1.00	900
Duck	kg	80	1.07	85		Vaccination	heads	50	1.00	50
Goat	head	1,200	1.02	1,229		Veterinary services	lump sum	200	1.00	200
Skin	kg	250	1.02	256		Equipment	lump sum	1,200	1.00	1,200
Sales	head	23	1.02	24		Duck chick	no.	25	1.02	26
Goat milk	head	7	1.02	7		Fodder for ducks	kg	7	1.02	7
						Vaccination for ducks	head	3	1.00	3
<b>INPUTS</b>					<b>Tomato processing unit</b>					
<b>Seeds</b>					<b>Investment</b>					
Maize seeds	kg	31	0.89	28		Workshop	no.	157,200	1.00	157,200
Maize new seed variety	kg	45	0.89	40		Production line	no.	524,000	1.01	529,372
Wheat seeds	kg	6	0.89	5		Furniture	no.	20,000	1.02	20,479
Wheat new seed variety	kg	20	0.89	18		Office vehicle	no.	100,000	1.02	102,394
Clover seed	kg	21	0.89	19		Office equipment	no.	10,480	1.02	10,731
Clover new seed variety	kg	36	0.89	32		Land	no.	140,000	1.00	140,000
Faba beans seed	kg	19	1.07	20		Equipment spare part inventory	no.	26,200	1.01	26,469
Onion seed	kg	18	1.07	19						
Tomato Seed	kg	45	1.07	48						
<b>Other agricultural inputs</b>					<b>Operating costs</b>					
Manure	ton	24	1.02	25		Tomato	kg	3	1.07	3
Bags (50 kg)	no.	7	1.02	7		Electricity (150 kWh / ton)	Kwh	1.40	1.00	1.40
<b>Fertilizers:</b>						Gas (230 kWh / ton)	Kwh	0.31	1.00	0.31
TSP	kg	8.59	1.02	8.79		Water (200 m3 / ton)	m3	3.10	1.00	3.10
Ammonium sulphate	kg	2.43	1.03	2.49		Wastewater (90 m3 / ton)	m3	3.10	1.00	3.10
Calcium carbide	kg	2.67	1.02	2.74		Maintenance hygiene	EGP/ton	25,000	1.00	25,000
Potassium chloride	kg	5.00	1.02	5.12		O&M building (5% of investment cost)	lumpsum	7,860	1.00	7,860
KCL	kg	4.21	1.02	4.31		O&M machinery and equipment	lumpsum	32,724	1.00	32,724
Superphosphate 18% P2O5	kg	1.60	1.03	1.64		O&M of new machinery and equipment	lumpsum	1,310	1.00	1,310
Urea	kg	2.50	1.02	2.56		Packaging in aseptic bags (200 kg)	no.	50.00	1.02	51.20
Basal Fertilizers (NPK, DAP, CAN)	kg	16.20	1.02	16.59		Tools/equipment	lumpsum	18,000	1.02	18,431
<b>Chemical products:</b>										
Insecticides	kg	81.00	0.97	78.63						
Herbicides	lt	145.80	0.92	133.41						
Tools	lumpsum	150.00	1.02	153.59		<b>Labour</b>				
Electricity	kWh	0.36	1.00	0.36		Manager	pers.month	3,100	1.00	3,100
Diesel	lt	6.85	0.98	6.71		Plant operators	pers.month	1,600	1.00	1,600
Water	m3	1.00	1.00	0.00		Helpers	pers.month	1,000	1.00	1,000
Mechanical Plowing	ha	650	1.02	666		Technician	pers.month	2,076	1.00	2,076
Transport	per kg	0.05	1.02	0.05		Driver	pers.month	1,000	1.00	1,000
Land rent	per ha	18,571	1.00	18,571		Guard	pers.month	800	1.00	800
Soil preparation (tractor)	per hr	250	1.00	250						
Mechanical harvesting	per hr	100	1.00	100		<b>Labour</b>				
Land levelling	lumpsum	250	1.00	250		Skilled labour	pers.day	100	1.00	100
Canal lining	per feddan	16,500	1.00	16,500		Family labour	pers.day	75	1.00	75
<b>Greenhouse building (4,200 m2)</b>						Administrative staff, managers	pers.day	120	1.00	120
Sit preparation and ground	per feddan	17,490	1.00	17,490						
Wood and kits	per feddan	31,482	1.00	31,482		<b>Taxes on income</b>	%			
Assembly and installation	per feddan	26,235	1.00	26,235		from 0 to 8,000 EGP	%	0%	0	0
						from 8,000 to 30,000 EGP	%	10%	0	0
						from 30,000 to 45,000 EGP	%	15%	0	0
						from 45,000 to 200,000 EGP	%	20%	0	0
						more than 200,000 EGP	%	22.5%	0	0
						VAT	%	14.0%	0	0
						Social security contribution	%	24%	0	0
						Discount rate	%	12%	0.83	10%

**Figure A 1: Crop budgets (physical budgets)**

PRODUCTION AND INPUTS		Maize (1 ha)			Wheat (1 ha)			Clover (1 Ha)			Onion (1 ha)			Tomato (1 ha)			Fava beans (1 ha)		
ITEMS	Unit	Price (EGP)	Quantities	Unit	Price (EGP)	Quantities	Unit	Price (EGP)	Quantities	Unit	Price (EGP)	Quantities	Unit	Price (EGP)	Quantities	Unit	Price (EGP)	Quantities	
<b>PRODUCTION AND INPUTS</b>																			
Product	kg	3.8	4,762	kg	4.57	4,286	kg	3.00	47,619	kg	4.00	29,524	kg	3.00	30,476	kg	14.00	5,714	
<b>Total sale</b>	kg		4,762	kg		4,286	kg		47,619	kg		29,524	kg		30,476	kg		5,714	
<i>Selfconsumption</i>	kg		0	kg		0	kg		0	kg		0	kg		0	kg		0	
By product	kg	0.5	4,286	kg	1	2,143	kg			kg			kg			kg	1	2,857	
Post-harvest losses	%		5%	%		5%	%		5%	%		5%	%		5%	%		5%	
<b>Investment</b>																			
<b>Productive inputs</b>																			
Seeds	kg	31	50	kg	6	148	kg	21	20	kg	18.00	7	kg	45.00	200	kg	19.00	160	
Manure	ton	24	2	ton	24	2.0	ton	24	35	ton	24	0	ton	24	0.8	ton	24	3	
Bags (50 kg)	no.	7	95	no.	7.0	86	no.	7	952	no.	7	590	no.		610	no.	7	114	
<b>Fertilizers:</b>																			
TSP	kg	8.6	40	kg	8.59	60	kg	8.59		kg	8.59	25	kg	8.6	300	kg	8.59		
Ammonium sulphate	kg	2.4		kg	2.43	50	kg	2.43		kg	2.43		kg	2.4		kg	2.43	100	
Calcium carbide	kg	2.7		kg	2.67		kg	2.67		kg	2.67	200	kg	2.7		kg	2.67		
Potassium chloride	kg	5.0		kg	5.00		kg	5.00	20	kg	5.00		kg	5.0		kg	5.00		
KCL	kg	4.2		kg	4.21		kg	4.21		kg	4.21		kg	4.2		kg	4.21		
Superphosphate 18% P2O5	kg	1.6	70	kg	1.60	100	kg	1.60		kg	1.60	75	kg	1.6	10	kg	1.60	50	
Urea	kg	2.5	100	kg	2.50	150	kg	2.50		kg	2.50	300	kg	2.5	50	kg	2.50		
Basal Fertilizers (NPK, DAP, CAN)	kg	16.2	150	kg	16.20		kg	16	115	kg	16.20	400	kg	16.2	150	kg	16.20		
<b>Chemical products:</b>																			
Insecticides	kg	81	1	kg	81	0.5	kg	81		kg	81	2	kg	81.0	2	kg	81	4	
Herbicides	lt	146	1	lt	146	0.5	lt	146		lt	146		lt	145.8	3	lt	146	5	
Tools	lumpsum	150	1	lumpsum	150	1	lumpsum	150	1	lumpsum	150	1	lumpsum	150.0	1	lumpsum	150	1	
Electricity	kWh	0.36	0	kWh	0.36	0	kWh	0.36	0	kWh	0.36	0	kWh	0.4	0	kWh	0.36	0	
Diesel	lt	6.85	50	lt	6.85	50	lt	6.85	50	lt	6.85	50	lt	6.9	0	lt	6.85	50	
Water	m3	-	3,780	m3	0.00	3,780	m3	0.00	3,780	m3	0.00	3,780	m3	0.0	0	m3	0.00	3,780	
Mechanical Plowing	ha	650	1	ha	650	1	ha	650	1	ha	650	1	ha	650.0	1	ha	650	1	
Transport	per kg	0.05	4,762	per kg	0.05	4,286	per kg	0.05	47,619	per kg	0.05	29,524	per kg	0.1	0	per kg	0.05	0	
Land rent	per ha	18,571	0	per ha	18,571	0	per ha	18,571.43	0	per ha	18,571.43	0	per ha	18,571.4	0	per ha	18,571.43	0	
<b>Labour force</b>																			
Land Preparation and sowing	pers.day		10	pers.day		10	pers.day		10	pers.day		10	pers.day		10	pers.day		10	
Transplanting	pers.day		5	pers.day		5	pers.day		5	pers.day		10	pers.day		10	pers.day		10	
Various operations	pers.day		50	pers.day		60	pers.day		70	pers.day		72	pers.day		70	pers.day		80	
Harvesting	pers.day		10	pers.day		10	pers.day		15	pers.day		25	pers.day		25	pers.day		25	
<i>Sub-total labour force</i>			75.00			85			100			117			115			125	
Specialized labour	pers.day	100	0	pers.day	100	0	pers.day	100	0	pers.day	100	10	pers.day	100	0	pers.day	100	0	
Family labour	pers.day	75	75.0	pers.day	75	85	pers.day	75	100	pers.day	75	107	pers.day	75	115	pers.day	75	125	

**Figure A 2: Crop budgets (financial budgets)**

FINANCIAL BUDGET	Maize (1 ha)		Wheat (1 ha)		Clover (1 Ha)		Onion (1 ha)		Tomato (1 ha)		Fava beans (1 ha)	
ITEMS		Revenues/costs		Revenues/costs		Revenues/costs		Revenues/costs		Revenues/costs		Revenues/costs
<b>Production Revenues</b>												
Product		18,095		19,571		142,857		118,095		91,429		80,000
Sales		18,095		19,571		142,857		118,095		91,429		80,000
Selfconsumption		0		0		0		0		0		0
By product		2,143		1,714		0		0		0		4,000
Post-harvest losses		905		814		9,048		5,610		5,790		1,086
Total revenues		19,333		20,471		133,810		112,486		85,638		82,914
<b>Investment cost</b>												
Infrastructure		0		0		0		0		0		0
Instruments/ tools/ machinery		0		0		0		0		0		0
Post harvest intervention		0		0		0		0		0		0
Hybrid seeds		0		0		0		0		0		0
Subtotal custos inversiones		0		0		0		0		0		0
<b>Operating costs</b>												
Seeds		1,550		890		420		126		9,000		3,040
Manure		48		48		840		0		18		72
<b>Fertilizers:</b>												
TSP		343		515		0		215		2,576		0
Ammonium sulphate		0		122		0		0		0		243
Calcium carbide		0		0		0		535		0		0
Potassium chloride		0		0		100		0		0		0
KCL		0		0		0		0		0		0
Superphosphate 18% P2O5		112		160		0		120		16		80
Urea		250		375		0		750		125		0
Basal Fertilizers (NPK, DAP, CAN)		2,430		0		1,863		6,480		2,430		0
<b>Chemical Products:</b>												
Insecticides		41		41		0		162		162		324
Herbicides		117		73		0		0		437		729
Tools		150		150		150		150		150		150
Electricity		0		0		0		0		0		0
Diesel		343		343		343		343		0		343
Water		0		0		0		0		0		0
Mechanical Plowing		650		650		650		650		650		650
Transport		238		214		2,381		1,476		0		0
Land rent		0		0		0		0		0		0
Sub-total operating costs		6,271		3,579		6,746		11,006		15,564		5,631
<b>Labour costs</b>												
Cost of specialized labour		0		0		0		1,000		0		0
Cost of family labour		5,625		6,375		7,500		8,025		8,625		9,375
Sub-total of labour cost		5,625		6,375		7,500		9,025		8,625		9,375
Total production cost		11,896		9,954		14,246		20,031		24,189		15,006
<b>Income (after labour cost)</b>		7,437		10,517		119,563		92,455		61,449		67,909
<b>Income (before labour cost)</b>		13,062		16,892		127,063		100,480		70,074		77,284



**Figure A 4: Goat keeping (financial budget)**

FINANCIAL BUDGET ITEMS	WITHOUT PROJECT		WITH PROJECT									
		1	1	2	3	4	5	6	7	8	9	10
<b>Main production revenue</b>												
Animal sales	0	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494	3,519	
Skin	0	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731	4,399	
Fiber	0	207	114	210	186	206	201	206	202	206	204	
Milk	0	6,408	3,524	4,880	4,302	4,606	4,507	4,593	4,498	4,582	4,540	
<i>Total revenue</i>	0	9,555	11,253	11,377	11,703	11,757	12,604	12,667	12,607	13,012	12,661	
<b>Investment inputs</b>												
Initial animal stock	0	2,400	0	0	0	0	0	0	0	0	0	
<i>Sub-total investment costs</i>	0	2,400	0	0	0	0	0	0	0	0	0	
<b>Operating costs</b>												
Shed/housing	0	0	330	330	330	330	330	330	330	330	330	
Green leguminous fodder cultivation	0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253	7,305	
Grasses/tender leave trees	0	164	425	351	403	388	400	399	401	398	401	
Water/electricity	0	900	900	900	900	900	900	900	900	900	900	
Vaccination	0	150	389	321	368	354	366	364	366	364	367	
Veterinary aid	0	200	200	200	200	200	200	200	200	200	200	
Equipment	0	1,200	0	0	0	0	1,200	0	0	0	0	
<i>Sub-total operating inputs costs</i>	0	5,604	9,986	8,495	9,538	9,235	10,680	9,453	9,492	9,445	9,503	
<b>Labour</b>												
Skilled (paid) labour costs	0	0	0	0	0	0	0	0	0	0	0	
Family labour costs	0	1,125	1,350	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	
<i>Sub-total labour costs</i>	0	1,125	1,350	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	
<i>Total production costs</i>	0	6,729	11,336	9,995	11,038	10,735	12,180	10,953	10,992	10,945	11,003	
<b>Income (after labour costs)</b>	0	2,826	-83	1,383	666	1,022	423	1,714	1,615	2,067	1,658	
<b>Incremental net income</b>		2,826	-83	1,383	666	1,022	423	1,714	1,615	2,067	1,658	
<b>Income (before labour costs)</b>	0	3,951	1,267	2,883	2,166	2,522	1,923	3,214	3,115	3,567	3,158	

<b>Return to family labour*</b>	96.17
*consider full development year family labour requirements	
<b>Discount rate</b>	12%
<b>NPV @ 0.12</b>	7,366
<b>IRR</b>	#NUM!
<b>NPVb</b>	65,685
<b>NPVc</b>	58,320
<b>B/C ratio</b>	1.13
<b>Switching values Benefits</b>	-11%
<b>Switching values Costs</b>	13%



**Figure A 6: Household model SML-DI-FC (financial budget)**

FINANCIAL BUDGET (EGP)		WITHOUT PROJECT										WITH PROJECT										
ITEMS		1	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
<b>Main production revenue</b>																						
Clover	7,272	7,461	7,876	8,290	8,290	8,290	8,290	8,290	8,290	8,290	8,290	8,290	7,461	7,876	8,290	8,290	8,290	8,290	8,290	8,290	8,290	8,290
Wheat	1,152	1,182	1,247	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,182	1,247	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313
Maize	296	304	321	338	338	338	338	338	338	338	338	338	304	321	338	338	338	338	338	338	338	338
Animal sales	0	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494	3,519	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494	3,519	3,519
Skin	0	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731	4,399	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731	4,399	4,399
Fiber	0	207	114	210	186	206	201	206	202	206	204	207	114	210	186	206	201	206	202	206	204	204
Milk	0	6,300	3,465	4,797	4,229	4,528	4,432	4,516	4,422	4,505	4,463	6,300	3,465	4,797	4,229	4,528	4,432	4,516	4,422	4,505	4,463	4,463
Ducks	0	0	480	640	800	800	800	800	800	800	800	0	480	640	800	800	800	800	800	800	800	800
<b>By-products</b>																						
Wheat straw	101	103	109	115	115	115	115	115	115	115	115	101	103	109	115	115	115	115	115	115	115	115
Maize (stalk)	35	36	38	40	40	40	40	40	40	40	40	35	36	38	40	40	40	40	40	40	40	40
Post harvest losses	886	727	767	808	707	707	606	606	606	606	606	886	727	767	808	707	707	606	606	606	606	606
<b>Total revenue</b>	<b>7,970</b>	<b>17,806</b>	<b>20,497</b>	<b>21,223</b>	<b>21,820</b>	<b>21,869</b>	<b>22,818</b>	<b>22,880</b>	<b>22,821</b>	<b>23,225</b>	<b>22,875</b>	<b>7,970</b>	<b>17,806</b>	<b>20,497</b>	<b>21,223</b>	<b>21,820</b>	<b>21,869</b>	<b>22,818</b>	<b>22,880</b>	<b>22,821</b>	<b>23,225</b>	<b>22,875</b>
<b>Investment input costs</b>																						
Clover new seed variety	0	41	0	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0
Wheat new seed variety	0	215	0	0	0	0	0	0	0	0	0	0	215	0	0	0	0	0	0	0	0	0
Maize new seed variety	0	168	0	0	0	0	0	0	0	0	0	0	168	0	0	0	0	0	0	0	0	0
Initial animal stock	0	2,400	0	0	0	0	0	0	0	0	0	0	2,400	0	0	0	0	0	0	0	0	0
Shed/housing	0	6,600	0	0	0	0	0	0	0	0	0	0	6,600	0	0	0	0	0	0	0	0	0
Ducks chicks	0	100	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0
<b>Sub-total investment costs</b>	<b>0</b>	<b>9,524</b>	<b>0</b>	<b>0</b>	<b>9,524</b>	<b>0</b>																
<b>Operating inputs</b>																						
Clover seeds	21	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0
Wheat seeds	56	0	0	0	0	0	0	0	0	0	0	56	0	0	0	0	0	0	0	0	0	0
Maize seeds	102	0	0	0	0	0	0	0	0	0	0	102	0	0	0	0	0	0	0	0	0	0
Clover new seed variety	0	0	41	41	41	41	41	41	41	41	41	0	41	41	41	41	41	41	41	41	41	41
Wheat new seed variety	0	0	215	215	215	215	215	215	215	215	215	0	215	215	215	215	215	215	215	215	215	215
Maize new seed variety	0	0	168	168	168	168	168	168	168	168	168	0	168	168	168	168	168	168	168	168	168	168
Manure	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118
Bags	1,000	1,048	1,107	1,165	1,178	1,178	1,190	1,190	1,190	1,190	1,190	1,000	1,048	1,107	1,165	1,178	1,178	1,190	1,190	1,190	1,190	1,190
<b>Inorganic Fertilizer:</b>																						
TSP	108	105	117	123	123	123	123	123	123	123	123	108	105	117	123	123	123	123	123	123	123	123
Ammonium sulphate	15	15	17	17	17	17	17	17	17	17	17	15	15	17	17	17	17	17	17	17	17	17
Calcium carbide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium chloride	13	12	14	14	14	14	14	14	14	14	14	13	12	14	14	14	14	14	14	14	14	14
KCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Superphosphate 18% P2O5	34	33	37	39	39	39	39	39	39	39	39	34	33	37	39	39	39	39	39	39	39	39
Urea	79	77	85	90	90	90	90	90	90	90	90	79	77	85	90	90	90	90	90	90	90	90
Basal Fertilizers (NPK, DAP, CAN)	541	527	586	617	617	617	617	617	617	617	617	541	527	586	617	617	617	617	617	617	617	617
<b>Chemicals:</b>																						
Insecticides	10	10	11	12	12	12	12	12	12	12	12	10	10	11	12	12	12	12	12	12	12	12
Herbicides	24	23	26	27	27	27	27	27	27	27	27	24	23	26	27	27	27	27	27	27	27	27
<b>Tools</b>																						
Electricity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diesel	129	126	140	148	148	148	148	148	148	148	148	129	126	140	148	148	148	148	148	148	148	148
Water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mechanical Plowing	246	239	266	280	280	280	280	280	280	280	280	246	239	266	280	280	280	280	280	280	280	280
Transport	357	348	387	407	407	407	407	407	407	407	407	357	348	387	407	407	407	407	407	407	407	407
Land rent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shed/housing maintenance	0	0	330	330	330	330	330	330	330	330	330	0	330	330	330	330	330	330	330	330	330	330
Green leguminous fodder	0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253	7,305	0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253	7,305
Grasses/tender leave trees	0	164	425	351	403	388	400	399	401	398	401	0	164	425	351	403	388	400	399	401	398	401
Water/electricity	0	900	900	900	900	900	900	900	900	900	900	0	900	900	900	900	900	900	900	900	900	900
Vaccination	0	150	389	321	368	354	366	364	366	364	367	0	150	389	321	368	354	366	364	366	364	367
Veterinary services	0	200	200	200	200	200	200	200	200	200	200	0	200	200	200	200	200	200	200	200	200	200
Equipment	0	1,200	0	0	0	0	1,200	0	0	0	0	0	1,200	0	0	0	0	0	0	0	0	0
Fodder for ducks	0	84	84	112	140	140	140	140	140	140	140	0	84	84	112	140	140	140	140	140	140	140
Vaccination for ducks	0	12	30	36	42	42	42	42	42	42	42	0	12	30	36	42	42	42	42	42	42	42
<b>Sub-total operating costs</b>	<b>2,910</b>	<b>8,438</b>	<b>13,496</b>	<b>12,189</b>	<b>13,278</b>	<b>12,976</b>	<b>14,434</b>	<b>13,206</b>	<b>13,245</b>	<b>13,198</b>	<b>13,256</b>	<b>2,910</b>	<b>8,438</b>	<b>13,496</b>	<b>12,189</b>	<b>13,278</b>	<b>12,976</b>	<b>14,434</b>	<b>13,206</b>	<b>13,245</b>	<b>13,198</b>	<b>13,256</b>
<b>Labour costs</b>																						
Skilled labour costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Family labour costs	849	2,137	2,374	2,499	2,499	2,499	2,499	2,499	2,499	2,499	2,499	849	2,137	2,374	2,499	2,499	2,499	2,499	2,499	2,499	2,499	2,499
<b>Sub-total labour costs</b>	<b>849</b>	<b>2,137</b>	<b>2,374</b>	<b>2,499</b>	<b>849</b>	<b>2,137</b>	<b>2,374</b>	<b>2,499</b>														
<b>Total production costs</b>	<b>3,759</b>	<b>20,099</b>	<b>15,870</b>	<b>14,688</b>	<b>15,777</b>	<b>15,475</b>	<b>16,933</b>	<b>15,705</b>	<b>15,744</b>	<b>15,697</b>	<b>15,755</b>	<b>3,759</b>	<b>20,099</b>	<b>15,870</b>	<b>14,688</b>	<b>15,777</b>	<b>15,475</b>	<b>16,933</b>	<b>15,705</b>	<b>15,744</b>	<b>15,697</b>	<b>15,755</b>
<b>Gross income (before labour costs)</b>	<b>5,060</b>	<b>-156</b>	<b>7,001</b>	<b>9,035</b>	<b>8,542</b>	<b>8,893</b>	<b>8,384</b>	<b>9,674</b>	<b>9,576</b>	<b>10,027</b>	<b>9,619</b>	<b>5,060</b>	<b>-156</b>	<b>7,001</b>	<b>9,035</b>	<b>8,542</b>	<b>8,893</b>	<b>8,384</b>	<b>9,674</b>	<b>9,576</b>	<b>10,027</b>	<b>9,619</b>
Taxes on income	0	0	0	903	854	889	838	967	958	1,003	962	0	0	0	903	854	889	838	967	958	1,003	962
<b>After-tax cash flow (before labour costs)</b>	<b>5,060</b>	<b>-156</b>	<b>7,001</b>	<b>8,131</b>	<b>7,688</b>	<b>8,004</b>	<b>7,546</b>	<b>8,707</b>	<b>8,618</b>	<b>9,024</b>	<b>8,657</b>	<b>5,060</b>	<b>-156</b>	<b>7,001</b>	<b>8,131</b>	<b>7,688</b>	<b>8,004</b>	<b>7,546</b>	<b>8,707</b>	<b>8,618</b>	<b>9,024</b>	<b>8,657</b>
<b>After-tax cash flow (after labour costs)</b>	<b>4,</b>																					



**Figure A 8: Household model SML-FI-FC (financial budget)**

FINANCIAL BUDGET (EGP)	WITHOUT PROJECT										WITH PROJECT									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
<b>ITEMS</b>																				
<b>Main production revenue</b>																				
Clover	7,512	7,707	8,135	8,564	8,564	8,564	8,564	8,564	8,564	8,564	7,512	7,707	8,135	8,564	8,564	8,564	8,564	8,564	8,564	8,564
Wheat	1,601	1,643	1,734	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,601	1,643	1,734	1,825	1,825	1,825	1,825	1,825	1,825	1,825
Maize	605	621	655	690	690	690	690	690	690	690	605	621	655	690	690	690	690	690	690	690
Animal sales	0	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494	0	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494
Skin	0	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731	0	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731
Fiber	0	207	114	210	186	206	201	206	202	206	0	207	114	210	186	206	201	206	202	206
Milk	0	6,300	3,465	4,797	4,229	4,528	4,432	4,516	4,422	4,505	0	6,300	3,465	4,797	4,229	4,528	4,432	4,516	4,422	4,505
Ducks	0	0	480	640	800	800	800	800	800	800	0	0	480	640	800	800	800	800	800	800
<b>By-products</b>																				
Wheat straw	140	144	152	160	160	160	160	160	160	160	140	144	152	160	160	160	160	160	160	160
Maize (stalk)	72	74	78	82	82	82	82	82	82	82	72	74	78	82	82	82	82	82	82	82
Post harvest losses	993	815	860	906	792	792	679	679	679	679	993	815	860	906	792	792	679	679	679	679
<b>Total revenue</b>	<b>8,937</b>	<b>18,820</b>	<b>21,567</b>	<b>22,350</b>	<b>22,959</b>	<b>23,008</b>	<b>23,969</b>	<b>24,031</b>	<b>23,972</b>	<b>24,376</b>	<b>8,937</b>	<b>18,820</b>	<b>21,567</b>	<b>22,350</b>	<b>22,959</b>	<b>23,008</b>	<b>23,969</b>	<b>24,031</b>	<b>23,972</b>	<b>24,376</b>
<b>Investment input costs</b>																				
Clover new seed variety	0	43	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0
Wheat new seed variety	0	298	0	0	0	0	0	0	0	0	0	298	0	0	0	0	0	0	0	0
Maize new seed variety	0	343	0	0	0	0	0	0	0	0	0	343	0	0	0	0	0	0	0	0
Initial animal stock	0	2,400	0	0	0	0	0	0	0	0	0	2,400	0	0	0	0	0	0	0	0
Shed/housing	0	6,600	0	0	0	0	0	0	0	0	0	6,600	0	0	0	0	0	0	0	0
Ducks chicks	0	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0
<b>Sub-total investment costs</b>	<b>0</b>	<b>9,784</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,784</b>	<b>0</b>							
<b>Operating inputs</b>																				
Clover seeds	22	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0
Wheat seeds	79	0	0	0	0	0	0	0	0	0	79	0	0	0	0	0	0	0	0	0
Maize seeds	207	0	0	0	0	0	0	0	0	0	207	0	0	0	0	0	0	0	0	0
Clover new seed variety	0	0	43	43	43	43	43	43	43	43	0	0	43	43	43	43	43	43	43	43
Wheat new seed variety	0	0	298	298	298	298	298	298	298	298	0	0	298	298	298	298	298	298	298	298
Maize new seed variety	0	0	343	343	343	343	343	343	343	343	0	0	343	343	343	343	343	343	343	343
Manure	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157
Bags	1,333	1,398	1,475	1,553	1,570	1,570	1,587	1,587	1,587	1,587	1,333	1,398	1,475	1,553	1,570	1,570	1,587	1,587	1,587	1,587
<b>Inorganic Fertilizer:</b>																				
TSP	144	141	156	164	164	164	164	164	164	164	144	141	156	164	164	164	164	164	164	164
Ammonium sulphate	20	22	22	23	23	23	23	23	23	23	20	22	22	23	23	23	23	23	23	23
Calcium carbide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium chloride	17	16	18	19	19	19	19	19	19	19	17	16	18	19	19	19	19	19	19	19
KCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Superphosphate 18% P2O5	46	45	49	52	52	52	52	52	52	52	46	45	49	52	52	52	52	52	52	52
Urea	105	102	114	120	120	120	120	120	120	120	105	102	114	120	120	120	120	120	120	120
Basal Fertilizers (NPK, DAP, CAN)	721	703	781	822	822	822	822	822	822	822	721	703	781	822	822	822	822	822	822	822
<b>Chemicals:</b>																				
Insecticides	14	13	15	16	16	16	16	16	16	16	14	13	15	16	16	16	16	16	16	16
Herbicides	32	31	34	36	36	36	36	36	36	36	32	31	34	36	36	36	36	36	36	36
Tools	76	74	82	86	86	86	86	86	86	86	76	74	82	86	86	86	86	86	86	86
Electricity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diesel	173	168	187	197	197	197	197	197	197	197	173	168	187	197	197	197	197	197	197	197
Water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mechanical Plowing	328	319	355	373	373	373	373	373	373	373	328	319	355	373	373	373	373	373	373	373
Transport	476	464	516	543	543	543	543	543	543	543	476	464	516	543	543	543	543	543	543	543
Land rent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shed/housing maintenance	0	0	330	330	330	330	330	330	330	330	0	0	330	330	330	330	330	330	330	330
Green leguminous fodder	0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253	0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253
Grasses/tender leave trees	0	164	425	351	403	388	400	399	401	398	0	164	425	351	403	388	400	399	401	398
Water/electricity	0	900	900	900	900	900	900	900	900	900	0	900	900	900	900	900	900	900	900	900
Vaccination	0	150	389	321	368	354	366	364	366	367	0	150	389	321	368	354	366	364	366	367
Veterinary services	0	200	200	200	200	200	200	200	200	200	0	200	200	200	200	200	200	200	200	200
Equipment	0	1,200	0	0	0	0	1,200	0	0	0	0	1,200	0	0	0	0	1,200	0	0	0
Fodder for ducks	0	84	84	112	140	140	140	140	140	140	0	84	84	112	140	140	140	140	140	140
Vaccination for ducks	0	12	30	36	42	42	42	42	42	42	0	12	30	36	42	42	42	42	42	42
<b>Sub-total operating costs</b>	<b>3,949</b>	<b>9,351</b>	<b>14,747</b>	<b>13,489</b>	<b>14,583</b>	<b>14,281</b>	<b>15,743</b>	<b>14,515</b>	<b>14,554</b>	<b>14,507</b>	<b>3,949</b>	<b>9,351</b>	<b>14,747</b>	<b>13,489</b>	<b>14,583</b>	<b>14,281</b>	<b>15,743</b>	<b>14,515</b>	<b>14,554</b>	<b>14,507</b>
<b>Labour costs</b>																				
Skilled labour costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Family labour costs	1,104	2,355	2,616	2,754	2,754	2,754	2,754	2,754	2,754	2,754	1,104	2,355	2,616	2,754	2,754	2,754	2,754	2,754	2,754	2,754
<b>Sub-total labour costs</b>	<b>1,104</b>	<b>2,355</b>	<b>2,616</b>	<b>2,754</b>	<b>2,754</b>	<b>2,754</b>	<b>2,754</b>	<b>2,754</b>	<b>2,754</b>	<b>2,754</b>	<b>1,104</b>	<b>2,355</b>	<b>2,616</b>	<b>2,754</b>						
<b>Total production costs</b>	<b>5,053</b>	<b>21,490</b>	<b>17,363</b>	<b>16,243</b>	<b>17,337</b>	<b>17,035</b>	<b>18,497</b>	<b>17,269</b>	<b>17,308</b>	<b>17,261</b>	<b>5,053</b>	<b>21,490</b>	<b>17,363</b>	<b>16,243</b>	<b>17,337</b>	<b>17,035</b>	<b>18,497</b>	<b>17,269</b>	<b>17,308</b>	<b>17,261</b>
<b>Gross income (before labour costs)</b>	<b>4,988</b>	<b>-315</b>	<b>6,821</b>	<b>8,861</b>	<b>8,376</b>	<b>8,727</b>	<b>8,226</b>	<b>9,516</b>	<b>9,418</b>	<b>9,869</b>	<b>4,988</b>	<b>-315</b>	<b>6,821</b>	<b>8,861</b>	<b>8,376</b>	<b>8,727</b>	<b>8,226</b>	<b>9,516</b>	<b>9,418</b>	<b>9,869</b>
Taxes on income	0	0	0	886	838	873	823	952	942	987	0	0	0	886	838	873	823	952	942	987
<b>After-tax cash flow (before labour costs)</b>	<b>4,988</b>	<b>-315</b>	<b>6,821</b>	<b>7,975</b>	<b>7,538</b>	<b>7,854</b>	<b>7,404</b>	<b>8,564</b>	<b>8,476</b>	<b>8,882</b>	<b>4,988</b>	<b>-315</b>	<b>6,821</b>	<b>7,975</b>	<b>7,538</b>	<b>7,854</b>	<b>7,404</b>	<b>8,564</b>	<b>8,476</b>	<b>8,882</b>
<b>After-tax cash flow (after labour costs)</b>	<b>3,884</b>	<b>-2,670</b>	<b>4,205</b>	<b>6,107</b>	<b>5,622</b>	<b>5,973</b>	<b>5,472</b>	<b>6,762</b> </												



**Figure A 10: Household model AVG-DI-FC (financial budget)**

FINANCIAL BUDGET (EGP)		WITHOUT PROJECT		WITH PROJECT									
ITEMS		1	1	2	3	4	5	6	7	8	9	10	
<b>Main production revenue</b>													
Clover		11,628	11,930	12,593	13,256	13,256	13,256	13,256	13,256	13,256	13,256	13,256	
Wheat		1,879	1,928	2,035	2,142	2,142	2,142	2,142	2,142	2,142	2,142	2,142	
Maize		921	945	998	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	
Animal sales		0	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494	3,519	
Skin		0	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731	4,399	
Fiber		0	207	114	210	186	206	201	206	202	206	204	
Milk		0	6,300	3,465	4,797	4,229	4,528	4,432	4,516	4,422	4,505	4,463	
Ducks		0	0	480	640	800	800	800	800	800	800	800	
<b>By-products</b>													
Wheat straw		165	169	178	188	188	188	188	188	188	188	188	
Maize (stalk)		109	112	118	124	124	124	124	124	124	124	124	
Post harvest losses		1,470	1,207	1,274	1,341	1,173	1,173	1,006	1,006	1,006	1,006	1,006	
<b>Total revenue</b>		<b>13,232</b>	<b>23,324</b>	<b>26,322</b>	<b>27,354</b>	<b>28,018</b>	<b>28,067</b>	<b>29,082</b>	<b>29,144</b>	<b>29,086</b>	<b>29,490</b>	<b>29,139</b>	
<b>Investment input costs</b>													
Clover new seed variety		0	66	0	0	0	0	0	0	0	0	0	
Wheat new seed variety		0	350	0	0	0	0	0	0	0	0	0	
Maize new seed variety		0	522	0	0	0	0	0	0	0	0	0	
Initial animal stock		0	2,400	0	0	0	0	0	0	0	0	0	
Shed/housing		0	6,600	0	0	0	0	0	0	0	0	0	
Ducks chicks		0	100	0	0	0	0	0	0	0	0	0	
<b>Sub-total investment costs</b>		<b>0</b>	<b>10,039</b>	<b>0</b>									
<b>Operating inputs</b>													
Clover seeds		34	0	0	0	0	0	0	0	0	0	0	
Wheat seeds		92	0	0	0	0	0	0	0	0	0	0	
Maize seeds		316	0	0	0	0	0	0	0	0	0	0	
Clover new seed variety		0	0	66	66	66	66	66	66	66	66	66	
Wheat new seed variety		0	0	350	350	350	350	350	350	350	350	350	
Maize new seed variety		0	0	522	522	522	522	522	522	522	522	522	
Manure		236	236	236	236	236	236	236	236	236	236	236	
Bags		1,999	2,097	2,213	2,330	2,355	2,355	2,380	2,380	2,380	2,380	2,380	
<b>Inorganic Fertilizer:</b>													
TSP		216	211	234	247	247	247	247	247	247	247	247	
Ammonium sulphate		31	30	33	35	35	35	35	35	35	35	35	
Calcium carbide		0	0	0	0	0	0	0	0	0	0	0	
Potassium chloride		25	25	27	29	29	29	29	29	29	29	29	
KCL		0	0	0	0	0	0	0	0	0	0	0	
Superphosphate 18% P2O5		69	67	74	78	78	78	78	78	78	78	78	
Urea		158	154	171	180	180	180	180	180	180	180	180	
Basal Fertilizers (NPK, DAP, CAN)		1,082	1,054	1,172	1,233	1,233	1,233	1,233	1,233	1,233	1,233	1,233	
<b>Chemicals:</b>													
Insecticides		20	20	22	23	23	23	23	23	23	23	23	
Herbicides		48	47	52	54	54	54	54	54	54	54	54	
Tools		113	111	123	129	129	129	129	129	129	129	129	
Electricity		0	0	0	0	0	0	0	0	0	0	0	
Diesel		259	252	280	295	295	295	295	295	295	295	295	
Water		0	0	0	0	0	0	0	0	0	0	0	
Mechanical Plowing		491	479	532	560	560	560	560	560	560	560	560	
Transport		714	696	773	814	814	814	814	814	814	814	814	
Land rent		0	0	0	0	0	0	0	0	0	0	0	
Shed/housing maintenance		0	0	330	330	330	330	330	330	330	330	330	
Green leguminous fodder		0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253	7,305	
Grasses/tender leave trees		0	164	425	351	403	388	400	399	401	398	401	
Water/electricity		0	900	900	900	900	900	900	900	900	900	900	
Vaccination		0	150	389	321	368	354	366	364	366	364	367	
Veterinary services		0	200	200	200	200	200	200	200	200	200	200	
Equipment		0	1,200	0	0	0	1,200	0	0	0	0	0	
Fodder for ducks		0	84	84	112	140	140	140	140	140	140	140	
Vaccination for ducks		0	12	30	36	42	42	42	42	42	42	42	
<b>Sub-total operating costs</b>		<b>5,903</b>	<b>11,177</b>	<b>16,982</b>	<b>15,825</b>	<b>16,927</b>	<b>16,625</b>	<b>18,095</b>	<b>16,868</b>	<b>16,907</b>	<b>16,860</b>	<b>16,917</b>	
<b>Labour costs</b>													
Skilled labour costs		0	0	0	0	0	0	0	0	0	0	0	
Family labour costs		1,509	2,701	3,001	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	
<b>Sub-total labour costs</b>		<b>1,509</b>	<b>2,701</b>	<b>3,001</b>	<b>3,159</b>								
<b>Total production costs</b>		<b>7,412</b>	<b>23,916</b>	<b>19,983</b>	<b>18,984</b>	<b>20,086</b>	<b>19,783</b>	<b>21,254</b>	<b>20,027</b>	<b>20,065</b>	<b>20,019</b>	<b>20,076</b>	
<b>Gross income (before labour costs)</b>		<b>7,329</b>	<b>2,109</b>	<b>9,340</b>	<b>11,530</b>	<b>11,091</b>	<b>11,442</b>	<b>10,987</b>	<b>12,277</b>	<b>12,179</b>	<b>12,630</b>	<b>12,222</b>	
Taxes on income		0	0	934	1,153	1,109	1,144	1,099	1,228	1,218	1,263	1,222	
<b>After-tax cash flow (before labour costs)</b>		<b>7,329</b>	<b>2,109</b>	<b>8,406</b>	<b>10,377</b>	<b>9,982</b>	<b>10,298</b>	<b>9,889</b>	<b>11,049</b>	<b>10,961</b>	<b>11,367</b>	<b>10,999</b>	
<b>After-tax cash flow (after labour costs)</b>		<b>5,820</b>	<b>-592</b>	<b>6,339</b>	<b>8,371</b>	<b>7,932</b>	<b>8,283</b>	<b>7,828</b>	<b>9,118</b>	<b>9,020</b>	<b>9,471</b>	<b>9,063</b>	
<b>Net Incremental Benefits (NIB)</b>			<b>-6,412</b>	<b>519</b>	<b>2,551</b>	<b>2,112</b>	<b>2,463</b>	<b>2,009</b>	<b>3,298</b>	<b>3,200</b>	<b>3,651</b>	<b>3,243</b>	
<b>Cumulative cash flow</b>			<b>-592</b>	<b>5,747</b>	<b>14,118</b>	<b>22,050</b>	<b>30,333</b>	<b>38,162</b>	<b>47,279</b>	<b>56,300</b>	<b>65,771</b>	<b>74,833</b>	
<b>Fraction row</b>			<b>-</b>	<b>1.00</b>	<b>0.91</b>	<b>1.69</b>	<b>2.78</b>	<b>3.66</b>	<b>4.87</b>	<b>5.19</b>	<b>6.24</b>	<b>6.94</b>	

MAIN PROFITABILITY RESULTS (before financing)	
Return to family labour* (EGP/day)	261
*consider full development year family labour requirements	
Discount rate	12%
NPV (EGP) @ 0.12	5,408
IRR	29%
NPVb	79,930
NPVc	74,522
B/C ratio	1.07
Switching values Benefits	-7%
Switching values Costs	7%
Payback period (years)	1.00



**Figure A 12: Household model AVG-FI-FC (financial budget)**

FINANCIAL BUDGET (EGP)	WITHOUT PROJECT										WITH PROJECT											
	1	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	
<b>ITEMS</b>																						
<b>Main production revenue</b>																						
Clover	20,658	21,195	22,373	23,550	23,550	23,550	23,550	23,550	23,550	23,550	23,550	20,658	21,195	22,373	23,550	23,550	23,550	23,550	23,550	23,550	23,550	
Wheat	3,535	3,627	3,829	4,030	4,030	4,030	4,030	4,030	4,030	4,030	4,030	3,535	3,627	3,829	4,030	4,030	4,030	4,030	4,030	4,030	4,030	
Maize	1,848	1,896	2,001	2,106	2,106	2,106	2,106	2,106	2,106	2,106	2,106	1,848	1,896	2,001	2,106	2,106	2,106	2,106	2,106	2,106	2,106	
Animal sales	0	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494	3,519	0	1,440	3,730	3,079	3,534	3,402	3,509	3,497	3,514	3,494	
Skin	0	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731	4,399	0	1,500	3,885	3,208	3,681	3,544	4,386	4,371	4,393	4,731	
Fiber	0	207	114	210	186	206	206	201	206	202	204	0	207	114	210	186	206	206	201	206	202	
Milk	0	6,300	3,465	4,797	4,229	4,528	4,432	4,516	4,422	4,505	4,463	0	6,300	3,465	4,797	4,229	4,528	4,432	4,516	4,422	4,505	
Ducks	0	0	480	640	800	800	800	800	800	800	800	0	0	480	640	800	800	800	800	800	800	
<b>By-products</b>																						
Wheat straw	310	318	335	353	353	353	353	353	353	353	353	310	318	335	353	353	353	353	353	353	353	
Maize (stalk)	219	224	237	249	249	249	249	249	249	249	249	219	224	237	249	249	249	249	249	249	249	
Post harvest losses	2,657	2,181	2,302	2,423	2,120	2,120	1,817	1,817	1,817	1,817	1,817	2,657	2,181	2,302	2,423	2,120	2,120	1,817	1,817	1,817	1,817	
<b>Total revenue</b>	<b>23,912</b>	<b>34,526</b>	<b>38,146</b>	<b>39,801</b>	<b>40,600</b>	<b>40,649</b>	<b>41,800</b>	<b>41,862</b>	<b>41,803</b>	<b>42,207</b>	<b>41,856</b>	<b>23,912</b>	<b>34,526</b>	<b>38,146</b>	<b>39,801</b>	<b>40,600</b>	<b>40,649</b>	<b>41,800</b>	<b>41,862</b>	<b>41,803</b>	<b>42,207</b>	
<b>Investment input costs</b>																						
Clover new seed variety	0	118	0	0	0	0	0	0	0	0	0	0	118	0	0	0	0	0	0	0	0	
Wheat new seed variety	0	659	0	0	0	0	0	0	0	0	0	0	659	0	0	0	0	0	0	0	0	
Maize new seed variety	0	1,048	0	0	0	0	0	0	0	0	0	0	1,048	0	0	0	0	0	0	0	0	
Initial animal stock	0	2,400	0	0	0	0	0	0	0	0	0	0	2,400	0	0	0	0	0	0	0	0	
Shed/housing	0	6,600	0	0	0	0	0	0	0	0	0	0	6,600	0	0	0	0	0	0	0	0	
Ducks chicks	0	100	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	
<b>Sub-total investment costs</b>	<b>0</b>	<b>10,924</b>	<b>0</b>	<b>10,924</b>	<b>0</b>																	
<b>Operating inputs</b>																						
Clover seeds	61	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	0	0	0	
Wheat seeds	173	0	0	0	0	0	0	0	0	0	0	173	0	0	0	0	0	0	0	0	0	
Maize seeds	633	0	0	0	0	0	0	0	0	0	0	633	0	0	0	0	0	0	0	0	0	
Clover new seed variety	0	0	118	118	118	118	118	118	118	118	118	0	0	118	118	118	118	118	118	118	118	
Wheat new seed variety	0	0	659	659	659	659	659	659	659	659	659	0	0	659	659	659	659	659	659	659	659	
Maize new seed variety	0	0	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	0	0	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	
Manure	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	
Bags	3,665	3,844	4,058	4,271	4,318	4,318	4,364	4,364	4,364	4,364	4,364	3,665	3,844	4,058	4,271	4,318	4,318	4,364	4,364	4,364	4,364	
<b>Inorganic Fertilizer:</b>																						
TSP	397	387	430	452	452	452	452	452	452	452	452	397	387	430	452	452	452	452	452	452	452	
Ammonium sulphate	56	55	61	64	64	64	64	64	64	64	64	56	55	61	64	64	64	64	64	64	64	
Calcium carbide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potassium chloride	46	45	50	53	53	53	53	53	53	53	53	46	45	50	53	53	53	53	53	53	53	
KCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Superphosphate 18% P2O5	126	122	136	143	143	143	143	143	143	143	143	126	122	136	143	143	143	143	143	143	143	
Urea	289	281	313	329	329	329	329	329	329	329	329	289	281	313	329	329	329	329	329	329	329	
Basal Fertilizers (NPK, DAP, CAN)	1,983	1,933	2,148	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	1,983	1,933	2,148	2,261	2,261	2,261	2,261	2,261	2,261	2,261	
<b>Chemicals:</b>																						
Insecticides	37	36	41	43	43	43	43	43	43	43	43	37	36	41	43	43	43	43	43	43	43	
Herbicides	88	85	95	100	100	100	100	100	100	100	100	88	85	95	100	100	100	100	100	100	100	
<b>Tools</b>	<b>208</b>	<b>203</b>	<b>225</b>	<b>237</b>	<b>208</b>	<b>203</b>	<b>225</b>	<b>237</b>														
Electricity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diesel	475	463	514	541	541	541	541	541	541	541	541	475	463	514	541	541	541	541	541	541	541	
Water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mechanical Plowing	901	878	976	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	901	878	976	1,027	1,027	1,027	1,027	1,027	1,027	1,027	
Transport	1,309	1,276	1,418	1,492	1,492	1,492	1,492	1,492	1,492	1,492	1,492	1,309	1,276	1,418	1,492	1,492	1,492	1,492	1,492	1,492	1,492	
Land rent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Shed/housing maintenance	0	0	330	330	330	330	330	330	330	330	330	0	0	330	330	330	330	330	330	330	330	
Green leguminous fodder	0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253	7,305	0	2,989	7,742	6,393	7,337	7,063	7,285	7,260	7,295	7,253	
Grasses/tender leave trees	0	164	425	351	403	388	400	399	401	398	401	0	164	425	351	403	388	400	399	401	398	
Water/electricity	0	900	900	900	900	900	900	900	900	900	900	0	900	900	900	900	900	900	900	900	900	
Vaccination	0	150	389	321	368	354	366	364	366	364	367	0	150	389	321	368	354	366	364	366	364	
Veterinary services	0	200	200	200	200	200	200	200	200	200	200	0	200	200	200	200	200	200	200	200	200	
Equipment	0	1,200	0	0	0	0	0	0	0	0	0	0	1,200	0	0	0	0	0	0	0	0	0
Fodder for ducks	0	84	84	112	140	140	140	140	140	140	140	0	84	84	112	140	140	140	140	140	140	
Vaccination for ducks	0	12	30	36	42	42	42	42	42	42	42	0	12	30	36	42	42	42	42	42	42	42
<b>Sub-total operating costs</b>	<b>10,879</b>	<b>15,741</b>	<b>22,820</b>	<b>21,913</b>	<b>23,036</b>	<b>22,734</b>	<b>24,225</b>	<b>22,998</b>	<b>23,037</b>	<b>22,990</b>	<b>23,048</b>	<b>10,879</b>	<b>15,741</b>	<b>22,820</b>	<b>21,913</b>	<b>23,036</b>	<b>22,734</b>	<b>24,225</b>	<b>22,998</b>	<b>23,037</b>	<b>22,990</b>	
<b>Labour costs</b>																						
Skilled labour costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Family labour costs	2,810	3,814	4,237	4,460	4,460	4,460	4,460	4,460	4,460	4,460	4,460	2,810	3,814	4,237	4,460	4,460	4,460	4,460	4,460	4,460	4,460	
<b>Sub-total labour costs</b>	<b>2,810</b>	<b>3,814</b>	<b>4,237</b>	<b>4,460</b>	<b>2,810</b>	<b>3,814</b>	<b>4,237</b>	<b>4,460</b>														
<b>Total production costs</b>	<b>13,690</b>	<b>30,479</b>	<b>27,057</b>	<b>26,373</b>	<b>27,497</b>	<b>27,194</b>	<b>28,686</b>	<b>27,458</b>	<b>27,497</b>	<b>27,451</b>	<b>27,508</b>	<b>13,690</b>	<b>30,479</b>	<b>27,057</b>	<b>26,373</b>	<b>27,497</b>	<b>27,194</b>					



**Figure A 14: Household model AVG-DI-HV (financial budget)**

FINANCIAL BUDGET (EGP)	WITHOUT PROJECT		WITH PROJECT									
		1	1	2	3	4	5	6	7	8	9	10
<b>ITEMS</b>												
<b>Main production revenue</b>												
Clover		15,696	18,364	19,385	20,405	20,405	20,405	20,405	20,405	20,405	20,405	20,405
Wheat		3,176	3,716	3,923	4,129	4,129	4,129	4,129	4,129	4,129	4,129	4,129
Maize		1,496	1,750	1,847	1,944	1,944	1,944	1,944	1,944	1,944	1,944	1,944
Onion		5,460	6,406	6,744	7,098	7,098	7,098	7,098	7,098	7,098	7,098	7,098
Tomato		4,227	4,960	5,221	5,496	5,496	5,496	5,496	5,496	5,496	5,496	5,496
Fava beans		3,699	4,340	4,568	4,809	4,809	4,809	4,809	4,809	4,809	4,809	4,809
<b>By-products</b>												
Wheat straw		278	326	344	362	362	362	362	362	362	362	362
Maize (stalk)		177	207	219	230	230	230	230	230	230	230	230
Fava beans straw		185	216	228	240	240	240	240	240	240	240	240
Post harvest losses		2,082	1,949	2,057	1,895	1,895	1,624	1,624	1,624	1,354	1,354	1,354
<b>Total revenue</b>		32,313	38,336	40,420	42,818	42,818	43,089	43,089	43,089	43,360	43,360	43,360
<b>Investment input costs</b>												
Clover new seed variety		0	102	0	0	0	0	0	0	0	0	0
Wheat new seed variety		0	675	0	0	0	0	0	0	0	0	0
Maize new seed variety		0	967	0	0	0	0	0	0	0	0	0
Canal rehabilitation		0	19,800	0	0	0	0	0	0	0	0	0
<b>Sub-total investment costs</b>		0	21,544	0	0	0	0	0	0	0	0	0
<b>Operating inputs</b>												
Clover seeds		46	0	0	0	0	0	0	0	0	0	0
Wheat seeds		156	0	0	0	0	0	0	0	0	0	0
Maize seeds		512	0	0	0	0	0	0	0	0	0	0
Onion seeds		6	8	8	8	8	8	8	8	8	8	8
Tomato seeds		416	541	499	499	499	499	499	499	499	499	499
Fava beans seeds		141	183	169	169	169	169	169	169	169	169	169
Clover new seed variety		0	0	102	102	102	102	102	102	102	102	102
Wheat new seed variety		0	0	675	675	675	675	675	675	675	675	675
Maize new seed variety		0	0	967	967	967	967	967	967	967	967	967
Manure		517	672	672	672	672	672	672	672	672	672	672
Bags		1,284	1,537	1,621	1,725	1,725	1,744	1,744	1,744	1,762	1,762	1,762
<b>Inorganic Fertilizer:</b>												
TSP		241	268	298	313	313	313	313	313	313	313	313
Ammonium sulphate		31	34	38	40	40	40	40	40	40	40	40
Calcium carbide		25	0	0	0	0	0	0	0	0	0	0
Potassium chloride		11	12	14	14	14	14	14	14	14	14	14
KCL		0	0	0	0	0	0	0	0	0	0	0
Superphosphate 18% P2O5		45	50	56	59	59	59	59	59	59	59	59
Urea		122	136	151	159	159	159	159	159	159	159	159
Basal Fertilizers (NPK, DAP, CAN)		818	909	1,010	1,063	1,063	1,063	1,063	1,063	1,063	1,063	1,063
<b>Chemicals:</b>												
Insecticides		40	44	49	52	52	52	52	52	52	52	52
Herbicides		75	84	93	98	98	98	98	98	98	98	98
<b>Tools</b>												
Electricity		0	0	0	0	0	0	0	0	0	0	0
Diesel		153	170	189	199	199	199	199	199	199	199	199
Water		0	0	0	0	0	0	0	0	0	0	0
Mechanical Plowing		321	357	396	417	417	417	417	417	417	417	417
Transport		459	510	567	596	596	596	596	596	596	596	596
<b>Sub-total operating costs</b>		5,493	5,597	7,665	7,924	7,924	7,943	7,943	7,943	7,961	7,961	7,961
<b>Labour costs</b>												
Skilled labour costs		0	0	0	0	0	0	0	0	0	0	0
Family labour costs		3,562	3,959	4,399	4,630	4,630	4,630	4,630	4,630	4,630	4,630	4,630
<b>Sub-total labour costs</b>		3,562	3,959	4,399	4,630	4,630	4,630	4,630	4,630	4,630	4,630	4,630
<b>Total production costs</b>		9,054	31,100	12,063	12,554	12,554	12,573	12,573	12,573	12,591	12,591	12,591
<b>Gross Income (before labour costs)</b>		26,820	11,195	32,756	34,894	34,894	35,147	35,147	35,147	35,399	35,399	35,399
Taxes on income		2,682	1,120	4,913	5,234	5,234	5,272	5,272	5,272	5,310	5,310	5,310
After-tax cash flow (before labour costs)		24,138	10,076	27,842	29,660	29,660	29,875	29,875	29,875	30,089	30,089	30,089
After-tax cash flow (after labour costs)		23,258	7,237	28,357	30,264	30,264	30,517	30,517	30,517	30,769	30,769	30,769
<b>Net Incremental Benefits (NIB)</b>			-16,022	5,099	7,006	7,006	7,258	7,258	7,258	7,511	7,511	7,511
<b>Cumulative cash flow</b>			7,237	35,594	65,858	96,122	126,639	157,156	187,672	218,441	249,209	279,978
<b>Fraction row</b>			0	1.00	1.26	2.18	3.18	4.15	5.15	6.15	7.10	8.10

MAIN PROFITABILITY RESULTS (before financing)	
Return to family labour* (EGP/day)	569
*consider full development year family labour requirements	
Discount rate	12%
NPV (EGP) @ 0.12	18,439
IRR	39%
NPVb	54,448
NPVc	36,010
B/C ratio	1.51
Switching values Benefits	-34%
Switching values Costs	51%
Payback period (years)	-



**Figure A 16: Household model CAP-FI-FC (financial budget)**

FINANCIAL BUDGET (EGP)		WITHOUT PROJECT	WITH PROJECT									
ITEMS		1	1	2	3	4	5	6	7	8	9	10
<b>Main production revenue</b>												
Clover		34,272	40,098	42,326	44,554	44,554	44,554	44,554	44,554	44,554	44,554	44,554
Wheat		7,477	8,748	9,234	9,720	9,720	9,720	9,720	9,720	9,720	9,720	9,720
Maize		6,293	7,363	7,772	8,181	8,181	8,181	8,181	8,181	8,181	8,181	8,181
Onion		0	0	0	0	0	0	0	0	0	0	0
Tomato		0	0	0	0	0	0	0	0	0	0	0
Fava beans		0	0	0	0	0	0	0	0	0	0	0
<b>By-products</b>												
Wheat straw		655	766	809	851	851	851	851	851	851	851	851
Maize (stalk)		745	872	920	969	969	969	969	969	969	969	969
Fava beans straw		0	0	0	0	0	0	0	0	0	0	0
Post harvest losses		4,944	4,628	4,885	4,499	4,499	3,856	3,856	3,856	3,214	3,214	3,214
<b>Total revenue</b>		<b>44,498</b>	<b>53,219</b>	<b>56,176</b>	<b>59,775</b>	<b>59,775</b>	<b>60,418</b>	<b>60,418</b>	<b>60,418</b>	<b>61,061</b>	<b>61,061</b>	<b>61,061</b>
<b>Investment input costs</b>												
Clover new seed variety		0	223	0	0	0	0	0	0	0	0	0
Wheat new seed variety		0	1,589	0	0	0	0	0	0	0	0	0
Maize new seed variety		0	4,069	0	0	0	0	0	0	0	0	0
Canal rehabilitation		0	39,600	0	0	0	0	0	0	0	0	0
<b>Sub-total investment costs</b>		<b>0</b>	<b>45,481</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Operating inputs</b>												
Clover seeds		101	0	0	0	0	0	0	0	0	0	0
Wheat seeds		367	0	0	0	0	0	0	0	0	0	0
Maize seeds		2,156	0	0	0	0	0	0	0	0	0	0
Onion seeds		0	0	0	0	0	0	0	0	0	0	0
Tomato seeds		0	0	0	0	0	0	0	0	0	0	0
Fava beans seeds		0	0	0	0	0	0	0	0	0	0	0
Clover new seed variety		0	0	223	223	223	223	223	223	223	223	223
Wheat new seed variety		0	0	1,589	1,589	1,589	1,589	1,589	1,589	1,589	1,589	1,589
Maize new seed variety		0	0	4,069	4,069	4,069	4,069	4,069	4,069	4,069	4,069	4,069
Manure		943	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227
Bags		2,145	2,566	2,708	2,882	2,882	2,913	2,913	2,913	2,944	2,944	2,944
<b>Inorganic Fertilizer:</b>												
TSP		316	352	391	411	411	411	411	411	411	411	411
Ammonium sulphate		46	52	57	60	60	60	60	60	60	60	60
Calcium carbide		0	0	0	0	0	0	0	0	0	0	0
Potassium chloride		24	27	30	31	31	31	31	31	31	31	31
KCL		0	0	0	0	0	0	0	0	0	0	0
Superphosphate 18% P2O5		100	111	124	130	130	130	130	130	130	130	130
Urea		230	256	284	299	299	299	299	299	299	299	299
Basal Fertilizers (NPK, DAP, CAN)		1,292	1,436	1,596	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
<b>Chemicals:</b>												
Insecticides		30	33	37	38	38	38	38	38	38	38	38
Herbicides		68	76	84	89	89	89	89	89	89	89	89
Tools		145	162	180	189	189	189	189	189	189	189	189
Electricity		0	0	0	0	0	0	0	0	0	0	0
Diesel		332	369	410	432	432	432	432	432	432	432	432
Water		0	0	0	0	0	0	0	0	0	0	0
Mechanical Plowing		630	701	778	819	819	819	819	819	819	819	819
Transport		766	852	946	996	996	996	996	996	996	996	996
<b>Sub-total operating costs</b>		<b>9,693</b>	<b>8,217</b>	<b>14,732</b>	<b>15,164</b>	<b>15,164</b>	<b>15,195</b>	<b>15,195</b>	<b>15,195</b>	<b>15,226</b>	<b>15,226</b>	<b>15,226</b>
<b>Labour costs</b>												
Skilled labour costs		0	0	0	0	0	0	0	0	0	0	0
Family labour costs		6,191	6,881	7,646	8,048	8,048	8,048	8,048	8,048	8,048	8,048	8,048
<b>Sub-total labour costs</b>		<b>6,191</b>	<b>6,881</b>	<b>7,646</b>	<b>8,048</b>	<b>8,048</b>	<b>8,048</b>	<b>8,048</b>	<b>8,048</b>	<b>8,048</b>	<b>8,048</b>	<b>8,048</b>
<b>Total production costs</b>		<b>15,884</b>	<b>60,579</b>	<b>22,378</b>	<b>23,213</b>	<b>23,213</b>	<b>23,244</b>	<b>23,244</b>	<b>23,244</b>	<b>23,275</b>	<b>23,275</b>	<b>23,275</b>
<b>Gross Income (before labour costs)</b>		<b>34,804</b>	<b>-479</b>	<b>41,444</b>	<b>44,611</b>	<b>44,611</b>	<b>45,223</b>	<b>45,223</b>	<b>45,223</b>	<b>45,834</b>	<b>45,834</b>	<b>45,834</b>
Taxes on income		5,221	0	6,217	6,692	6,692	9,045	9,045	9,045	9,167	9,167	9,167
<b>After-tax cash flow (before labour costs)</b>		<b>29,584</b>	<b>-479</b>	<b>35,227</b>	<b>37,919</b>	<b>37,919</b>	<b>36,178</b>	<b>36,178</b>	<b>36,178</b>	<b>36,667</b>	<b>36,667</b>	<b>36,667</b>
<b>After-tax cash flow (after labour costs)</b>		<b>28,613</b>	<b>-7,360</b>	<b>33,798</b>	<b>36,563</b>	<b>36,563</b>	<b>37,174</b>	<b>37,174</b>	<b>37,174</b>	<b>37,786</b>	<b>37,786</b>	<b>37,786</b>
<b>Net Incremental Benefits (NIB)</b>			<b>-35,973</b>	<b>5,185</b>	<b>7,949</b>	<b>7,949</b>	<b>8,561</b>	<b>8,561</b>	<b>8,561</b>	<b>9,173</b>	<b>9,173</b>	<b>9,173</b>
<b>Cumulative cash flow</b>			<b>-7,360</b>	<b>26,438</b>	<b>63,001</b>	<b>99,563</b>	<b>136,738</b>	<b>173,912</b>	<b>211,087</b>	<b>248,873</b>	<b>286,659</b>	<b>324,445</b>
<b>Fraction row</b>			-	1.00	0.78	1.72	2.72	3.68	4.68	5.68	6.59	7.59

MAIN PROFITABILITY RESULTS (before financing)	
Return to family labour* (EGP/day)	421
*consider full development year family labour requirements	
Discount rate	12%
NPV (EGP) @ 0.12	5,758
IRR	16%
NPVb	79,976
NPVc	74,218
B/C ratio	1.08
Switching values Benefits	-7%
Switching values Costs	8%
Payback period (years)	1.00

**Figure A 17: Household model CAP-FI-HV (physical budget)**

YIELDS AND INPUTS			WITHOUT PROJECT										WITH PROJECT										
ITEMS	UNIT	PRICE (EGP)	WITHOUT PROJECT										WITH PROJECT										
			1	1	2	3	4	5	6	7	8	9	10										
<b>Croppin pattern and distribution</b>																							
Total land available to HHS	Feddan		3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	
Clover	Feddan		0.88	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Wheat	Feddan		1.03	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Maize	Feddan		0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
High value crop	Feddan		0.44	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Check line			2.85	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Ha : Feddan ratio	ha to feddan		0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Livestock	Head		0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Livestock model ratio	ratio		0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>Main production</b>																							
Clover	kg	3.0	17,546	11,700	12,350	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000
Wheat	kg	4.57	1,847	1,053	1,112	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
Maize	kg	3.8	1,011	1,170	1,235	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Onion	kg	4.0	1,801	3,604	3,794	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994
Tomato	kg	3.0	1,859	28,591	30,096	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680	31,680
Fava beans	kg	14	349	676	711	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749
<b>By-products</b>																							
Wheat straw	kg	0.8	923	527	556	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585
Maize (stalk)	kg	0.5	910	1,053	1,112	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
Fava beans straw	kg	1.4	174	695	734	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772
Post harvest losses	%		10%	8%	8%	7%	7%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
<b>Total Production</b>	kg		<b>23,778</b>	<b>45,143</b>	<b>47,563</b>	<b>50,610</b>	<b>50,610</b>	<b>51,154</b>	<b>51,154</b>	<b>51,154</b>	<b>51,154</b>	<b>51,154</b>	<b>51,699</b>										
<b>Investment inputs</b>																							
Clover new seed variety	kg	36	0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat new seed variety	kg	20	0	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize new seed variety	kg	45	0	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canal rehabilitation	per feddan	16,500	0	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Greenhouse building (4,200 m2)																							
Sit preparation and ground	per feddan	17,490	0	1																			
Wood and kits	per feddan	31,482	0	1																			
Assembly and installation	per feddan	26,235	0	1																			
<b>Equipment</b>																							
Fans, Fertilization system, harvesting eq	per feddan	57,717	0	1																			
Drip Irrigation System	per feddan	61,215	0	1																			
Polyethylene sheets & insect-proof nets	per feddan	26,235	0	1																			
<b>Operating inputs</b>																							
Clover seeds	kg	21	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat seeds	kg	6	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize seeds	kg	31	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Onion seeds	kg	18	0.43	0.71	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Tomato seeds	kg	45	12.2	20.2	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Fava beans seeds	kg	19	10	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
Clover new seed variety	kg	36	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Wheat new seed variety	kg	20	-	-	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Maize new seed variety	kg	45	-	-	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Manure	ton	24	56	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
Bags	no.	7	476	903	951	1,012	1,012	1,012	1,012	1,023	1,023	1,023	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034
<b>Inorganic Fertilizer:</b>																							
TSP	kg	9	54	60	67	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Ammonium sulphate	kg	2	28	31	34	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Calcium carbide	kg	3	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium chloride	kg	5	7	8	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
KCL	kg	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Superphosphate 18% P2O5	kg	2	66	74	82	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
Urea	kg	3	107	119	132	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139
Basal Fertilizers (NPK, DAP, CAN)	kg	16	108	120	133	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
<b>Chemicals:</b>																							
Insecticides	kg	81	1	0.90	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Herbicides	lt	146	1	0.97	1.08	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
<b>Tools</b>																							
Electricity	kWh	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diesel	lt	7	57	63	70	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
Water	m3	0	4,285	4,763	5,292	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571	5,571
Mechanical Plowing	ha	650	1.19	1.3	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Transport	per kg	0.1	23,778	45,143	47,563	50,610	50,610	51,154	51,154	51,154	51,154	51,154	51,699	51,699	51,699	51,699	51,699	51,699	51,699	51,699	51,699	51,699	51,699
Land rent	per ha	18,571	-																				

**Figure A 18: Household model CAP-FI-HV (financial budget)**

FINANCIAL BUDGET (EGP)		WITHOUT PROJECT										WITH PROJECT									
ITEMS		1										1 2 3 4 5 6 7 8 9 10									
<b>Main production revenue</b>																					
Clover	52,638	35,100	37,050	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	39,000	
Wheat	8,435	4,809	5,076	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	5,343	
Maize	3,840	4,446	4,693	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	
Onion	7,205	14,417	15,176	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	15,974	
Tomato	5,578	85,774	90,288	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	95,040	
Fava beans	4,881	9,461	9,959	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	10,483	
<b>By-products</b>																					
Wheat straw	739	421	445	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468	
Maize (stalk)	455	527	556	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	
Fava beans straw	244	973	1,027	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	
Post harvest losses	6,611	3,624	3,826	3,524	3,524	3,020	3,020	3,020	3,020	3,020	3,020	2,517	2,517	2,517	2,517	2,517	2,517	2,517	2,517	2,517	
<b>Total revenue</b>	<b>77,404</b>	<b>152,303</b>	<b>160,443</b>	<b>169,391</b>	<b>169,391</b>	<b>169,391</b>	<b>169,391</b>	<b>169,391</b>	<b>169,391</b>	<b>169,391</b>	<b>169,391</b>	<b>169,391</b>									
<b>Investment input costs</b>																					
Clover new seed variety	0	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wheat new seed variety	0	672	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Maize new seed variety	0	1,890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Canal rehabilitation	0	51,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Greenhouse building (4,200 m2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Site preparation and ground	0	17,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wood and kits	0	31,482	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Assembly and installation	0	26,235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fans, Fertilization system, harvesting equipments	0	57,717	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Drip Irrigation System	0	61,215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Polyethylene sheets & insect-proof nets	0	26,235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Sub-total investment costs</b>	<b>0</b>	<b>274,237</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>										
<b>Operating inputs</b>																					
Clover seeds	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wheat seeds	414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Maize seeds	1,316	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Onion seeds	8	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
Tomato seeds	549	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	
Fava beans seeds	185	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	
Clover new seed variety	0	0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
Wheat new seed variety	0	0	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	
Maize new seed variety	0	0	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	
Manure	1,336	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	1,737	
Bags	3,329	6,320	6,659	7,085	7,085	7,162	7,162	7,162	7,162	7,162	7,162	7,238	7,238	7,238	7,238	7,238	7,238	7,238	7,238	7,238	
<b>Inorganic Fertilizer:</b>																					
TSP	465	517	574	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	
Ammonium sulphate	67	75	83	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	
Calcium carbide	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potassium chloride	37	41	46	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
KCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Superphosphate 18% P2O5	106	118	131	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	
Urea	268	298	331	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	
Basal Fertilizers (NPK, DAP, CAN)	1,746	1,940	2,156	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	
<b>Chemicals:</b>																					
Insecticides	66	73	81	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	
Herbicides	127	142	157	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	
Tools	179	199	221	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	
Electricity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diesel	388	432	480	505	505	505	505	505	505	505	505	505	505	505	505	505	505	505	505	505	
Water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mechanical Plowing	777	863	959	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	
Transport	1,189	2,257	2,378	2,531	2,531	2,558	2,558	2,558	2,558	2,558	2,558	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	
Land rent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Infrastructure O&M	0	0	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	11,019	
<b>Sub-total operating costs</b>	<b>12,739</b>	<b>17,195</b>	<b>31,907</b>	<b>32,761</b>	<b>32,761</b>	<b>32,864</b>	<b>32,864</b>	<b>32,864</b>	<b>32,864</b>	<b>32,864</b>	<b>32,864</b>	<b>32,968</b>	<b>32,968</b>	<b>32,968</b>	<b>32,968</b>	<b>32,968</b>	<b>32,968</b>	<b>32,968</b>	<b>32,968</b>	<b>32,968</b>	
<b>Labour costs</b>																					
Skilled labour costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Family labour costs	8,338	15,101	16,779	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	17,662	
<b>Sub-total labour costs</b>	<b>8,338</b>	<b>15,101</b>	<b>16,779</b>	<b>17,662</b>	<b>17,662</b>	<b>17,662</b>	<b>17,662</b>	<b>17,662</b>	<b>17,662</b>	<b>17,662</b>	<b>17,662</b>	<b>17,662</b>									
<b>Total production costs</b>	<b>21,077</b>	<b>306,533</b>	<b>48,686</b>	<b>50,423</b>	<b>50,423</b>	<b>50,526</b>	<b>50,526</b>	<b>50,526</b>	<b>50,526</b>	<b>50,526</b>	<b>50,526</b>	<b>50,630</b>	<b>50,630</b>	<b>50,630</b>	<b>50,630</b>	<b>50,630</b>	<b>50,630</b>	<b>50,630</b>	<b>50,630</b>	<b>50,630</b>	
<b>Gross Income (before labour costs)</b>	<b>6</b>																				



**Figure A 20: Tomato processing unit model (financial budget)**

FINANCIAL BUDGET	WITHOUT PROJECT											
	ITEMS	0	1	2	3	4	5	6	7	8	9	10
<b>Main production revenue</b>												
Tomato concentrate		0	5,928,000	7,113,600	8,299,200	9,484,800	15,600,000	15,600,000	15,600,000	15,600,000	15,600,000	15,600,000
	<i>Sales</i>	0	5,928,000	7,113,600	8,299,200	9,484,800	15,600,000	15,600,000	15,600,000	15,600,000	15,600,000	15,600,000
	<i>Selfconsumption</i>	0	0	0	0	0	0	0	0	0	0	0
Post harvest losses		0	592,800	640,224	663,936	663,936	936,000	780,000	780,000	780,000	780,000	780,000
<b>Total revenue</b>		0	5,335,200	6,473,376	7,635,264	8,820,864	14,664,000	14,820,000	14,820,000	14,820,000	14,820,000	14,820,000
<b>Investment input costs</b>												
Workshop		157,200	0	0	0	0	0	0	0	0	0	0
Production line		524,000	0	0	0	0	0	0	0	0	0	0
Furniture		20,000	0	0	0	0	0	0	0	0	0	0
Office vehicle		100,000	0	0	0	0	0	0	0	0	0	0
Office equipment		10,480	0	0	0	0	0	0	0	0	0	0
Land		140,000	0	0	0	0	0	0	0	0	0	0
Equipment spare part inventory		26,200	0	0	0	0	0	0	0	0	0	0
<b>Sub-total investment costs</b>		977,880	0	0	0	0	0	0	0	0	0	0
		59,265										
<b>Operating input costs</b>												
Tomato		0	3,900,000	4,680,000	5,460,000	6,240,000	7,800,000	7,800,000	7,800,000	7,800,000	7,800,000	7,800,000
Electricity (150 KWh / ton)		0	273,000	327,600	382,200	436,800	546,000	546,000	546,000	546,000	546,000	546,000
Gas (230 kWh / ton)		0	92,690	111,228	129,766	148,304	185,380	185,380	185,380	185,380	185,380	185,380
Water (200 m3 / ton)		0	806,000	967,200	1,128,400	1,289,600	1,612,000	1,612,000	1,612,000	1,612,000	1,612,000	1,612,000
Wastewater (90 m3 / ton)		0	362,700	435,240	507,780	580,320	725,400	725,400	725,400	725,400	725,400	725,400
Maintenance hygiene		0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
O&M building (5% of investment cost)		0	7,860	7,860	7,860	7,860	7,860	7,860	7,860	7,860	7,860	7,860
O&M machinery and equipment		0	32,724	32,724	32,724	32,724	32,724	32,724	32,724	32,724	32,724	32,724
O&M of new machinery and equipment		0	1,310	1,310	1,310	1,310	1,310	1,310	1,310	1,310	1,310	1,310
Packaging in aseptic bags (200 kg)		0	49,400	59,280	69,160	79,040	130,000	130,000	130,000	130,000	130,000	130,000
Tools/equipment		0	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
<b>Sub-total operating costs</b>		0	5,568,684	6,665,442	7,762,200	8,858,958	11,083,674	11,083,674	11,083,674	11,083,674	11,083,674	11,083,674
<b>Labour costs</b>												
Manager		0	37,200	37,200	37,200	37,200	37,200	37,200	37,200	37,200	37,200	37,200
Plant operators		0	38,400	38,400	38,400	38,400	38,400	38,400	38,400	38,400	38,400	38,400
Helpers		0	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000
Technician		0	24,912	24,912	24,912	24,912	24,912	24,912	24,912	24,912	24,912	24,912
Driver		0	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Guard		0	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
<b>Sub-total labour costs</b>		0	158,112	158,112	158,112	158,112	158,112	158,112	158,112	158,112	158,112	158,112
<b>Total production costs</b>		977,880	5,726,796	6,823,554	7,920,312	9,017,070	11,241,786	11,241,786	11,241,786	11,241,786	11,241,786	11,241,786
<b>Gross income (after labour costs)</b>		-977,880	-391,596	-350,178	-285,048	-196,206	3,422,214	3,578,214	3,578,214	3,578,214	3,578,214	3,578,214
Taxes		0	0	0	0	0	769,998	805,098	805,098	805,098	805,098	805,098
Social security contribution (24%)		0	37,947	37,947	37,947	37,947	37,947	37,947	37,947	37,947	37,947	37,947
<b>Net income (after labour costs)</b>		-977,880	-429,543	-388,125	-322,995	-234,153	2,614,269	2,735,169	2,735,169	2,735,169	2,735,169	2,735,169
<b>Net incremental income</b>		-977,880	-587,655	-546,237	-481,107	-392,265	2,456,157	2,577,057	2,577,057	2,577,057	2,577,057	2,577,057
	<i>Foregone income (WOP)</i>	158,112										
<b>Income (before labour costs)</b>		-977,880	-271,431	-230,013	-164,883	-76,041	2,772,381	2,893,281	2,893,281	2,893,281	2,893,281	2,893,281

<b>Return to family labour*</b>	<b>#DIV/0!</b>
*consider full development year family labour requirements	
Discount rate	12%
NPV (EGP) @ 0.12	4,135,160
IRR	33%
NPVb	58,705,457
NPVc	54,465,524
B/C ratio	1.08
Switching values Benefits	-7%
Switching values Costs	8%
Payback period (years)	4.10

**Figure A 21: Project economic costs (EGP '000)**

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt [STAR]

**Project Components by Year -- Base Costs**

Economic Costs (EGP '000)

	Base Cost							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	36,284	55,468	82,223	69,148	28,490	2,202	-	273,814
2. Micro enterprises development	22,216	144,242	152,479	136,271	125,520	63,114	55,449	699,290
<b>Subtotal</b>	<b>58,499</b>	<b>199,710</b>	<b>234,702</b>	<b>205,419</b>	<b>154,010</b>	<b>65,316</b>	<b>55,449</b>	<b>973,104</b>
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	14,724	88,592	928,924	977,104	457,877	101,612	-	2,568,833
2. Production related investments under business plans	33,517	66,253	139,227	332,823	314,269	223,659	82,627	1,192,376
<b>Subtotal</b>	<b>48,241</b>	<b>154,845</b>	<b>1,068,151</b>	<b>1,309,927</b>	<b>772,146</b>	<b>325,271</b>	<b>82,627</b>	<b>3,761,209</b>
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	29,173	14,432	12,902	12,302	12,302	12,302	6,051	99,464
2. M&E and Knowledge Management	3,109	2,057	2,363	2,057	2,057	2,363	4,080	18,084
<b>Subtotal</b>	<b>32,282</b>	<b>16,489</b>	<b>15,265</b>	<b>14,359</b>	<b>14,359</b>	<b>14,665</b>	<b>10,131</b>	<b>117,548</b>
<b>Investment costs for final aggregation</b>	<b>77,975</b>	<b>117,460</b>	<b>277,179</b>	<b>301,414</b>	<b>179,805</b>	<b>78,644</b>	<b>35,140</b>	<b>4,851,861</b>
Funds directly used in the models	58,064	247,617	1,031,988	1,219,340	751,758	322,132	113,067	
Funds directly used in the models	2,983	5,967	8,950	8,950	8,950	4,475	-	

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt [STAR]

**Expenditure Accounts by Years -- Base Costs**

Economic Costs (EGP '000)

	Base Cost							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>I. Investment Costs</b>								
A. Technical assistance and consultancies /a	47,915	40,869	143,588	129,732	56,822	8,658	9,753	437,337
B. Goods, Services and Inputs	31,664	89,438	163,873	329,327	298,278	213,618	76,955	1,203,153
C. Trainings, Workshops and Meetings /b	23,214	24,964	29,014	23,804	19,472	6,644	-	127,113
D. Civil Works	9,000	71,600	810,100	881,000	420,300	100,000	-	2,292,000
E. Grants and subsidies	10,191	128,250	155,620	150,520	130,320	62,610	55,449	692,960
<b>Total Investment Costs</b>	<b>121,985</b>	<b>355,121</b>	<b>1,302,195</b>	<b>1,514,383</b>	<b>925,192</b>	<b>391,530</b>	<b>142,156</b>	<b>4,752,563</b>
<b>II. Recurrent Costs</b>								
A. Salaries and Allowances	11,676	10,752	10,752	10,152	10,152	10,152	5,076	68,712
B. Operating costs /c	5,361	5,170	5,170	5,170	5,170	3,570	975	30,586
<b>Total Recurrent Costs</b>	<b>17,037</b>	<b>15,922</b>	<b>15,922</b>	<b>15,322</b>	<b>15,322</b>	<b>13,722</b>	<b>6,051</b>	<b>99,298</b>
<b>Total BASELINE COSTS</b>	<b>139,022</b>	<b>371,043</b>	<b>1,318,117</b>	<b>1,529,705</b>	<b>940,514</b>	<b>405,252</b>	<b>148,207</b>	<b>4,851,861</b>
<b>Recurrent costs for final aggregation</b>	<b>17,037</b>	<b>15,922</b>	<b>15,922</b>	<b>15,322</b>	<b>15,322</b>	<b>13,722</b>	<b>6,051</b>	

**Figure A 22: Calculation of conversion factors (1/2)**

IE	Urea	Financial	Economic
	Item	Value	
	1. Price FOB at port (USD per ton)	249	249
	2. Exchange rate	17	17
	3. Price FOB at port (EGP per ton)	4109	4207
	4. Export duty (0% of CIF)	0	0
	5. Value-Added Tax (0%)	0	0
	6. Handling (50 EGP per ton)	50	50
	7. Storage fee (1% of CIF and duties)	41	42
	8. Port fee (50% of the storage fee and handling fee)	46	46
	9. Transportation/handling/margins cost from port to whosale market (EGP per ton)	616	510
	10. Price at wholesale market	3356	3559
	11. Transportation/handling/margins cost from port to whosale market (EGP per ton)	616	510
	12. price at the farm gate (EGP per ton)	3972	4069
	13. price at the farm gate (EGP per kg)	3.97	4.07
	<b>conversion factor</b>	1.02	

IE	Potassium chloride	Financial	Economic
	Item	Value	
	1. Price FOB at port (USD per ton)	215	215
	2. Exchange rate	16.50	16.90
	3. Price FOB at port (EGP per ton)	3548	3632
	4. Export duty (0% of CIF)	0	0
	5. Value-Added Tax (0%)	0	0
	6. Handling (50 EGP per ton)	50	50
	7. Storage fee (1% of CIF and duties)	35	36
	8. Port fee (50% of the storage fee and handling fee)	43	43
	9. Transportation/handling/margins cost from port to whosale market (EGP per ton)	532	440
	10. Price at wholesale market	2887	3062
	11. Transportation/handling/margins cost from port to whosale market (EGP per ton)	532	440
	12. price at the farm gate (EGP per ton)	3419	3503
	13. price at the farm gate (EGP per kg)	3.42	3.50
	<b>conversion factor</b>	1.02	

IE	Rock phosphate	Financial	Economic
	Item	Value	
	1. Price FOB at port (USD per ton)	88	88
	2. Exchange rate	16.50	16.90
	3. Price FOB at port (EGP per ton)	1452	1487
	4. Export duty (0% of CIF)	0	0
	5. Value-Added Tax (0%)	0	0
	6. Handling (50 EGP per ton)	50	50
	7. Storage fee (1% of CIF and duties)	15	15
	8. Port fee (50% of the storage fee and handling fee)	32	32
	9. Transportation/handling/margins cost from port to whosale market (EGP per ton)	218	180
	10. Price at wholesale market	1137	1209
	whosale market (EGP per ton)	218	180
	12. price at the farm gate (EGP per ton)	1355	1389
	13. price at the farm gate (EGP per kg)	1.36	1.39
	<b>conversion factor</b>	1.03	

IE	DAP	Financial	Economic
	Item	Value	
	1. Price FOB at port (USD per ton)	393	393
	2. Exchange rate	16.50	16.90
	3. Price FOB at port (EGP per ton)	6485	6640
	4. Export duty (0% of CIF)	0	0
	5. Value-Added Tax (0%)	0	0
	6. Handling (50 EGP per ton)	50	50
	7. Storage fee (1% of CIF and duties)	65	66
	8. Port fee (50% of the storage fee and handling fee)	57	58
	9. Transportation/handling/margins cost from port to whosale market (EGP per ton)	973	805
	10. Price at wholesale market	5340	5660
	whosale market (EGP per ton)	973	805
	12. price at the farm gate (EGP per ton)	6312	6465
	13. price at the farm gate (EGP per kg)	6.31	6.47
	<b>conversion factor</b>	1.02	

IE	Triple super phosphate	Financial	Economic
	Item	Value	
	1. Price FOB at port (USD per ton)	346	346
	2. Exchange rate	17	17
	3. Price FOB at port (EGP per ton)	5709	5846
	4. Export duty (0% of CIF)	0	0
	5. Value-Added Tax (0%)	0	0
	6. Handling (50 EGP per ton)	50	50
	7. Storage fee (1% of CIF and duties)	57	58
	8. Port fee (50% of the storage fee and handling fee)	54	54
	9. Transportation/handling/margins cost from port to whosale market (EGP per ton)	856	709
	10. Price at wholesale market	4692	4974
	11. Transportation/handling/margins cost from port to whosale market (EGP per ton)	856	709
	12. price at the farm gate (EGP per ton)	5548	5683
	13. price at the farm gate (EGP per kg)	6	6
	<b>conversion factor</b>	1.02	

II	Milling machine	Financial	Economic
	Item	Value	
	1. CIF price al port (Cif: \$ per Unit)	20000	20000
	2. Exchange rate	17	17
	3. CIF price at port (CIF: EGP per unit)	330000	337900
	4. Import duty (5% of CIF)	16500	0
	5. Value-Added Tax (5%)	16500	0
	6. Handling (50 EGP per ton)	5000	5000
	7. Storage fee (1% of CIF and duties)	3630	3379
	8. Port fee (50% of the storage fee and handling fee)	4315	4190
	9. Transportation/handling/margins cost from port to whosale market (EGP per ton)	49500	40973
	10. Price at wholesale market	234555	284359
	11. Transportation cost from port to farm (EGP per ton)	49500	40973
	12. price at the farm gate (EGP per ton)	709500	716773
	13. price at the farm gate (EGP per kg)	710	717
	<b>conversion factor</b>	1.01	

IE	Gasoline	Financial	Economic
	Item	Value	
	1. Price FOB at port (USD per ton)	700	700
	2. Exchange rate	17	17
	3. Price FOB at port (EGP per ton)	11550	11827
	4. Import duty (5% of CIF)	578	0
	5. Value-Added Tax (10%)	1213	0
	6. Withholding tax (Pajak Penghasilan) 0.3%	36	0
	8. Handling (50 EGP per kg)	50000	50000
	9. Storage fee (1% of CIF and duties)	133	118
	10. Port fee (50% of the storage fee and handling fee)	25067	25059
	11. Transportation/handling/margins cost from port to whosale market (EGP per ton)	578	478
	12. Price at wholesale market	-66054	-63829
	13. Transportation/handling/margins cost from port to whosale market (EGP per ton)	58	48
	14. price at the farm gate (EGP per ton)	-65996	-63781
	15. price at the farm gate (BRL per lt)	-66.0	-63.8
	<b>conversion factor</b>	0.97	

IE	Diesel	Financial	Economic
	Item	Value	
	1. Price FOB at port (USD per ton)	615	615
	2. Exchange rate	17	17
	3. Price FOB at port (EGP per ton)	10148	10390
	4. Import duty (0% of CIF)	0	0
	5. Value-Added Tax (10%)	1015	0
	6. Withholding tax (Pajak Penghasilan) 0.3%	30	0
	8. Handling (50 EGP per kg)	50000	50000
	9. Storage fee (1% of CIF and duties)	112	104
	10. Port fee (50% of the storage fee and handling fee)	25056	25052
	11. Transportation/handling/margins cost from port to whosale market (EGP per ton)	507	420
	12. Price at wholesale market	-66573	-65185
	13. Transportation/handling/margins cost from port to whosale market (EGP per ton)	51	42
	14. price at the farm gate (EGP per ton)	-66522	-65143
	15. price at the farm gate (BRL per lt)	-66.5	-65.1
	<b>conversion factor</b>	0.98	

**Figure A 23: calculation of conversion factors (2/2)**

II	Herbicides	Financial	Economic	II	Fungicides	Financial	Economic
	Item	Value			Item	Value	
	1. Price CIF al port (USD per ton)	5000	5000		1. Price CIF al port (USD per ton)	900	900
	2. Exchange rate	16.50	16.90		2. Exchange rate	16.50	16.90
	3. Price CIFal port (EGP per ton)	82500	84475		3. Price CIFal port (EGP per ton)	14850	15206
	4. Import duty (5% of CIF)	4125	0		4. Import duty (5% of CIF)	743	0
	5. Value-Added Tax (14%)	12128	0		5. Value-Added Tax (14%)	2183	0
	8. Handling (50 EGP per kg)	50000	50000		8. Handling (50 EGP per kg)	50000	50000
	9. Storage fee (1% of CIF and duties)	988	845		9. Storage fee (1% of CIF and duties)	178	152
	10. Port fee (50 % of the storage fee and handling fee)	25494	25422		10. Port fee (50 % of the storage fee and handling fee)	25089	25076
	11. Transportation/handling/margins cost from port to whosale market (EGP per ton)	4125	3414		11. Transportation/handling/margins cost from port to whosale market (EGP per ton)	743	615
	12. Price at wholesale market	179359	164157		12. Price at wholesale market	93785	91048
	13. Transportation/handling/margins cost from port to whosale market (EGP per ton)	413	341		13. Transportation/handling/margins cost from port to whosale market (EGP per ton)	74	61
	14. price at the farm gate (EGP per ton)	179771	164498		14. price at the farm gate (EGP per ton)	93859	91110
	15. price at the farm gate (EGP per lt)	180	164		15. price at the farm gate (EGP per lt)	94	91
	<b>conversion factor</b>	0.92			<b>conversion factor</b>	0.97	
OIS	Maize	Financial	Economic	OIS	Wheat	Financial	Economic
	Item	Value			Item	Value	
	1. CIF Price at port (USD per ton)	158	158		1. CIF Price at port (USD per ton)	210	210
	2. Exchange rate	17	17		2. Exchange rate	17	17
	1. CIF Price at port (EGP per ton)	2602	2664		1. CIF Price at port (EGP per ton)	3465	3548
	4. Import duty (0% of CIF)	0	0		4. Import duty (0% of CIF)	0	0
	5. Value-Added Tax (14%)	364	0		5. Value-Added Tax (0%)	485	0
	6. Handling (50 EGP per kg)	50	51		6. Handling (50 EGP per kg)	50	51
	7. Storage fee (1% of CIF and duties)	30	27		7. Storage fee (1% of CIF and duties)	40	35
	8. Port fee (50 % of the storage fee and handling fee)	40	39		8. Port fee (50 % of the storage fee and handling fee)	45	43
	9. Transportation cost from port to wholesale market (EGP per ton)	390	323		9. Transportation cost from port to wholesale market (EGP per ton)	520	430
	10. Price at wholesale market (EGP)	3476	3103		10. Price at wholesale market (EGP)	4604	4107
	11. Transportation cost from port to farm (EGP per ton)	59	48		11. Transportation cost from port to farm (EGP per ton)	78	65
	12. price at the farm gate (EGP per ton)	3418	3055		12. price at the farm gate (EGP per ton)	4526	4043
	13. price at the farm gate (EGP per kg)	3	3		13. price at the farm gate (EGP per kg)	5	4
	<b>conversion factor</b>	0.89			<b>conversion factor</b>	0.89	
OEX	Wheat flour	Financial	Economic	OIS	Goat meat	Financial	Economic
	Item	Value			Item	Value	
	1. FOB Price at port (USD per ton)	206	206		1. CIF Price at port (USD per ton)	5939	5939
	2. Exchange rate	17	17		2. Exchange rate	17	17
	1. FOB Price at port (EGP per ton)	3399	3480		1. CIF Price at port (EGP per ton)	98000	100346
	4. Export duty (0% of CIF)	0	0		4. Import duty (0% of CIF)	0	0
	5. Value-Added Tax (0%)	0	0		5. Value-Added Tax (0%)	13720	0
	6. Handling (50 EGP per kg)	50	51		6. Handling (50 EGP per kg)	50	51
	7. Storage fee (1% of CIF and duties)	34	35		7. Storage fee (1% of CIF and duties)	1117	1003
	8. Port fee (50 % of the storage fee and handling fee)	42	43		8. Port fee (50 % of the storage fee and handling fee)	584	527
	9. Transportation cost from port to wholesale market (EGP per ton)	510	422		9. Transportation cost from port to wholesale market (EGP per ton)	14700	12168
	10. Price at wholesale market (EGP)	2763	2930		10. Price at wholesale market (EGP)	128171	114095
	11. Transportation cost from port to farm (EGP per ton)	76	63		11. Transportation cost from port to farm (EGP per ton)	2205	1825
	12. price at the farm gate (EGP per ton)	2687	2867		12. price at the farm gate (EGP per ton)	125966	112270
	13. price at the farm gate (EGP per kg)	3	3		13. price at the farm gate (EGP per kg)	126	112
	<b>conversion factor</b>	1.07			<b>conversion factor</b>	0.89	
OEX	Onion	Financial	Economic	OEX	Tomato	Financial	Economic
	Item	Value			Item	Value	
	1. FOB Price at port (USD per ton)	285	285		1. FOB Price at port (USD per ton)	90	90
	2. Exchange rate	17	17		2. Exchange rate	17	17
	1. FOB Price at port (EGP per ton)	4703	4815		1. FOB Price at port (EGP per ton)	1485	1521
	4. Export duty (0% of CIF)	0	0		4. Export duty (0% of CIF)	0	0
	5. Value-Added Tax (0%)	0	0		5. Value-Added Tax (0%)	0	0
	6. Handling (50 EGP per kg)	50	51		6. Handling (50 EGP per kg)	50	51
	7. Storage fee (1% of CIF and duties)	47	48		7. Storage fee (1% of CIF and duties)	15	15
	8. Port fee (50 % of the storage fee and handling fee)	49	49		8. Port fee (50 % of the storage fee and handling fee)	32	33
	9. Transportation cost from port to wholesale market (EGP per ton)	705	584		9. Transportation cost from port to wholesale market (EGP per ton)	223	184
	10. Price at wholesale market (EGP)	3852	4083		10. Price at wholesale market (EGP)	1165	1238
	11. Transportation cost from port to farm (EGP per ton)	106	88		11. Transportation cost from port to farm (EGP per ton)	33	28
	12. price at the farm gate (EGP per ton)	3746	3996		12. price at the farm gate (EGP per ton)	1132	1210
	13. price at the farm gate (EGP per kg)	4	4		13. price at the farm gate (EGP per kg)	1	1
	<b>conversion factor</b>	1.07			<b>conversion factor</b>	1.07	

**Figure A 24: derivation of Shadow Exchange Rate (EGP Million)**

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Total imports of G&S	M	195,000	259,400	346,000	329,300	320,800	338,500	407,200	434,500	483,000	529,400	539,200	1,017,000	1,303,100	596,967
Total exports of G&S	X	185,000	225,300	295,900	260,100	257,600	282,000	274,600	316,600	303,400	322,200	280,300	548,900	839,200	380,533
Average duties on imports	t	4.90%	3.94%	3.86%	4.10%	4.28%	3.97%	4.00%	4.00%	4.00%	3.96%	4.00%	4.00%	4.00%	
Import duties	Tm	9,554	10,233	13,361	13,496	13,733	13,455	16,288	17,380	19,320	20,955	21,568	40,680	52,124	23,945
Average taxes on exports	s	0.001%	0.010%	0.175%	0.177%	0.318%	0.103%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	
Export duties	Tx	2	22	519	461	819	289	360	415	397	422	367	719	1,099	453
Total international commerc	M+X	380,000	484,700	641,900	589,400	578,400	620,500	681,800	751,100	786,400	851,600	819,500	1,565,900	2,142,300	977,500
	M+Tm	204,554	269,633	359,361	342,796	334,533	351,955	423,488	451,880	502,320	550,355	560,768	1,057,680	1,355,224	620,911
	X-Tx	184,999	225,278	295,381	259,639	256,781	281,711	274,240	316,185	303,003	321,778	279,933	548,181	838,101	379,990
	SCF	0.975	0.979	0.980	0.978	0.978	0.979	0.977	0.978	0.977	0.976	0.975	0.975	0.977	0.977
	OER (EGP/USD)	5.73	5.64	5.43	5.54	5.62	5.93	6.06	6.87	7.00	7.50	9.00	17.90	17.70	
	SER	5.88	5.75	5.54	5.67	5.75	6.06	6.20	7.03	7.17	7.68	9.23	18.36	18.12	

Source: World Bank data retrieved on June 8th, 2019

## **Egypt**

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### **Sustainable Transformation for Agricultural Resilience in Upper Egypt Project Design Report**

#### **Annex 5: Social Environment and Climate Assessment (SECAP) Review Note**

Document Date: 29/10/2019  
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Near East, North Africa and Europe Division  
Programme Management Department



# **Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)**

## **Annex 5**

### **Social Environment and Climate Assessment (SECAP) Review Note**

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# 1. Introduction

IFAD undertook a concept note mission in March 2019 and a project design mission in June 2019 for the Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR) project. In Cairo, the mission met with the core stakeholders in the Ministry of Agriculture and Land Reclamation (MALR), Ministry of Investments and International Cooperation (MIIC), Ministry of Water Resources and Irrigation (MWRI), Egyptian Environmental Affairs Agency (EEAA), Ministry of Supply and Internal Trade, and other key government agencies as well as development partners. Extensive field visits were undertaken to the three governorates of Minya, Asyut and Sohag where the mission met farmers involved with IFAD financed projects (OFIDO and PRIME) as well as those supported by other donors.

The objective of the Review Note of the Social Environment and Climate Assessment Procedures (SECAP) is for the project to take into account social, environmental and climate change issues. The Review Note summarizes the development context, looks how the project might impact it with regards to IFAD's mainstreaming themes (gender, youth, nutrition, indigenous peoples, climate and environment) and makes specific recommendations how the project can mitigate risks and better include social and environmental concerns.

## 2. Situational Analysis and Potential Project Impacts

### A. Socio-economic and Poverty Assessment

#### *i. Overall poverty situation*

**Poverty:** Poverty in Egypt, as measured in monetary terms through the National Poverty Line, has been increasing over the past 15 years, from around 16.7 percent (or 9.9 million people) in 1996 to 21.6 percent in 2009 and 25.2 percent (21 million) in 2011. This suggests that economic growth, which was steady over the same period, has not resulted in an improvement in the lives of Egyptians. Poverty and food insecurity have risen by 20% between 2009 and 2015, with 27.8 percent of Egyptians (26 Million) living below the poverty line (CAPMAS).<sup>1</sup> Disparities in poverty follow geographic and gender lines: Rural Upper Egypt and Frontier Governorates experience higher levels of poverty than other areas, with women and children facing multi-dimensional poverty. When compared to urban areas in Egypt, the poverty rate in rural areas is 37 percent higher. The poverty rate is highest in Upper Egypt and specifically rural Upper Egypt (51.5 percent of population against the national average of 27.8 percent). Poverty in Upper Egypt is mainly structural, driven by lack of adequate public infrastructure, private capital accumulation, and low investment in human capital. Women are subject more

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<sup>1</sup> The official poverty measure is based on a household-specific poverty line that takes into account two key things: (1) the household composition and thus the household-specific caloric requirements; and (2) the regional variation in cost/calorie and non-food allowance. This methodology leads to several thousand poverty lines. In 2015, the average poverty line in Egypt was equivalent to 5,787 EGP per capita per year (roughly \$4 per person per day 2011 PPP). According to World Bank data, population below the international Poverty line (2015) set at 1,3 Million (US\$1.90 PPP) while the population below the lower middle-income poverty line (US\$3.20 PPP) at 16% of the total population (16 Million people) and 61.9% (58 Million) upper Middle-Income Poverty (US\$5.50 PPP).

than men to experience multi-dimensional poverty, with women head of households resulting as the most vulnerable (11 percent of rural households are women-headed).<sup>2</sup> The incidence of poverty is also widely variable across governorates, the prevalence of income poverty is critically high in Asyut (66 percent), Sohag (65.8 percent) and Minya (56.7 percent) in Upper Egypt <sup>3</sup>.

## *ii. Gender*

**Gender Equality and Women's Empowerment:** Egypt scored 0.449 on the UNDP's 2017 Gender Inequality Index and ranking it 101 out of 160 countries in the 2017 index. In Egypt, 14.9 percent of parliamentary seats are held by women, and 58.2 percent of adult women have reached at least a secondary level of education compared to 70.7 percent of their male counterparts. For every 100,000 live births, 33 women die from pregnancy related causes; and the adolescent birth rate is 50.0 births per 1,000 women of ages 15-19. Female participation in the labour market is 22.2 percent compared to 73.7 for men<sup>4</sup>. According to the Global Gender Gap Report 2018, Egypt ranked 135 out of 149 countries (score 0.614).<sup>5</sup>

**Women access to labour market:** Gender differentials in the level of labour participation and unemployment are clearly noticed. Labor force in Egypt was estimated at 28.9 million in 2016, with women representing 24.2 percent of the total labor force. Labor force residing in rural areas is higher than that in urban areas (16.6 million and 12.3 million, respectively). According to the Egypt Demographic and Health Survey (EHDS 2014), the sector where women were employed in Rural Upper Egypt is: Professional and technical 37.3%; clerical 5.4%, service 20.5%, skilled manual 7.2%, unskilled manual 0.6 %and Agriculture 26%. Overall unemployment stands at 12 percent, but is particularly higher among women at 23.1 percent. Male unemployment was only 8.2 percent while female unemployment was about three times that level (23.1%).<sup>6</sup>

Regional disparities in women's illiteracy, age at marriage, unemployment, fertility and health still persist, with Upper Egypt lagging behind. Thee most recent CAPMAS labor survey (2016) and Survey of Young People in Egypt (SYPE)<sup>7</sup> point to the persistently low female labor participation rates due to multiple factors including social norms and values, burdens of marital responsibilities, lack of childcare facilities, poor transportation, sexual harassment and a mismatch between labor market demand and the outputs of the education system. Unemployment rate for women by Governorates targeted by STAR show the following percentage: Minya 24%, Asyut 41% and Sohag 37%.

**Rural women access to education:** According to the 2017 census (CAPMAS), 30.8 percent of Egyptian females over ten years of age (10.6 million females) are illiterate compared to 18.5 of men. This percentage is higher in rural areas (38.8 percent) and even higher in Upper Egypt where 82 percent of men have ever attended school, compared with 66 percent of women. Educational attainment is associated with wealth

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<sup>2</sup> CAPMAS, Income expenditure and Consumption Survey, 2015

<sup>3</sup> UNFPA, Localizing the targets of the Sustainable Development Goals on Governorate Level (2018) based on EHDS 2014.

<sup>4</sup> UNDP, Human Development Report, 2017

<sup>5</sup> WEF, The global gender Gap report, 2018

<sup>6</sup> CAPMAS, Egypt Demographic and Health Survey (EDHS), 2014

<sup>7</sup> Population Council, Panel survey of young people in Egypt (SYPE) Generating Evidence for Policy, Programs, and Research, 2014

index, with the largest differentials between males and females observed in the lowest two wealth quintiles. The details percentage in the target area show that in women literacy rate is less than 50 percent having Minya with 45 percent, followed by Assuyt 41 percent and Sohag 41 percent.

**Women in the agriculture sector:** Women have always played a critical role in Egyptian agriculture, but their contribution has remained invisible. At household level men and women have different roles and responsibilities on farm: While men carry out the land preparation, planting, weeding, irrigation, and pest control, women are mostly engaged in animal husbandry (95% in Upper Egypt), fattening small ruminants, and generate additional income from milk, cheese, butter, eggs and poultry. The products are usually used for consumption with a minimal amount sold in the village market. In upper Egypt the differences are marked by limited mobility of women, performing their activities in the homestead. When women performed agriculture and farming-related activities on the land (very rare in rural Upper Egypt but more common in Lower rural Egypt) it is mostly on family owned land as unpaid labour. Women are mostly engaged in post production, forming the majority (75 per cent) of the work force involved in harvesting, handling, sorting and packing processes within the post-harvest activities.

According to EDHS 2014, overall women engaged in agriculture sector account for a total of 16 percent of which 10 percent are women head of households. In Rural Upper Egypt they account for 26 percent and majority of them have no education (48 percent) or some primary (38 percent). Furthermore, 63 percent belong to the lowest wealth quintile and 28 percent to the second lowest. Data reveal that 55 percent women farmers did not received any payment for the agriculture labour, against 34% percent paid in cash and 7 percent paid in cash and in kind. Data report that 53.5 were employed by family members, 33.8 by non family members and only 12.7 were self-employed in agriculture. Women working all year in agriculture account for 56 percent, seasonal 38 percent and only 5.9 percent provide occasional labour. Only 3.9 percent of women own land.

**Digital Divide:** Data from CAMPAS 2016, show that reducing the digital divide is occurring for both sexes in urban and in rural area. Digital literacy is higher among males in urban and rural areas; however, bridging the gap is faster in urban areas. The gap in using computers in urban areas is 34 percent among females compared to 45 percent male. The pace is slower in rural areas where the gap is 37% women and 45 % men. The gap in digital literacy is non-existent among among youth below 25 years of age but is larger with regard to married women (age 15-49) with only 14% surveyed having used computer, 8% having used internet and 9% social media.

**Women access to finance:** Women's access to finance is very limited in Egypt. Women account for only 10 to 25 percent of bank borrowers, and the majority of them are microfinance clients. In fact, only 20 percent of women entrepreneurs rely on commercial banks for credit. On the financial inclusion front, the latest FINDEX (2017) revealed that inequality remains an obstacle and women are disproportionately excluded from the formal financial system, although there is considerable room for growth: formal account ownership among women has more than tripled between 2011 and 2017 (from 7 to 27 percent). However, it is still below the rate among men .(percent in 2017 39) The current environment holds huge potential for women's financial inclusion in Egypt. Egypt's National Women's Empowerment Strategy and its accompanying pillar on Women's

Economic Empowerment list women's access to economic resources, through increased access to financial services, as an important objective<sup>8</sup>.

### *iii. Youth*

**Youth:** Egypt is the most populous Arab country, with an estimated population of 98.4 million (2018, World Bank). The population is currently growing at 2.0% per year (2018), producing a youth bulge with attendant problems such as a rapidly intensifying need for education, jobs, housing, health care services and so on. The percentage of youth (18-29 years) out of total population is calculated at 21% (CAPMAS,2015) corresponding to 21.7 million people.

**Youth Unemployment:** The unemployment rate for the young is currently 15.7 per cent – 23.5 per cent for young men and 50.59 per cent for young women according to ILO Report Labour Market Transitions of Young Women and Men in Egypt (2014). This statistic refers to the proportion of unemployed youth aged 15-29 to those in the workforce (both employed and unemployed) from the same age group. First, unemployed youth are primarily from the educated. Almost one-half of unemployed young people have completed university-level education or above (44.5 per cent of the unemployed). The second largest group of unemployed are technical vocational education and training (TVET) graduates (38.4 of the unemployed). The youth unemployment rate increases with each additional level of educational attainment; tertiary-level graduates have the highest rate at 34.0 per cent, compared to only 2.4 per cent among youth with less than primary-level education.

**Youth challenges for employment and self-employment opportunities:** There are a number of commonly identified challenges facing men and women youth in entering the labor market and contributing to increasing the unemployment rate. First, (i) the limited skill base of unemployed youth can be related to problems in the education systems and its inability to prepare its graduates with the relevant skills needed in the labor market or early school drop-out. Access to soft and portable skills, such as the ability to communicate effectively, have been identified as a key challenge to these new entrants to the labor market. Second, (ii) the limited access to labor market information about employment opportunities, particularly for youth in poor and remote areas is also another key challenge. Young educated youth in remote rural areas face this access to information problem and are hence unable to apply to available vacancies elsewhere. Third, (iii) the limited access to finance for entrepreneurial support is a key challenge and inhibits the entrepreneurship potentials for young people. Fourth, (iv) the lack of employment opportunities challenge is also more prevalent in remote and poor areas, particularly for educated rural youth. This group is faced with contracting employment opportunities in agriculture and the mismatch of their education to their rural settings.

### *iv. Nutrition*

**Nutrition:** According to the 2018 Global Hunger Index, Egypt suffers from a moderate level of hunger, ranking 61 of 119 countries. Affordability, food quality and food safety remain the most pressing challenges as Egypt continues to rely on global markets for more than half of its staples.

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<sup>8</sup> Integrating gender and Women financial inclusion into the central bank of Egypt (CBE) framework, 2018

Malnutrition is a growing public health concern, with the double burden of undernutrition, including high rates of stunting and micronutrient deficiencies, and overweight and obesity. Because of poor hygiene education and lack of positive food consumption awareness, the burden of malnutrition among children aged between 6 months and 2 years, adolescents and women of reproductive age continues to increase.

According to the Nutrition Agenda for Action (2017)<sup>9</sup> based on national statistics data (EDHS 2014) chronic undernutrition, “stunting”, for children under five remains at 21%. Trends in child wasting (weight-for-height) and underweight (weight-for-age), between 2000 and 2014, have shown an increase from three to eight percent and from four to six percent, respectively. The level of severe acute undernutrition (severe wasting) stands at 3.8 percent. Looking at residential categories, the proportion underweight was higher in Upper Egypt with stunted children, at 39 percent, compared with a national average.

Anaemia in women of child-bearing age (15-49 years) is high at 25 percent; overweight in children is 15 percent (2014); exclusive breast feeding (EBF) is rapidly declining instead of improving, where EBF rates at 4-5 months is only 13 percent; acute malnutrition is increasing and stands at 8 percent (2014) with half of those children classified as severe acute malnutrition. Anaemia in children 6-59 months is 27 percent with significant variations among regions: higher in rural relative to urban areas (29 and 23 percent respectively), peaking among children in the three Frontier Governorates (Matrouh, Red Sea, New Valley) and in rural Upper Egypt (45 and 30 percent, respectively).

There is a strong correlation between poverty and poor dietary diversity, with 56.2 percent of the population in rural Upper Egypt, Egypt’s poorest region, having a poor dietary diversity. Rising poverty has resulted in increasing dependence on cheaper, calorie-dense foods, including subsidized commodities, all of which have a correlation with obesity. Compounded by high food prices, changing lifestyles, and poor nutritional awareness, obesity in Egypt is on the rise, with an estimated 48 percent of rural women older than 15 being obese (55 percent in the highest quintile and 44 percent women belonging to the lowest quintile).

## **B. Environment and Climate Context, Trends and Implications**

### ***i. Environmental assessment***

**Water.** The Nile River – which is the longest river in the world at 6,741 km – is the main source of water providing 72.7% of Egypt's total 64.4 billion m<sup>3</sup> water resources. Egypt's share of the Nile is currently 55.5 billion m<sup>3</sup> governed by several colonial and post-colonial conventions and treaties (Ministry of Environment, 2017).

The rest of Egypt's water resources for the year 2014-2015 are from recycling agricultural wastewater drainage (15.51%), groundwater (9.03%), wastewater treatment (1.7%) and rainfall (1.18%). With 64.4 billion m<sup>3</sup>, Egypt suffers from water scarcity and is 13.4 billion m<sup>3</sup> short from meeting its current water demands that add up to 77.8 billion m<sup>3</sup> (Ministry of Environment, 2017). This gap is- of course- being widened by the country's increase in population which is currently at a high rate. Agriculture is

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<sup>9</sup> UNICEF, Nutrition Agenda for Action, 2017

the top sector in terms of water demand with 63.25 billion m<sup>3</sup> followed by household usage with 10.55 billion m<sup>3</sup> and finally industrial usage with 1.5 billion m<sup>3</sup>. This in addition to 2.5 billion m<sup>3</sup> that are lost in evaporation (Ministry of Environment, 2017).

The Nile river faces pollution challenges mainly due to waste disposal coming from industrial, agricultural and sanitation drainage that amount to 18.992 billion m<sup>3</sup>/year . Agriculture drainage networks have the biggest share with 72 drains disposing water into the Nile containing large amounts of agrochemicals in addition to the direct waste coming from rural villages with no sanitation services. However, the levels of Dissolved Oxygen (DO), Chemical Oxygen Demand (COD) and Biochemical Oxygen Demand (BOD) for 2016 all came within safe limits for the project target governorates except for the COD in Minya where it was higher than the 10 ppm threshold (Ministry of Environment, 2017).

The issue of water salinity also remains a concern for Egypt. Drainage return flows to the Nile increase the salinity of the water from 250 ppm (mg/l) at Aswan to 2,700 ppm at the delta barrages (Ministry of Environment, 2016), mostly as a result of the use of chemical fertilizers that increase salinity. Although Total Dissolved Salts (TDS) for Nile water is within normal ranges for the three target governorates (CAPMAS, 2018a), meetings with farmers in some areas in Asyut and Sohag confirmed that groundwater has showed high level of salinity in recent years. This consequently increased soil salinity and required more use of surface water to clean the soil.

**Land.** Egypt's total cultivated land was 9.1 million feddans in 2016 (CAPMAS, 2018b). Although since 2001 the area of old lands dropped from 6.40 to 6.15 million feddans, the new lands reclaimed almost doubled from 1.54 to 2.95 million feddans to increase the total agricultural land area (CAPMAS, 2018b). However, the per capita share of agricultural land has declined from 0.13 feddan/capita in 1995 to 0.1 feddan/capita in 2015 due to the increase in population (Ministry of Environment, 2017). According to the population census of 2017, this figure should be around 0.9 for 2018. Cultivated lands in Upper Egypt are currently at 1.33 million feddans (Ministry of Environment, 2017) representing around 14.6% of the total agricultural land in Egypt.

One of the main challenges facing agricultural land resources in Egypt is encroachment for urban development and infrastructure. In 2017, Egypt has already lost 0.4 million feddans of its agricultural land since 1983. Around 45% of this area has been lost due to illegal violations on land, while the rest was for public services and legal urban expansion. The rate of agricultural land loss due to violations has increased more than 4 times after the 2011 revolution to reach 13,100 feddans/year (Ministry of Environment, 2017).

Another challenge for land resources is soil salinity and pollution. Studies show that around 25-30% of Egyptian soil suffer from high salinity (Ministry of Environment, 2017). The increase in temperature that causes groundwater containing high levels of fertilizers and pesticides coupled with irrigation with agriculture drainage water increase the soil salinity (Ministry of Environment, 2017). These factors coincide with the reasons brought up by farmers and agriculture directorate experts in some parts of Asyut and Sohag suffering from soil salinity. However, soil salinity is much more evident in the Nile Delta where seawater intrusion is a third factor that contributes to this problem. Soil pollution is mainly attributed to excessive use of fertilizers, pesticides and the low quality of drainage water.

In 2016, organic agriculture in Egypt represented 2.8% of total agricultural land compared to 0.1% in 2000. Minya and Sohag are among the top 10 ranked governorates with organic agriculture representing 3.8% and 3% of total agricultural land respectively. Only 1.3% of Asyut's agricultural land is organic (CIHEAM-IAMM, 2019). Although there is a big potential for promoting organic agriculture in upper Egypt, a number of challenges remain. Water scarcity, weak extension services, land fragmentation as well as the high cost of initial investment are among the main challenges facing farmers who are willing to move towards organic agriculture (CIHEAM-IAMM, 2019).

**Air Pollution.** Air quality is a major concern in Egypt especially in urban areas and areas near industrial zones. While levels of Sulphur dioxide and Lead are within normal range across the country, the PM<sub>10</sub> levels are much higher than the 70 microgram/m<sup>3</sup> quality threshold adopted by the Ministry of Health, with 329, 304 and 299 microgram/m<sup>3</sup> in Minya, Asyut and Sohag respectively. Same goes for the Total Suspended Particles (TSP) where levels are much higher than the 90 microgram/m<sup>3</sup> quality threshold adopted by the Ministry of Health with 667, 397 and 556 microgram/m<sup>3</sup> in Minya, Asyut and Sohag respectively (CAPMAS, 2018a).

**Waste.** Egypt has to face a number of challenges in waste management. The increasing population, lack of society's awareness, changes in production and consumption patterns and lack of financial and institutional capacities are all obstacles crippling the Ministry of Environment's efforts towards sound waste management. Currently, only 12% of Egypt's solid waste is being recycled (Ministry of Environment, 2017). However, the percentage might be actually higher due to informal recycling that is not accounted for in official statistics.

It is worth mentioning that agricultural waste has the biggest waste share with 31 million tonnes/year representing 34.2% in the total waste produced in Egypt. The second biggest share is the waste produced from cleaning canals and drainage systems with 25 million tonnes/year representing 27.5%. Solid municipal waste is third with 21 million tonnes/year representing 23.1% (Ministry of Environment, 2017).

At the governorate level, Cairo produces the highest amount of solid municipal waste with 5.48 million tonnes/year representing one quarter of the country's total solid municipal waste produced. Minya, Asyut and Sohag produce 0.53, 0.26 and 0.41 million tonnes/year representing 2.4%, 1.2% and 1.9% respectively (Ministry of Environment, 2017).

## *ii. Climate trends and impacts*

### **Historical Data Analysis**

Generally, there has been an increase in annual temperature in Egypt of 2.1°C with most of the increase- 3.6°C- taking place in winter and increase of 1.8°C, 1.9°C and 1.1°C for spring, fall and summer respectively. Extreme temperature indices show an increase in both daily maximum and minimum temperature. Since 1990, all the years have been warmer than the average (Ministry of Environment, 2016). Precipitation has declined by an average of 7% between 1975 and 2005 (Ministry of Environment, 2016).

Analysis of historical climate data shows that for the 1901-2017 period average maximum temperature has increased between May and October by 0.95%<sup>10</sup>, 1% and 0.93% for Asyut, Minya and Sohag respectively. While for the same period of time, average maximum temperature between November and April has declined by 0.64%, 0.61% and 0.72% for Asyut, Minya and Sohag respectively. The three governorates show a similar trend for the period 1901-2017 with regards to monthly mean temperature. There has been an increase in the monthly mean temperature between March and August. On the other hand, there has been a decrease in the monthly mean temperature between September and November; and January and February. However, there has been an increase in the trend of the monthly mean temperature during December. Detailed analysis is in Annex 5.2.

Although there might be variance across the different data sources, however temperature increase in summer is common among all of them. This coincides with the farmer's own observations with regards to heat and the subsequent irrigation demand for their crops.

In terms of heat waves, analysis of historical data shows that the frequency of heat waves has increased during over the past 50 years while it also suggests that the length of the heat waves have also increased over the past 20 years. Detailed analysis is in Annex 5.2.

### **Climate Trends and Projections**

The impact on precipitation is not significant in the project areas since the volume of rainfall is already negligible (Minya receives 9.15 mm/year, Asyut receives 6 mm/year and Sohag receives 3.25 mm/year<sup>11</sup>). However, there will be a significant change in temperature.

Annex 5.2 shows an analysis of climate projections for the periods 2020-2039 and 2080-2099 compared to 1986-2005 under the IPCC's 4.5 RCP and 8.5 RCP scenarios. Data is derived from World Bank's Climate Change Portal using the "ensemble" model.

Under the RCP 4.5 scenario, projections show that the monthly temperature will increase across the country and the median increase is almost doubled for every month as we go from the 2020-2039 period to the 2080-2099 period. The highest increase will be in August reaching around 3°C by 2080-2099. While for the RCP 8.5 scenario, the increase will be much higher with no less than 1°C for 2020-2039. On the longer term, the increase will surpass 4°C reaching a maximum median of 6°C in August. The projections' trend for the three target governorates shows almost no variance compared to the overall trend and to each other.

This coincides with the historical data analysis that shows the increasing trend in the three governorates between May and October since 1901. However, it shows that- unlike the historical trend- temperature will also increase between November and April but at a lower rate.

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<sup>10</sup> This percentage represents the trend slope. The percentage increase represents the average rate of increase per year in degrees Celsius. For example, 0.95% slope increase is equal to an 0.0095°C/year average rate of increase.

<sup>11</sup> Derived from historical data using CoMon tool

The frequency of occurrence of heat waves is most likely to increase in the future. Under the RCP 4.5 scenario, the annual probability of heat waves for Egypt increases with time starting with a median value of 0.03 for the 2020-2039 period until it reaches 0.12 for the 2080-2099 period. The probability almost doubles with the RCP 8.5 scenario starting with a median value of 0.05 for the 2020-2039 period until it reaches around 0.27 for the 2080-2099 period. This index shows the daily probability of observing a heat wave, which is a 3 or more-day sequence where the daily temperature is above the long-term 95<sup>th</sup> percentile of daily mean temperature. Although this model uses a different definition – adopted by the World Bank Climate Change Knowledge Portal- for heat waves than the WMO's adopted for the historical analysis, it still shows the future trend in probability of number of hot days. However, it still does not show the exact frequency or intensity of such heat waves.

Findings of the consultation meetings with farmers who already observed this trend confirm that heat waves have become more frequent and tend to occur for longer days.

### Impacts on Water Resources

**Water demand.** The projected increase in temperature induced by climate change will increase water demands for agriculture and municipal use (Ministry of Water Resources and Irrigation, 2013). This is mainly due to the increase in the rate of evaporation (Ministry of Environment, 2016). Table 1 below shows the average impact of climate change on water demand until the year 2100<sup>12</sup>

Table 1 Projected averaged direct & indirect impacts of climate change on water demands (Ministry of Water Resources and Irrigation, 2013)

year	2010	2025	2050	2075	2100
Population (million)	79	104	146	191	237
Mean air Temperature increase (°C)		1.0	1.7	2.5	3.5
ETo and Irrigation Water Requirements %	--	2%	4.5%	8 %	12%
Municipal Water (million m <sup>3</sup> /yr)	9.0	9.6	12.55	14.75	17.2
Industrial Water (million m <sup>3</sup> /yr)	2.0	2.20	3.4	4.0	4.9

**Nile flow.** Regarding future impacts of climate change on the Nile flows, there is a large variation between the general circulation models (GCMs) about whether the Blue Nile- that contributes more than 75% of the Nile flows- will get wetter or drier. Around two thirds of the GCMs project an increase in precipitation in East Africa, while the rest expect reduced precipitation (Ministry of Water Resources and Irrigation, 2013). Table 2 below shows the variation between the different models used for the Blue Nile.

<sup>12</sup> ETo = Evapotranspiration

Table 2 Model-simulated flow of the Blue Nile at Diem (Ministry of Water Resources and Irrigation, 2013)

GCM	1961–1990	2081–2100	% Change
BCM	48.96	37.34	-24
CGCM	50.57	20.70	-59
CGCM63	50.82	20.38	-60
CNRM	52.24	44.80	-14
CSIRO30	47.99	34.96	-27
CSIRO35	46.66	34.96	-25
CM20	46.45	28.85	-38
CM21	47.46	34.31	-28
AOM	48.44	49.33	2
GOAL	47.65	50.68	7
INMCM	42.82	56.45	32
MIROCH	47.74	47.74	0
MIROCM	46.93	68.25	45
ECHAM	44.18	35.74	-19
MRI	50.30	33.00	-34
CCSM	32.84	40.15	22
PCM	48.60	35.38	-27
Mean	47.10	39.82	-15

On the other hand, other sources show a change of between -19% to +29% for the Blue Nile, -8% to +10% for the White Nile and -13% to +36% for the Main Nile.

These model variations add to the existing uncertainties to the expectations for Egypt's share in Nile water. However, such uncertainty should not stop policymakers from re-evaluating the current water policies. Since the associated potential impacts would be severe and that any decrease in the total supply of water, coupled with an expected increase in consumption due to continuing high population growth rates and rising incomes and living standards, would have drastic impacts, therefore adaptation in the water sector becomes a top priority (Ministry of Water Resources and Irrigation, 2013). Table 3 below shows a summary of the water budget trends in the drying and wetting scenarios.

Table 3 Summary of assumptions used in developing the water budget trends (Ministry of Water Resources and Irrigation, 2013)

	2025	2050	2075	2100
Estimated % change in Nile Flows Drying Scenario	-6%	-15%	-20%	-31%
Estimated % change in Nile Flows Wetting Scenario	+10%	+21%	+24%	+27
Water Cuts due to Upstream Dams (billion m <sup>3</sup> /yr)	5	8	10.50	13

More importantly, inter-annual variability of total Nile flow could increase by 50% in the twenty-first century compared to the twentieth century (Siam et al., 2017). This will be mainly due to the increase in the intensity and duration of El Niño and La Niña cycle, which are strongly connected to annual rainfall variations in the Ethiopian highlands and adjacent eastern Nile basins. As a result, there will be fewer normal flow years with flows between 70 and 100 km<sup>3</sup> per year, many more extreme years with flows greater than 100 and more years of drought (Siam et al., 2017).

Meetings with government stakeholders and researchers have confirmed the uncertainties regarding the Nile flow in the future. The future inter-annual variation has been also highlighted as a challenge given the current irrigation practices widely used..

Although Egypt is less vulnerable in terms of Nile flow variation than Ethiopia and Sudan, Egypt's high dependence on the Nile makes it vulnerable to future climate change impacts on the river's flow (Ministry of Environment, 2016).

**Water for agricultural use.** While crop water stress is identified as the other main factor causing reduced productivity under climate change, agriculture in Egypt is considered less sensitive to climate variability- compared to other countries in the region- due to its reliance on irrigated agriculture systems rather than rain-fed agriculture for some 95 % of the total cultivated area (Ministry of Water Resources and Irrigation, 2013). However, inter-annual variability of Nile flow can have major impact on agriculture in Egypt as discussed in the above section. Without adaptation policies to protect farmers from such variability on the long term, the agriculture sector will suffer greatly from water scarcity.

### **Impacts on the Agriculture Sector**

The projected rise in temperature and change of its seasonal pattern would lead to decreasing the productivity of some crops and livestock, a negative impact on marginal agricultural areas and a potential increase in desertification rates (Ministry of Environment, 2016). In addition, extreme weather events such as heat waves are projected to occur more frequently and/or last for longer periods of time (Ministry of Water Resources and Irrigation, 2013). During meetings with ministry of agriculture's technical officials and farmers in the three governorates, climate change and frequent heat waves have been underlined as one of the key challenges facing agriculture in their respective governorates.

**Agricultural Production.** Such impact on the agriculture sector would then have a negative impact on the country's food security. Different estimates predict a decline between 11% and 51% in national food production due to climate change. Strategic crops such as wheat and maize would suffer a decline of 11-12% and 40-47% respectively under a 1.5°C increase scenario. The price of these crops will also most likely increase accordingly (Ministry of Environment, 2016). During consultations with farmers in the 3 governorates, it has been highlighted that the increasingly frequent heat waves were the biggest threat to their crops and have already caused crop losses in some areas. It is worth mentioning that upper Egypt were the most vulnerable areas to heat waves with major impact on wheat in winter (-35%) and maize (-15.1%) in summer during heat waves recorded in winter 2010 and summer 2015 (Saleh et al., 2017). Table 4 below shows the expected impact of climate change on the productivity of the major crops in Egypt.

Table 4 Change in major crop production due to climate change (Ministry of Environment, 2016)

Crop	Increasing in temperature of 1.5°C	Increasing in temperature of 3.5°C
	Change in crop yields %	
Wheat	- 11 to - 12	-27 to - 31
Maize	-40 to - 47	
Rice	-26 to - 47	
Sunflower	-29	
Sorghum	-19	
Vegetable	-28	
Onion	-1.53	
Lentil	-28	
Cotton	19.8	
Citrus	-15.2	
Soybean	-28	
Sugarcane	-15.2	
Potato	-11 to -13	
Faba bean	-8.40 to -38.35	

Annex 5.2 shows an analysis for change in crop yields using IFAD's Climate Adaptation in Rural Development (CARD) tool. It shows a lower change in yield for maize and soy beans of -13.56% and -12.72% by 2039 in the most pessimistic scenario compared to -40% and -28% in the Third National Communication to the UNFCCC (TNC). However, CARD shows even higher change in wheat yield reaching -34.65% by 2039 compared to a maximum of -31% reported in the TNC. Although it is difficult to compare both models since CARD uses a time frame and the TNC uses temperature increase scenarios, both models agree that there will be a decline in Egypt's most strategic crops due to climate change.

**Plant Pests and Diseases.** There is clear scientific evidence that climate change is already altering the distribution, incidence and intensity of plant pests and diseases. Climate change creates new ecological niches which potentially allow plant pests and diseases spread to new geographical areas. Severe epidemics of tomato late blight (*Phytophthora infestans*) emerged in the last few years. In practice, an epidemic onset is expected to lead to 2-4 additional sprays to be applied at the coming decades of the 2025-2100 period. Severities of current cultivars of wheat to leaf rust caused by *Puccinia triticina* and stripe rust disease caused by *Puccinia striiformis* increase with increasing temperature, which is projected under climate change conditions. Subsequently, this will result in higher costs related to inspection, treatment and compliance with the obligations of the importing trading partners in addition to more frequent trade disputes under World Trade Organisation (WTO) that are costly to resolve (Ministry of Environment, 2016).

**Livestock.** Due to increase in temperature, the lack of ability of animals to dissipate the heat determines that animals suffer heat stress during, at least, part of the year. Heat stress has a variety of detrimental effects on livestock, with significant effects on milk production and reproduction in dairy cows. Extreme events, such as heat waves, may particularly affect beef and dairy cattle. However, higher minimum temperatures might reduce the frequency and severity of cold-stress events conditions that foster high lamb mortality. On the other hand, climate change can also indirectly affect animal performance due to alterations in the quantity and quality of their feed resources (Ministry of Environment, 2016). During consultations with women in field schools, they have pointed out that the increased temperature has caused increased the spread of diseases among animals in a noticeable manner.

**Aquaculture.** Climate change is expected to increase sea temperature causing fish distribution to shift northwards and to move to deeper water. Aquaculture may suffer from water shortages due to the expected scarcity in freshwater supply, and increased temperatures might also affect the production of some fish species.

### *iii. Climate change mitigation*

The agriculture sector in Egypt is the third biggest sector in terms of Greenhouse Gas (GHG) emissions – after energy and industrial sectors- with a contribution of 39,446 Gg. According to 2005 GHG inventory data, agricultural soil is the main source of GHGs emissions from agriculture sector by a contribution of 50.75% followed by enteric fermentation with 22.8% and rice cultivation with 11.73%. Manure management and field burning of agricultural residue contribute the rest with 10.18% and 4.43% respectively (Ministry of Environment, 2016). However, it is worth mentioning though that the government has widely restricted the cultivation of rice since 2018.

The project is mainly focused on adaptation measures. However, there are opportunities for mitigation co-benefits mainly through promoting sustainable agriculture, soil conservation and organic farming in addition to replacing diesel pumps with electrical (including solar) pumps in some target areas.

The project does not include activities that would have significant impact on greenhouse gas emissions in the target areas.

## **C. Poverty and Targeting Profiles**

**Smallholder farmers in Egypt:** The traditional Egyptian farming system is based on a mixed and integrated crop-livestock system. According to a FAO study, using data from the 2009–10 agricultural census<sup>13</sup>, the population among farming families is nearly 28.4 million, which is 38 percent of Egypt’s total population and two-thirds of the rural population. Families of holding areas less than one feddan are the largest group, comprising about 37.7 percent of the agricultural population. The population within the SSF category (<3 feddans) is about 69 percent of the total family farming population,

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<sup>13</sup> FAO, Study on small scale family farming in Near East and North Africa Region, focus country on Egypt, 2017

landless represent 16.5 percent of the total family farming population in 2010. The remaining landholders (with three feddans or more) represent only 14.5 percent of the total agricultural population in Egypt.

In general, smallholders and their smallholdings are the primary producers of the main food and fodder crops for domestic consumption. With the prevailing agricultural system in Egypt, the income generated from farms of less than three feddans (from different farming activities and utilizing family labour) does not meet the poverty line of US\$1.25 per day per capita (the United Nations poverty line). Therefore, holders of less than three feddans are considered by many experts to be the most vulnerable category of farmers in Egypt.

**Key concerns for smallholder farmers:** (i) marketing of produce (ii) lack of storage facilities (iii) lack of post-harvesting equipment (iv) lack of access to water (v) lack of access to affordable credit due to collateral requirements and high rates of interest (vi) lack of advice on market trends and crop diversification. Key concern for women farmers are: (i) limited mobility due to many factors, including gender biases (ii) lack of access to skill development training related to entrepreneurial opportunities and improve production on the commodities they are engaged; (iii) access to finance and related education (iv) lack of market information for selling their products (v) low access to nutritious food and poor dietary diversity. Key concern for rural youth: (i) lack of entrepreneurial opportunities and access to finance as well as (ii) lack proper on the job training education in the agriculture sector to develop professional service provision.

**STAR target groups**, can be described mainly on the basis of poverty level<sup>14</sup>, land ownership and access to market: (i) Very poor households living below the poverty line, with limited agriculture productive assets, considered as landless and near landless (less than 0.5) and ranking among the poorest; (ii) poor smallholder subsistence households living below the poverty line, farming on very limited land holding (below 1 feddan) and experiencing very limited access to market and income generation due to low surplus; (iii) market-oriented smallholder households with small land holding size (1-3 feddans) with access to market but limited return due to low prices, high production and transaction costs, and low bargaining power. They are slightly above the poverty line but considered as vulnerable and transitory poor due to the risks to slide back into poverty; (v) youth (19-35) from the targeted communities (skilled, graduated as well as unskilled) with low opportunities of employment and self-employment in general and specifically in agriculture (either as farming as a business or skilled/unskilled labors) and allied sector (agro-entrepreneurship, service provision, extension). The programme will consider direct targeted interventions for specific categories (direct targeting).

Another target group that the project will consider are transformation drivers, better off households, including: medium and large holder farmers (land average size above 3 feddans) traders, processors, aggregators and other actors along the value chains; supplier, traders, entrepreneurs and other private sector actors that the project will engage with to catalyse the expected transformation.

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<sup>14</sup> The poverty line used is EGP 482 per capita per month, which is defined by the 2015 national poverty line. According to this line, the poorest 40 percent of households are defined as poor. In the absence of an official updated poverty line, this is a working definition of poverty that seems reasonable and coincides conveniently with the targeting goal of the program.

**Landless, near landless and very poor households,** including women headed households: Those households will comprise 20% of the total target beneficiaries (or 32,000 HHs). They are worse-off households of landless and near landless with less than 0.5 feddan and unable to make their living out of poverty. Typically, those households are composed of high number of members/dependants with limited productive capacity, unable to fulfil households' basic needs. Within this category households' livelihood is mainly focused on animal husbandry (small ruminants, poultry) and low income off-farm activities. The project, in line with principles of leave no one behind and putting emphasis on a strong social inclusion strategy, will include 32,000 households from this category, focusing on women which are expected to be more than 70% beneficiaries from this category, while 30% will be youth.

**Poor subsistence smallholders' households (less than 1 feddan):** The project will target 80,000 poor subsistence smallholder households (corresponding to 50% total direct beneficiaries). Farmers in this category practice subsistence agriculture (0.5 -1 feddan), with low surplus for selling and low income due to low prices. Project services will be equally provided to men and women (minimum 30% women) in line with the activities/responsibilities they are engaged in the farming sector: i.e crop production mostly dominated by adult men, versus animal husbandry (small ruminants, poultry and ducks) and dairy activities for women. They process cheese and other products for household use and occasional informal sales. Proceeds from agricultural activities make the major contribution to the viability of their livelihood. To strengthen household resilience, the project will consider specific activities for men (land consolidation and improved agriculture practices, among others) and also for women (on farm as well as off farm) along the value chains (post processing-added value).

**Market oriented smallholders' households (1-3 feddan):** The project will target 40,000 market-oriented smallholder households (corresponding to 25% of the total direct beneficiaries). Farmers in this category are considered borderline poor as they are above the poverty line but at risk to slide back into poverty due to stress and external shocks. They are men and women smallholders (and/or small-scale processors) who typically own 1 to 3 feddans, 1 to 2 cows and buffalos and 5 to 6 small ruminants. They have sufficient labour and skills as well as high production but lack affordable inputs, connectivity to profitable networks and markets, technical capacity, scale and bargaining power. They produce a range of products which are sold at a low price through formal and informal outlets such as neighbours, domestic markets, brokers, aggregators. Women in this category practice agriculture activities as described above: animal husbandry, small animals fattening (ruminants) and ducks rearing and dairy production for informal sale to complement household income.

**Better off households.** These include actors at least one step higher in the agriculture value chain, including lead farmers (large farmers with 3 feddan and above), agro-enterprises and processors who can serve as aggregators and models to demonstrate the viability of new approaches to increase rural resilience and provide potential development pathways for the poor, including generating employment opportunities. The project will engage with them as linkage for market services. Given the commercial nature of their involvement in the value chain, project takes into consideration of their influence and outreach potential to serve other producers with market linkages/services. They are 6% of the targeted beneficiaries, comprising a total of about 8,000 households including a smaller percentage of women and youth. Youth in this category correspond

to young men and women graduated from universities (young professionals) and interested in agriculture from different angle: agronomy, business and market orientation, veterinary.

**Youth:** Youth are found in the above categories (poor, transitory poor and better off). The higher percentage of them is from the very poor and poor categories (outlined above) and a smaller percentage from the better off as young professionals. Overall this target group includes (i) young men and women (18-35 years) who are engaged (on full time or part time basis) in rural activities at subsistence level (family labour/ or subsistence) with an interest to further expand their activities to make it as a business, make use of technologies and increase their income, and (ii) unemployed (or seasonal workers at minimum wage) young men and women who are not directly engaged in rural activities and represent beneficiaries who are interested to explore the sector, identify and engage in better employment and self-employment opportunities offered by the cluster development, especially in agri-business, service provision and allied sectors; (iii) young graduated interested to apply their skills in the agriculture sectors as professionals service providers.

**Project services and target groups:** All target groups will equally benefit from activities under Sub-component 1.1: Strengthening marketing institutions. Institutional strengthening aims to empower the targeted communities through the strengthening and outreach of Marketing Associations (MA) in order to promote market access to both domestic and export markets, thereby increasing the marketing of smallholder (men and women) produce and profits. It is expected that farmers from all categories will be included in the marketing associations in existing CDAs. Activities developed under component 2: Improvement of smallholders' productivity and resilience will be directed towards men and women producers, as they are traditionally engaged in crop production (men) and in animal husbandry activities (women). Majority of women, youth and landless will be benefiting directly from activities supported under Sub-component 1.2: Micro enterprises development for strengthening entrepreneurial skills, technical knowhow and mobilise finance to develop business ideas around agricultural services provision and agribusinesses, with the aim of generating income opportunities and employment.

The objectives of this intervention targeting mostly landless, including women and youth is: (i) to ensure that trained youth and women interested in starting or expanding a small agri-business receive business development and financial support. This can include homestead production, agro-processing and agriculture allied production, such as handicrafts from agricultural waste; and (ii) to promote private agricultural services to complement public extension services, improve provision of inputs, and other agricultural services, such as compost making, nurseries and renting of machinery. The sub-component will invest in: (i) tailored entrepreneurial training, for example Start and Improve Your Own Business; (ii) development of savings and credit culture, including financial literacy training and orientation of financial products and repayment schemes and assistance in preparation of feasibilities; (iii) Specific technical capacity building in production, processing and agricultural services and the marketing of these products; and (iv) applied skills and practical training through apprenticeship programs with established agribusiness. Specifically targeting women, the programme will promote poultry and small ruminants (e.g. ducks, goats, sheep) and homestead processing and

services. Furthermore, roof and homestead gardens will be promoted, complemented with nutritional awareness campaigns and food conservation.

For youth, the programme will facilitate technical training in processing and value addition, in areas such as basil, tomato paste, sun dried tomatoes and pomegranate processing (validated through the market studies); as well as the provision of agricultural services (e.g. nurseries, equipment repairs, agro dealership). Training packages, ensuring readiness for trainees with practical technical knowledge, will be provided coupled with access to finance through a dedicated seed capital mechanism with favorable conditions.

### **3. Institutional Analysis**

#### **Ministry of Agriculture and Land Reclamation**

The Ministry of Agriculture and Land Reclamation (MALR) is responsible for formulating and implementing agricultural sector policies for promoting and upgrading Egyptian agriculture. It is in charge of land reclamation and agricultural, fisheries and livestock development. MALR has jurisdiction for providing a variety of agricultural services and regulate the activities of public and private entities involved in production and processing of agricultural products. The responsibilities of MALR for services and regulation are carried out at the Governorate level through the Governorates Directorate of Agriculture (GDA) and Governorate Directorate of Veterinary Services (GDVS), which are administratively responsible to the Governor but technically responsible to MALR. MALR also has the responsibilities of overseeing irrigation and water management at farm level and on farm improvements. MALR is the main implementing entity for the STAR project. There are several institutions that are affiliated to MALR, such as the Agricultural Bank of Egypt (ABE) and the Agriculture Research Centre (ARC).

#### **Ministry of Water Resources and Irrigation**

The Ministry of Water Resources and Irrigation (MWRI) is the principal government body that is responsible for managing the water resources of Egypt so as to guarantee adequate supplies for municipal, agricultural, industrial, navigational and power generation use. MWRI has sole responsibility for planning and execution of regulations and policies as well as for the development, distribution and management of water resources in all the Egyptian districts. It is responsible for regulation, distribution and quality management of water resources of which the agricultural sector is the greatest recipient. MWRI authorizes water use and manages water supply, irrigation and drainage systems and associated pumping stations. These responsibilities are carried out through several departments and agencies. The development and operation and maintenance of water infrastructure is largely funded by the Government and carried out by MWRI. MWRI is also responsible for irrigation improvements from mesqa level (tertiary canals) and above, covering branch, main and principal canals as well as the River Nile, while MALR on the other hand is responsible for on-farm irrigation improvements including marwas (quaternary canals) and other on-farm improvements. These responsibilities are carried out through several departments and agencies at central and governorate level.

#### **Ministry of Social Solidarity**

The Ministry of Social Solidarity (MoSS) aims to provide social protection, integrated care and economic empowerment to the citizens who are in need. It also seeks to develop its services throughout the country and calls for coordination of efforts with the private sector and civil society to invest in joint work for the development of citizens and society. Non-Governmental Organizations (NGOs)/ Community Development Associations (CDAs) are registered with the Ministry of Social Solidarity (MoSS) and are governed by Law no. 84 of 2002/2004.

### **Ministry of Investments and International Cooperation**

The Ministry of Investment and International Cooperation (MIIC) is responsible for integrating and harmonizing available funds to contribute to national development and for fostering private investments and private sector engagement through promoting a more conducive environment for investment and entrepreneurship. It is also responsible for mobilizing Official Development Assistance (ODA) in order to complement the national efforts and support the national priorities and needs. It works on managing and strengthening Egypt's cooperation with other countries as well as regional and international financial institutions to receive loans and grants that would support the country in its socio-economic plan objectives. The Ministry is also responsible for advising on the State's external borrowing by negotiating terms to reduce impact on foreign reserves and diversifying funding to effectively manage financial resources and follows-up matters of usage and repayment with the relevant counterparts benefiting from loans and grants. MIIC is the government representative in respect of IFAD financing. It leads the financing negotiations and the ratification process and it is the focal point with IFAD in all matters concerned with amendments to the financing agreement.

### **Ministry of Youth and Sports**

The Ministry of Youth and Sports is the government entity responsible for enhancing the quality of life of Egyptian youth and supporting the development of their skills and abilities. The Ministry's mission includes: launching a national policy for youth and sport in which all segments of the society take part; providing decent work opportunities for the young people through small and medium enterprises; and adopting youth initiatives and expanding community partnership with civil society organizations.

### **Ministry of Environment**

The Ministry of Environment with its executive agency, EEAA, is the government entity responsible for the definition of environmental and climate policies and the setting of environmental priorities, as well as designing, actively supporting and implementing initiatives within the context of sustainable development. It has the role of monitoring the pollution levels and setting the environmental standards that would contribute to improving the quality of the environment. This is carried out with a focus on the reduction of pollution, the conservation of the country's natural resources and combating climate change.

### **Supreme Committee for Climate Change**

The Supreme Committee for Climate Change has been recently established and operates under the Egyptian Cabinet headed by the Prime Minister. The committee is constituted of concerned line ministries and the Ministry of Environment has a leading role within the

committee. The committee aims to coordinate climate action across line ministries and work on mainstreaming adaptation and mitigation measures in sectorial work.

### **Agricultural Bank of Egypt (ABE)**

The Agricultural Bank of Egypt (ABE) is the former Principal Bank for Development and Agriculture Credit (PBDAC). ABE aims to provide the necessary funding for various types of agricultural and rural development activities. The Bank underwent a comprehensive institutional reform, which is regarded as the cornerstone of achieving major institutional changes to the organizational structure, internal policies and operations, in efforts to improve the Bank's accountability, efficiency and sustainability. It is worth noting that PBDAC institutional challenges affected its performance throughout previous IFAD's projects. The poor performance was as a result of the high default rates and the absence of a reliable system for credit monitoring and follow-ups of overdue loans.

### **Micro, Small and Medium Enterprises Development Agency (MSMEDA)**

The Micro, Small and Medium Enterprises Development Agency (MSMEDA) is a national entity that is concerned with the development of Micro, Small and Medium Enterprises (MSMEs) and entrepreneurship and responsible for MSMEs projects in Egypt. The Agency replaced the Social Fund for Development (SFD), which was established in 1991. It aims at supporting the government efforts in implementing community development programs and labor-intensive projects, creating employment opportunities, providing a more enabling environment for micro and small enterprises, and promoting entrepreneurship, which would in turn contribute to improving the living standards of citizens and reducing poverty rates. In 2018, MSMEDA provided loans amounting to a total of 5.4 billion EGP to around 251 thousand micro and small projects. It is estimated that these projects provided 407 thousand job opportunities. The Agency has been following a geographic poverty targeting approach and has a strong network of implementing agencies at local levels: namely the governorates, NGOs, CDAs, and banks. MSMEDA is supported by both national and international development partners.

### **National Council for Women (NCW)**

The National Council for Women (NCW) is a government body that focuses on enhancing the socioeconomic conditions of Egyptian women and supporting women's participation in the development of their local communities and the society. The council addresses women's economic empowerment; raising the standard of living of poor and marginalized women; and promoting the principle of gender equality and the integration of a gender perspective into all policies. Its mission is to have an effective partnership and role in formulating policies and programs related to women's advancement and the sustainability of their development, as well as defining their active roles and participation in their society at all levels.

### **Agriculture Research Centre**

The Agricultural Research Centre (ARC) is one of the largest research organizations in the Middle East dedicated to research and development of agricultural sciences. Under MALR, ARC is the principal organization responsible for technology generation and transfer for agriculture growth and development. It focuses its research on the development of new varieties, improved agronomic practices, livestock development and better food processing techniques.

## **Community Development Associations (CDAs)**

Community Development Associations (CDAs) are considered NGOs under the relevant legislation for non-profit organizations. They are governed by Law 84 of 2002/2004?? and are registered with and supervised by the Ministry of Social Solidarity (MoSS). They currently operate under the supervision of the Egyptian Financial Supervisory Authority (EFSA), according to the microfinance law no. 141 of 2014. CDAs exist in many villages and their mandate can vary from charity and social services to development, but their coverage is usually limited to a village or a neighborhood. CDAs can also provide economic services as they can play a vital role in offer microloans to end beneficiaries in the rural community.

## **Agriculture Cooperatives**

The Agricultural Cooperatives are recognized organizations that mostly pertain to the local community. They were established by the Egyptian government mainly to supply the farmers with the necessary agricultural inputs and purchase their crops as well as generally be of support to them. As per their current mandate, the Agricultural Cooperatives are defined as social and economic units with the objective of improving agriculture, providing recommendations for the crop choices and rotations and contributing to the rural development of the area in which they work. Agricultural Cooperatives are formed under the Cooperative Law and supervised by the Central Administration for Agricultural Cooperatives, a specific unit in MALR.

## **Adaptation Fund**

The Adaptation Fund finances projects and programmes that help vulnerable communities in developing countries adapt to climate change. Initiatives are based on country needs, views and priorities. The Adaptation Fund was established under the Kyoto Protocol of the UN Framework Convention on Climate Change, and since 2010 has committed US\$ 564 million to climate adaptation and resilience activities, including supporting 84 concrete adaptation projects. STAR will explore co-financing opportunities from the Adaptation Fund.

## **World Food Programme (WFP)**

The World Food Programme (WFP) is the leading humanitarian organization in delivering food assistance in emergencies and working with communities to improve nutrition and build resilience. WFP is currently implementing an Adaptation Fund project in upper Egypt including Minya, Asyut and Sohag that aims to build resilience of food systems. The project will build on the best practices and lessons learned from WFP's interventions in the target areas.

## **African Development Bank**

The overarching objective of the African Development Bank (AfDB) Group is to spur sustainable economic development and social progress in its regional member countries (RMCs), thus contributing to poverty reduction. STAR is currently in negotiations with the African Development Bank for co-financing infrastructure interventions.

**Annex 5.5 shows the national plans and strategies to which the project is aligned.**

## 4. Environmental and Social Category

The project targets smallholder farmers and will include investing in large-scale water conservation measures; rehabilitation of damaged irrigation systems; and enhancing marketing capacities mainly for smallholder farmers, youth and women. The project is deliberately intended to prevent irreversible or unprecedented social or environmental adverse impacts. Hence, the STAR project is classified as **a moderate risk project: category B** according to IFAD's Social, Environmental and Climate Assessment Procedures Guidelines. An Environmental and Social Management Plan is required for each of the project components.

## 5. Climate Risk Category

The proposed project's interventions will not increase the vulnerability of target populations and resources to climate hazards. On the contrary, the project components will contribute to increasing the adaptive capacity of smallholder farmers and their families through improved water-efficient irrigation systems; economic diversification mainly through investing in women and youth; use of digital agriculture technologies in early warning systems; and poverty alleviation through enhanced access to markets. Hence, the STAR project's **Climate Risk Classification** is **Moderate** according to IFAD's Social, Environmental and Climate Assessment Procedures Guidelines.

## 6. Recommendations for Project Design and Implementation

### **Component 1: Strengthening Rural Institutions, Enterprises and Markets**

Poverty and unemployment are major socio-economic challenges facing upper Egypt. Women and youth shall be regarded as change agents when it comes to the development of micro-enterprises and training and business plan support shall focus on them. On one hand, this would contribute to addressing rural unemployment in a way that lives up to youth ambitions. On the other hand, it would contribute to women economic empowerment especially among female headed households. In addition, this economic diversification at the household level is an adaptation measure to climate and market shocks and so would mitigate the risk of falling into further poverty.

The institutional capacity building activities of the project shall also focus on increasing awareness of environmental and climate change issues from a value chain analysis perspective.

### **Component 2 Improvement of smallholders productivity and resilience**

Even if water scarcity is not felt by all the farmers – except those who are downstream with respect to branch canals-, it is still the major environmental issue facing the three governorates and Egypt as a whole. In that sense, the project shall invest in water-efficient irrigation systems as an adaptation measure starting from the branch canal level in compliance with the target strategy that focuses on the poorest villages around branch canals that need to be rehabilitated. The project shall also consider drip irrigation and hydroponic agriculture to be introduced in demonstration fields. Mitigation co-benefits in terms of solar pumping shall be utilised according to the project's cost recovery mechanism.

In order to ensure the sustainability of such investments, water resources management strategies at the governorate level should be formulated for the three governorates. This shall help planning in terms of management and maintenance.

In response to climate change, the use of digital agriculture can be utilised in this project to enhance early warning systems in the target areas especially with regards to heat waves. The digital tool shall not only provide warning signals to farmers but also should give meaningful information that the farmer can follow to avoid crop loss or damage due to climate shocks.

The project shall also propose a more structural approach to increasing the resilience of food systems through building on the government's current thinking to widely grow crops like beans and lentils which have relatively less water requirements and have high market demand. This could also contribute to better nutrition at household level. In general, the project can push to prioritise crops with high nutritional values for humans over crops for feeding animals.

In the interest of ensuring sustainable farming practices and in the light of weak extension services, youth shall be empowered through a "Young Professional Programme" that gives young graduates- from the faculty of agriculture- practical experience in dealing with farmers and providing extension services. This will build their capacities towards providing such service in the future and at the same time would give the chance to communicate new climate-resilient and sustainable farming practices. This would be especially useful in areas suffering from soil salinity due to intense use of fertilisers or pesticides (also see "Further Studies Needed" section). There is a big opportunity to push towards organic and nutrition-oriented farming especially if links can be made with the first component in terms of marketing.

### **Climate Finance Opportunities**

The project shall seek co-financing from the Adaptation Fund (AF) for activities related to building climate resilience. The amount available for Egypt is \$2.8 million and already a concept note has been prepared to seek endorsement from the Egyptian Environmental Affairs Agency to submit a proposal to the AF board. The grant can be mainly used to establish demonstration plots for climate-resilient production techniques; water-efficient irrigation for poor smallholder farmers; enhancing early warning systems; capacity development of rural institutions with regards to climate change; improved water management planning at the governorate level; support to innovative climate change adaptation micro-enterprises.

Further funding from the Green Climate Fund (GCF) shall be explored.

**IFAD will use the following entry points to address mainstreaming themes:** (i) improve women's access to viable economic opportunity (on farm and off-farm) and finance; (ii) generate economic and professional opportunities for youth (iii) improve nutrition for all, especially for food insecure households and vulnerable categories.

**Improve women's access to viable economic opportunities and access to finance:** The project will address gender disparities and the key constraints that limit women's participation in viable economic opportunities and access to financial services by: (a) ensuring that women have equal access to capacity building, training and opportunity by creating an enabling environment which ensure their mobility and participation in the economic activities. Community facilitators hired by the project will engage with community leaders and also male household members, to sensitize on gender equality and women's economic empowerment (b) promoting productive opportunities that are suitable for women's by ensuring that analysis are done capturing women's needs and priorities and allowing women full participation during the design of sub-project activities; (c) increase women's access to skills and knowledge by providing women's skills in financial literacy, digital literacy, managing and saving money, business development and leadership. This type of activities is tailored to serve women from different socio-economic categories: vulnerable women interested in small IGA to complement their livelihood (subsistence level), as well as women from better off farming households engaged in productive activities (agriculture related) and interested to expand their businesses along the value chains.

**Specific measures** will include: (i) Ensuring strong awareness/sensitisation campaign at the beginning of the project; (ii) developing the capacities of Cluster Support Team (CST) to undertake proper mobilisation of women and young women, involving also traditional leaders and male household members (iii) increase number of women accessing viable economic opportunity; (iv) ensuring that both male and female have access to demo plots and other technical training depending on the activities they are engaged (men on crop farming and women on animal husbandry and processing) and women's leadership training. The programme will pay careful attention to ensure trainings respond to women's needs and to ensure their inclusion consider appropriate time, location, especially considering the strict mobility limit for women in Upper Egypt. One of the best training model for women producers is the Women's Farmers Field Schools, which will be replicated and will include topics of relevance for women: (i) animal health; (ii) milk handling and hygiene; (iv) small-ruminants and beef-dairy fattening activities; (v) animal husbandry; and (vi) marketing. In addition to the above, nutrition education/sensitisation will also be conducted as part of the training.

**Generating economic opportunities for young people:** Youth will be consulted, selected by the Cluster Support Teams (CSTs) and CDAs then organized in groups on the basis of their interests and different degrees of participation in the programme; i.e. as existing farmers' producers or new entrants; skilled or unskilled, with low education level or with secondary education and above, thus being organized accordingly and receiving targeted interventions and trainings on the basis of their aspirations and interest in engaging in agricultural activities (from adopting technology in the production system to provide service along the different nodes of value chains).

Selection of youth will consider a screening process using questionnaire forms to determine: preparedness, having clear ideas, willingness to invest time and energy. Youth mobilisation, formation of groups as well as provision of services and

implementation of specific activities will be undertaken in accordance and alignment with business plan developed at cluster level. This is expected to benefit youth already engaged in agriculture and interested to continue, but lacking capacity, skills and capital to do agriculture as a business and using advanced technologies (most of them being unpaid family labour or unskilled labourer at larger farms). Others will be engaged in entrepreneurial opportunities related to the agriculture value chains: from private agricultural services to complement public extension services, improve provision of inputs, and other agricultural services, such as compost making, nurseries and renting of machinery.

They will receive additional intensive trainings on: i) how to develop a concrete business idea first; and then, (ii) enable the potential entrepreneurs to develop a bankable business plan. In this case the programme could consider using the successful methodology applied by ILO: Star and Improve Your Business (SIYB). This is one of the largest global business management training programmes. It has four training packages that respond to stages of business development. Young graduated (50% young boys and 50% young girls) will benefit from the *Young professional program*. To support the STAR targeted farmer groups in adopting new crops, practices and technologies a young professional program for newly agricultural and irrigation graduates from the programme governorates will be established. The program will give the young professionals an opportunity to rapidly gain substantial field experience, and build their CV and capacities in working with farmers, bringing in new ideas including digital solutions and adapt these to the conditions and needs of smallholder farmers. It is expected that after the program a part of these graduates will be able to establish private extension services or join companies or NGOs providing these services in the three governorates. Each participant will be supported with subsistence allowances and complete a one to two years program with the STAR programme.

**Improving nutrition for all, especially among food insecure households:** IFAD is committed to addressing malnutrition in all its forms in its investments. This includes in addition to underweight and micronutrient deficiency also overweight and obesity. The project recognizes that access to better economic opportunity is a key element that within the household dynamics can play an important role in combatting malnutrition as long as it is accompanied by awareness creation. Limited nutrition knowledge among beneficiaries may prevent STAR target groups to translate increased production and income into improved diets. The project will contribute to improved nutrition by promoting awareness at community level, with special focus/priority in areas where higher food vulnerability is registered. To support beneficiaries in addressing gaps in nutrition knowledge, the project will carry out nutrition education at village level establishing Demonstration site with roof-top gardens. This will be particularly relevant for low income level households.

The nutrition intervention will also address awareness creation about obesity. Tailored nutrition education sessions will be organised to advocate for healthy diets and food systems. Key topics will be: (i) Nutrient values (ii) dietary diversity for healthy diets (iii) consumer information on healthy food choices to allow purchase of food on the basis of informed decisions.

## 7. Further Studies Needed

During consultation meetings with stakeholders and farmers in the three different governorates, the issue of soil salinity has been raised. A study to explore the main reasons behind soil salinity- and declining soil quality in general- is needed. The study should help the project team understand the key factors behind this phenomenon and should assess the soil conservation options within the context of the need for increased agricultural production.

A feasibility study on the introduction of some crops that use less water and less fertilizers as strategic crops (e.g. beans) would act as a guiding document for the project and the government policy. The study should include the impact of introducing such crops on water efficiency and soil conservation; economic and marketing assessment for each crop; technical and cultural barriers for farmers to plant these crops; and the risk analysis.

## 8. Monitoring and Evaluation

Project Monitoring and Evaluation (M&E) will be under the oversight of the PMU, and led by the M&E officer who will work closely with the implementing entities. The M&E system should produce, organize and disseminate the information needed for the strategic management of the Project; document the results and lessons learned; and respond to the information needs of IFAD and the Government (and other co-financing institutions) on the activities, immediate outcomes and impact of the Project.

Day to day monitoring of implementation progress will be the responsibility of the project team, based on the project's Annual Work Plan and its indicators. During the first months of the project, the project team will complete and fine-tune baseline data for each indicator, and will define and fine-tune performance. Specific targets for the first year of implementation, progress indicators, and their means of verification will be developed at the Start up Workshop.

M&E officer- supported by IFAD supervision- shall monitor compliance to the Social and Environmental Category and the Climate Risk Category and report any issues regarding compliance to IFAD's procedures. In addition, a review of this SECAP note shall be done to identify any emerging social, environmental or climate issues in the project target areas.

The M&E system will give strong emphasis to monitoring of targeting performance. All implementers will be required to provide disaggregated data on women and youth participation, in relation to overall project targets. The M&E system will collect and analyze information about project outreach, effectiveness of the targeting strategy and specific benefits for women and youth. This requires strong coordination and collaboration between the M&E unit and the Gender and Social Development experts at all levels. Impact will be assessed on the basis of methodologically gender sensitive baseline, mid-term and completion surveys which will use key indicators to measure women's empowerment

## **Environment and Climate Related Indicators<sup>15</sup>**

3.1.1. Number of groups supported to sustainably manage natural resources and climate-related risks

3.1.2. Number of persons provided with climate information services

3.1.4. Number of hectares of land brought under climate-resilient management

## **Gender, Youth and Nutrition Related Indicators**

**Gender:** proposed Indicators will consider: number of women members of Income Generating Groups and Marketing Associations, including number of women in leadership position.

**Youth:** Proposed indicators will consider: number of youth self-employed in agriculture and allied sector ; number of students receiving support through the young professional programme; #number of youth accessing finance for business plans related to on farm/off farm IGA and service provision (baseline to be conducted).

**Nutrition:** Proposed indicators will consider: number of demo-plots established; number of people increased dietary diversity; number of households increased consumption of nutritious foods; number of households starting roof-top garden as a results of the trainings received; (Baseline to be conducted).

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<sup>15</sup> Adopted from IFAD's Results and Impact Management System Document

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## Annex 5.1: Climate Vulnerability Assessment Framework

*Vulnerability = Exposure + Sensitivity – Adaptive Capacity*

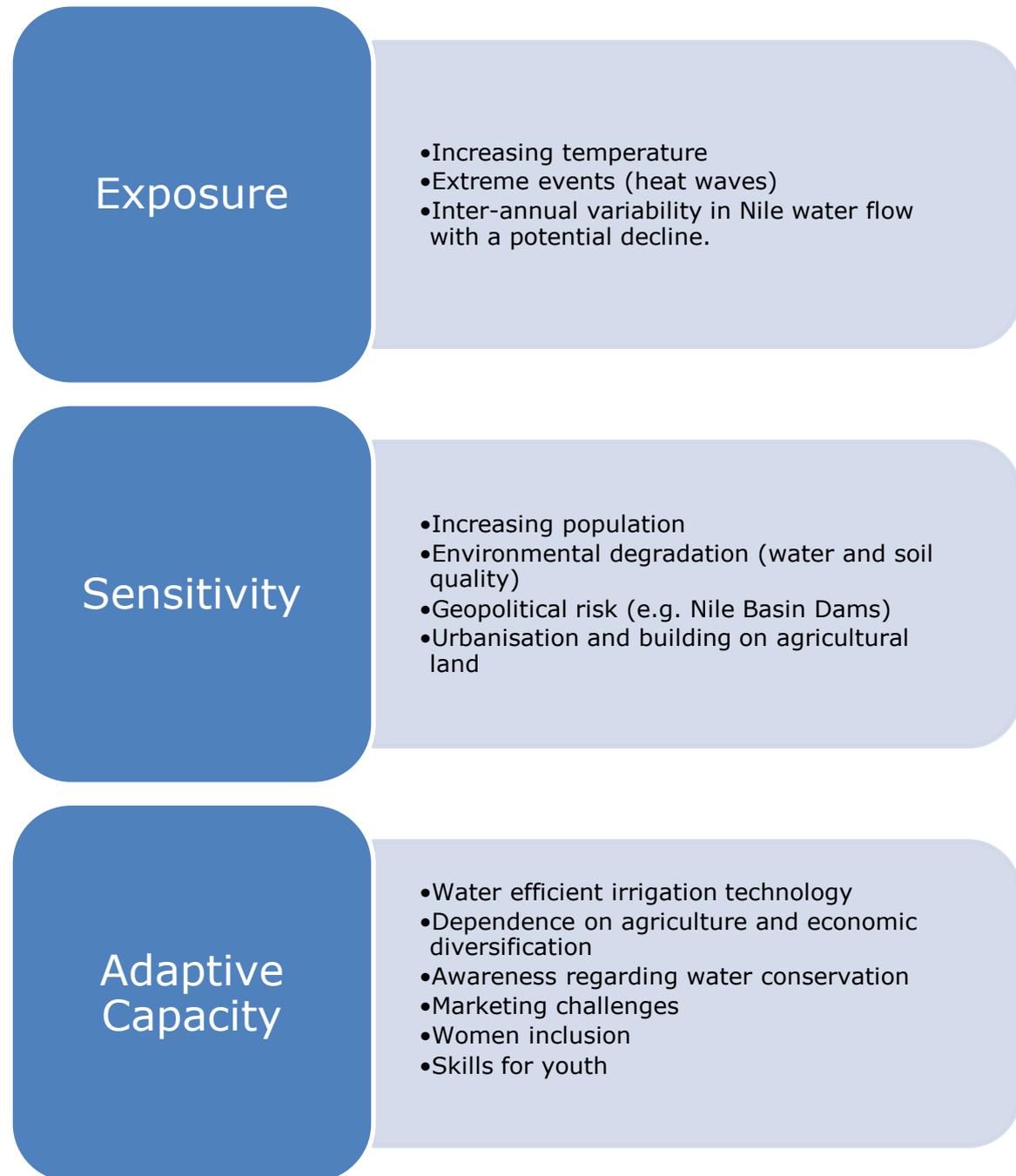


Figure 1 Climate Vulnerability Assessment Framework

## Annex 5.2: Climate Risk Analysis

### Historical Temperature Data Analysis

Since the STAR project will be implemented in Minya, Asyut and Sohag, an analysis of the historical temperature data for the period 1901-2017 has been carried out using CoMon model data.

As shown in Figure 2 below, the trend slope for the period 1901-2017 shows an increase of 0.95% in average maximum temperature between May and October in Asyut. On the other hand, there has been a decrease of 0.64% in the average maximum temperature between November and April.

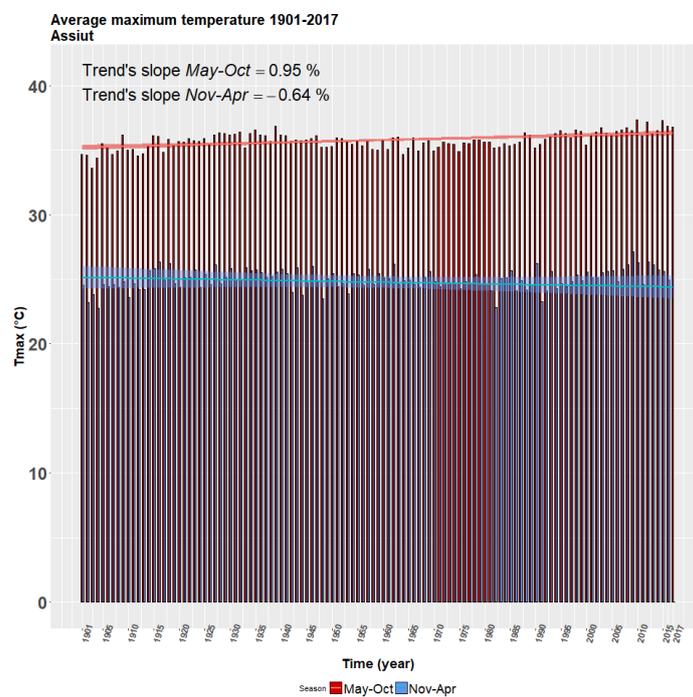


Figure 2 Average Maximum Temperature in Asyut (1901-2017)

As shown in Figure 3 below, the trend slope for the period 1901-2017 shows an increase of 1% in average maximum temperature between May and October in Minya. On the other hand, there has been a decrease of 0.61% in the average maximum temperature between November and April.

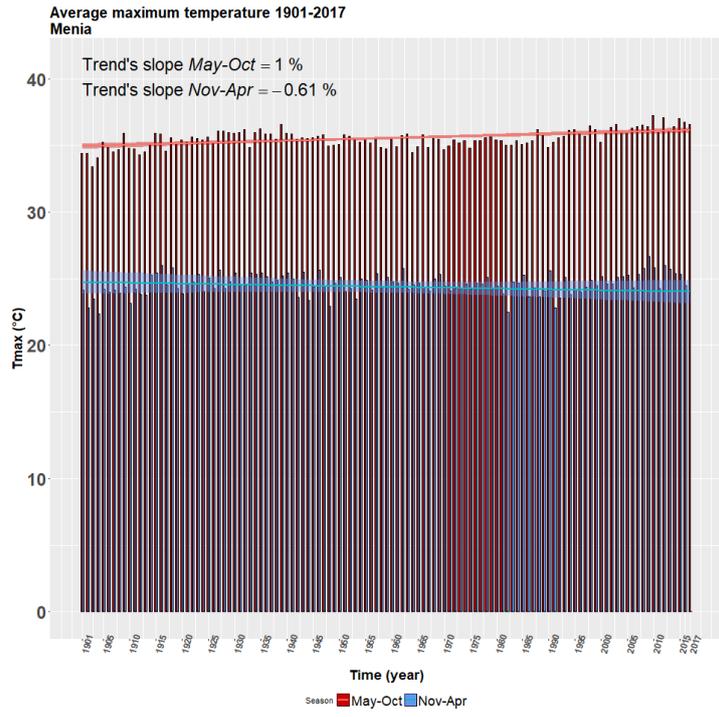


Figure 3 Average Maximum Temperature in Minya (1901-2017)

As shown in Figure 4 below, the trend slope for the period 1901-2017 shows an increase of 0.93% in average maximum temperature between May and October in Sohag. On the other hand, there has been a decrease of 0.72% in the average maximum temperature between November and April.

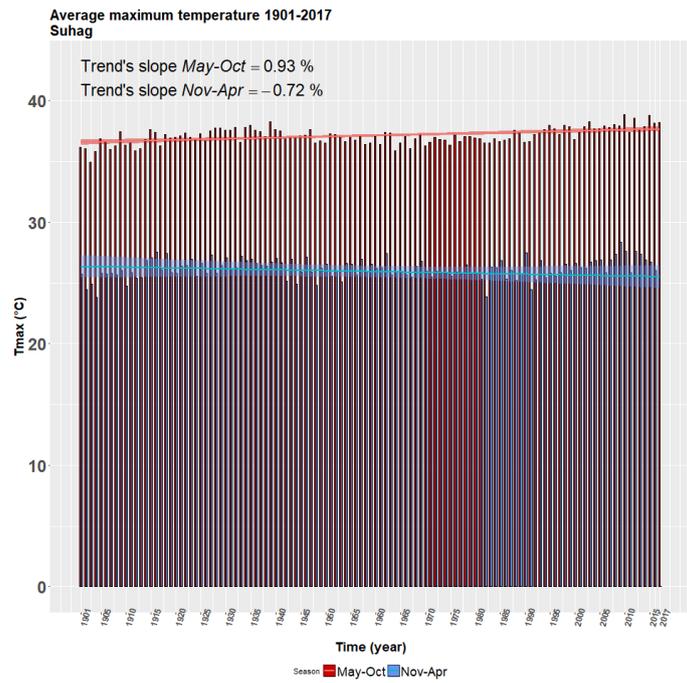


Figure 4 Average Maximum Temperature in Sohag (1901-2017)

Asyut, Minya and Sohag show a similar trend for the period 1901-2017 with regards to monthly mean temperature. As shown in Figures 5, 6 and 7 below, the biggest increase in the monthly mean temperature is between March and August in the 3 governorates.

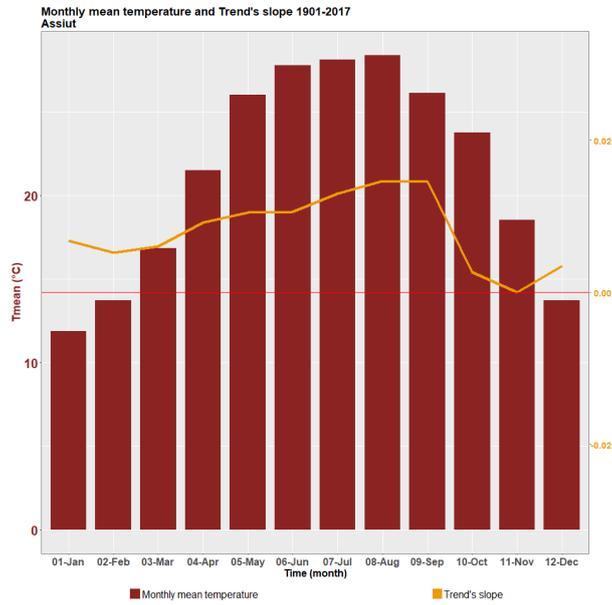


Figure 5 Monthly Mean Temperature and Trend's Slope for 1901-2017 in Asyut

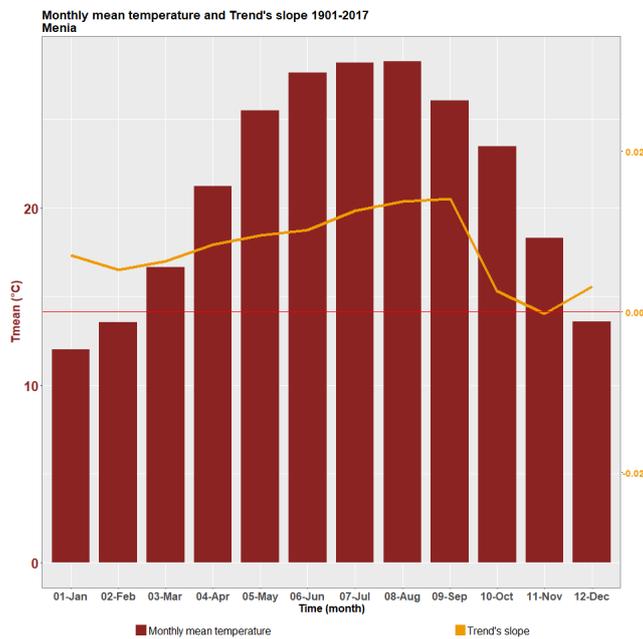


Figure 6 Monthly Mean Temperature and Trend's Slope for 1901-2017 in Minya

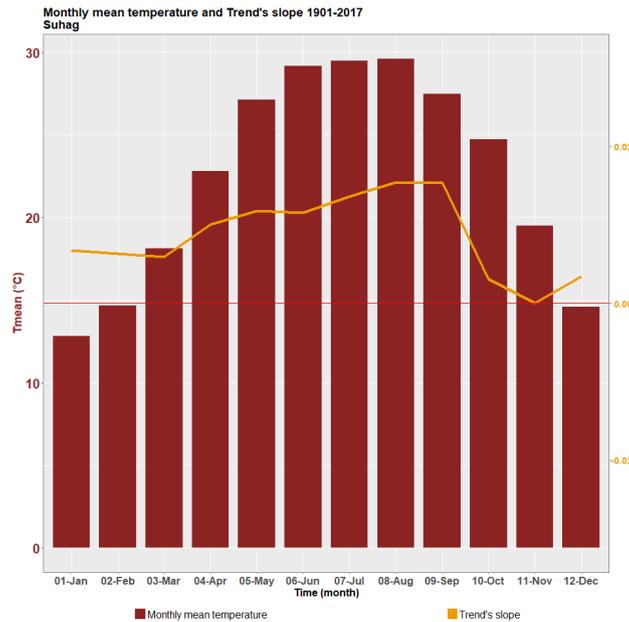


Figure 7 Monthly Mean Temperature and Trend's Slope for 1901-2017 in Sohag

### Historical Heat Waves Data Analysis

The World Meteorological Organization defines heat waves as five or more consecutive days during which the daily maximum temperature surpasses the average maximum temperature by 5 °C (9 °F) or more.

This analysis has been done by using the historical NASA dataset GLDAS-2.0 covering the period 1948-2010 and GLDAS-2.1 covering the period 2000-current. Daily average maximum temperature has been calculated for the 1971-2000 time period.

Figures 8, 10 and 12 show the number of heat waves per year in Asyut, Minya and Sohag for the period 1970-2010 using NASA's GLDAS-2.0. The 5 year average indicated by the red line shows that the trend has been increasing for the three governorates between 1970 and 2010. In 2008, each of the three governorates suffered from 3 heat waves which is more than any other year for that period.

Figures 9, 11 and 13 show the number of heat waves per year in Asyut, Minya and Sohag for the period 2000-2018 using NASA's GLDAS-2.1. The 5 year average indicated by the red line shows that the trend has been increasing for the three governorates between 2000 and 2018. It is worth mentioning that 2018 has been the highest for the three governorates in terms of numbers with 15 heat waves for Asyut and Sohag and 9 heat waves for Minya.

Although the two datasets show slightly different numbers for the overlapping years (2000-2010), the trend remains the same for the three governorates with an increase in the frequency of heat waves.

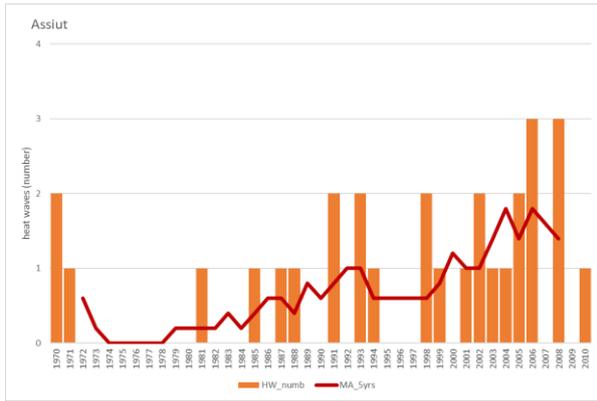


Figure 8 Number of Heat Waves in Assiut (1970-2010)

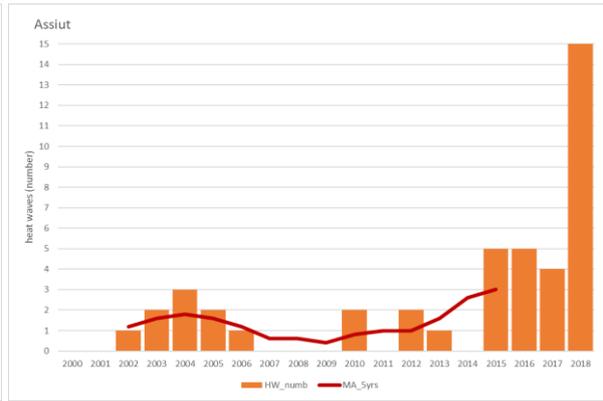


Figure 9 Number of Heat Waves in Assiut (2000-2018)

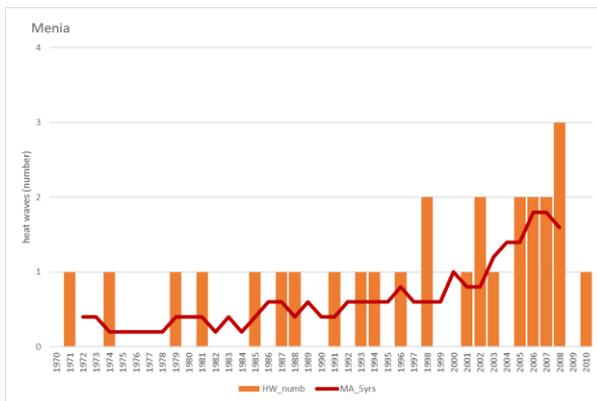


Figure 10 Number of Heat Waves in Minya (1970-2010)

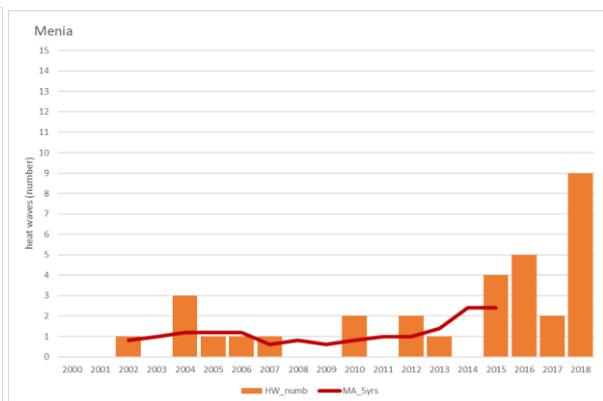


Figure 11 Number of Heat Waves in Minya (2000-2018)

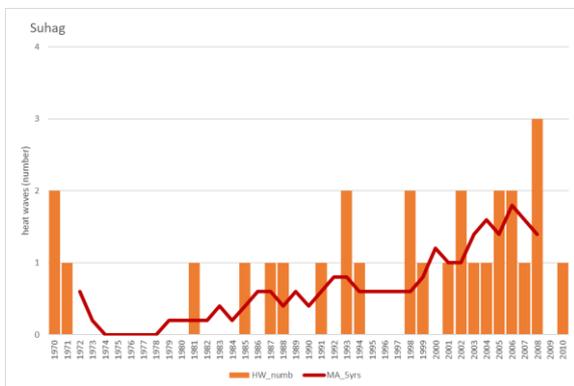


Figure 12 Number of Heat Waves in Sohag (1970-2010)

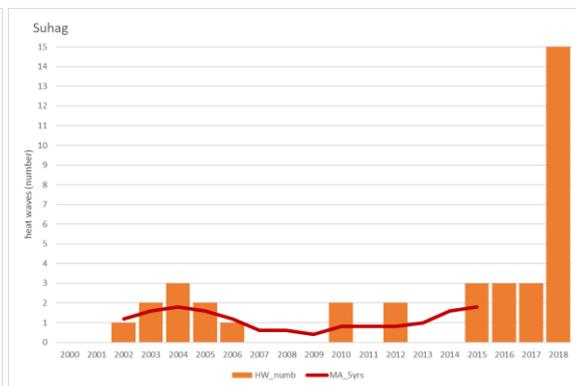


Figure 13 Number of Heat Waves in Sohag (2000-2018)

On the other hand, the intensity of heat waves- measured by the number of days of the heat wave- has not shown a certain pattern for any of the governorates using NASA's GLDAS-2.0 as suggested by the Figures 14, 16 and 18 below. However, NASA's GLDAS-2.1 illustrated by Figures 15, 17 and 19 shows a pattern where the length of the annual longest heat wave event is generally increasing for the three governorates. It is worth mentioning that the year 2018 has seen the longest heat wave for Assiut and Sohag with 16 and 15 days respectively, while the longest for Minya was for 13 days in 2017.

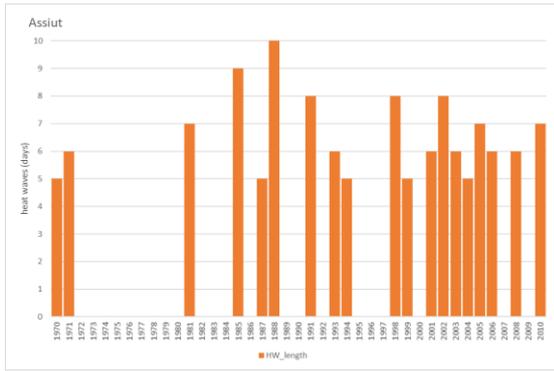


Figure 14 Longest Heat Waves Event in Asyut (1970-2010)

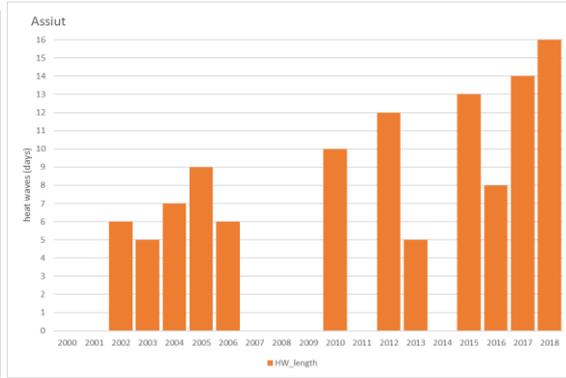


Figure 15 Longest Heat Waves Event in Asyut (2000-2018)

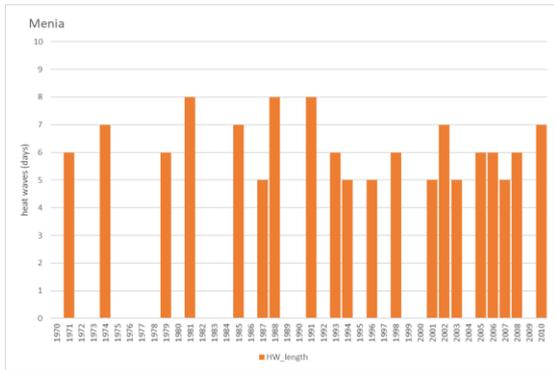


Figure 16 Longest Heat Waves Event in Minya (1970-2010)

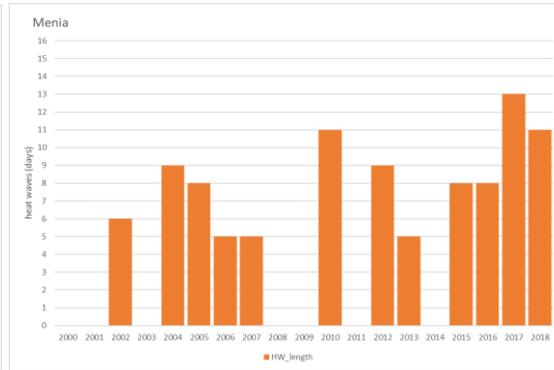


Figure 17 Longest Heat Waves Event in Minya (2000-2018)

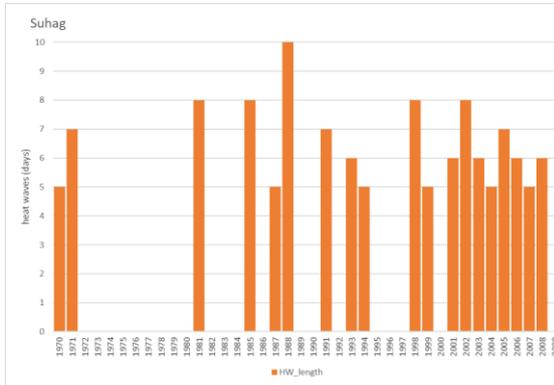


Figure 18 Longest Heat Waves Event in Sohag (1970-2010)

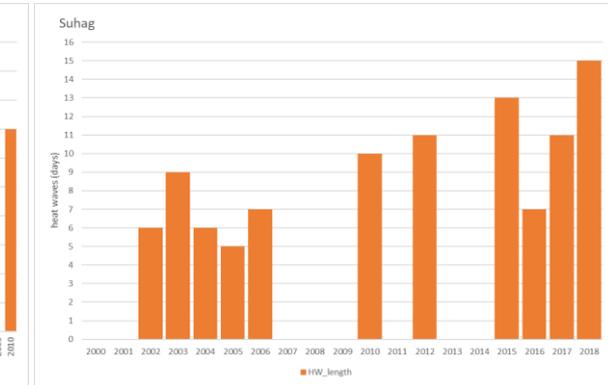


Figure 19 Longest Heat Waves Event in Sohag (2000-2018)

## Climate Projection and Trend Analysis

The section below shows an analysis of climate projections for the periods 2020-2039 and 2080-2099 compared to 1986-2005 under the IPCC's 4.5 RCP and 8.5 RCP scenarios. Data is derived from World Bank's Climate Change Portal using the "ensemble" model.

While there will be no significant change in average precipitation all over the country under all scenarios, there will be a significant change in temperature. In general, monthly temperature will increase all over the year under all scenarios in Egypt. The figures below show the monthly increase in temperature for 2020-2039 and 2080-2099 under RCP 4.5 and RCP 8.5.

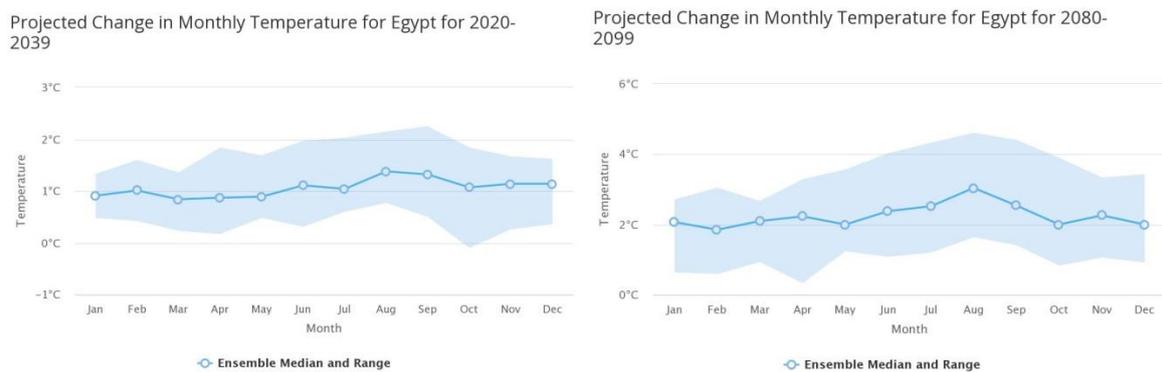


Figure 20 Projected Change in Monthly Temperature for Egypt under RCP 4.5 (World Bank, 2019)

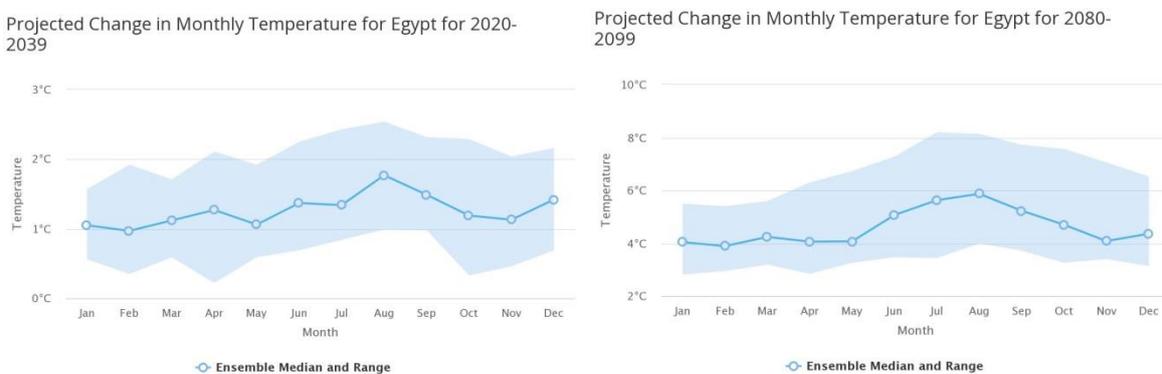
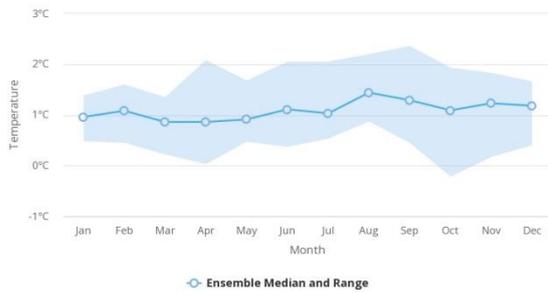


Figure 21 Projected Change in Monthly Temperature for Egypt under RCP 8.5 (World Bank, 2019)

Under the RCP 4.5 scenario, projections show that the monthly temperature will increase across the country and the median increase is almost doubled for every month as we go from the 2020-2039 period to the 2080-2099 period. The highest increase will be in August reaching around 3°C by 2080-2099. While for the RCP 8.5 scenario, the increase will be much higher with no less than 1°C for 2020-2039. On the longer term, the increase will surpass 4°C reaching a maximum median of 6°C in August.

Projected Change in Monthly Temperature for Egypt at Location (31.19,27.18) for 2020-2039



Projected Change in Monthly Temperature for Egypt at Location (31.19,27.18) for 2080-2099

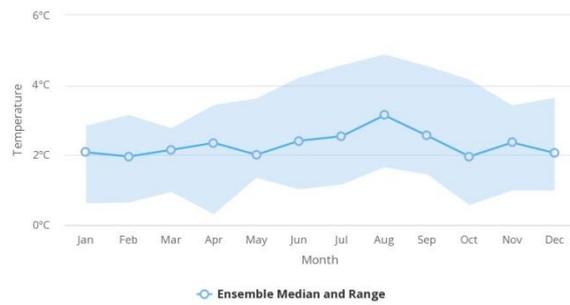
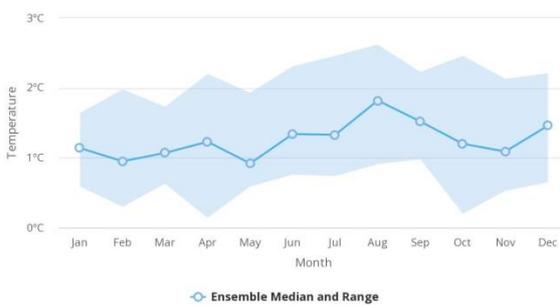


Figure 22 Projected Change in Monthly Temperature for Asyut under RCP 4.5 (World Bank, 2019)

Projected Change in Monthly Temperature for Egypt at Location (31.19,27.18) for 2020-2039



Projected Change in Monthly Temperature for Egypt at Location (31.19,27.18) for 2080-2099

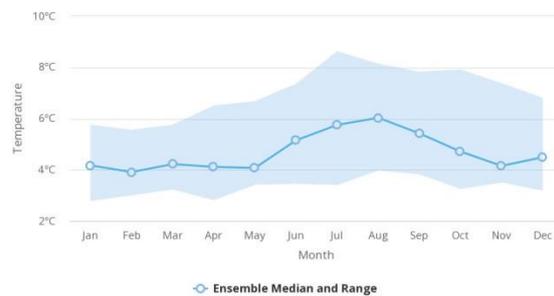
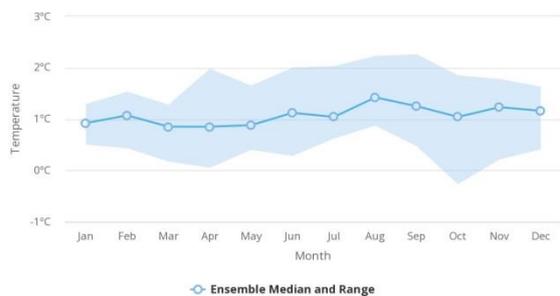


Figure 23 Projected Change in Monthly Temperature for Asyut under RCP 8.5 (World Bank, 2019)

Projections show a similar trend for Asyut. Under the RCP 4.5 scenario, the monthly temperature will increase and the median increase is almost doubled for every month as we go from the 2020-2039 period to the 2080-2099 period. The highest increase will also be in August reaching more than 3°C by 2080-2099. While for the RCP 8.5 scenario, the increase will be much higher with no less than 1°C for 2020-2039 and reaching around 1.8°C in August. On the longer term, the increase will surpass 4°C reaching a maximum median of 6°C in August.

Projected Change in Monthly Temperature for Egypt at Location (30.76,28.09) for 2020-2039



Projected Change in Monthly Temperature for Egypt at Location (30.76,28.09) for 2080-2099

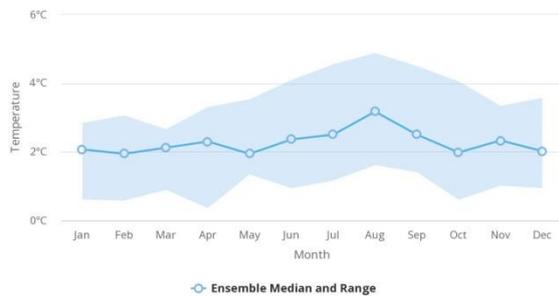
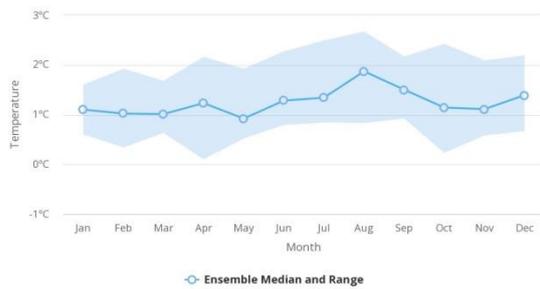


Figure 24 Projected Change in Monthly Temperature for Minya under RCP 4.5 (World Bank, 2019)

Projected Change in Monthly Temperature for Egypt at Location (30.76,28.09) for 2020-2039



Projected Change in Monthly Temperature for Egypt at Location (30.76,28.09) for 2080-2099

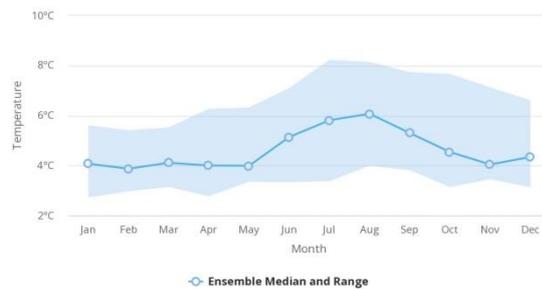
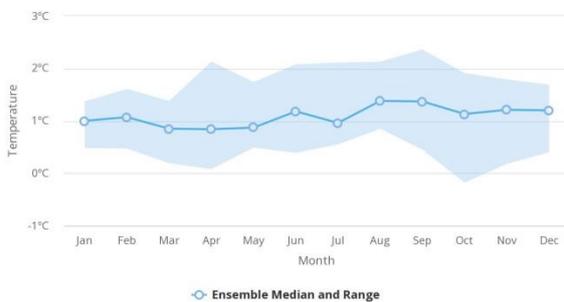


Figure 25 Projected Change in Monthly Temperature for Minya under RCP 8.5 (World Bank, 2019)

Projections show a similar trend for Minya. Under the RCP 4.5 scenario, the monthly temperature will increase and the median increase is almost doubled for every month as we go from the 2020-2039 period to the 2080-2099 period. The highest increase will also be in August reaching more than 3°C by 2080-2099. While for the RCP 8.5 scenario, the increase will be much higher with no less than 1°C for 2020-2039 and reaching almost 2°C in August. On the longer term, the increase will surpass 4°C reaching a maximum median of 6°C in August.

Projected Change in Monthly Temperature for Egypt at Location (31.70,26.54) for 2020-2039



Projected Change in Monthly Temperature for Egypt at Location (31.70,26.54) for 2080-2099

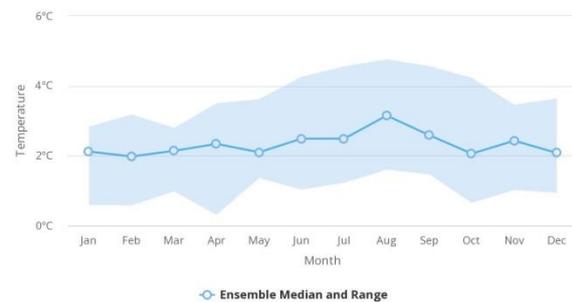
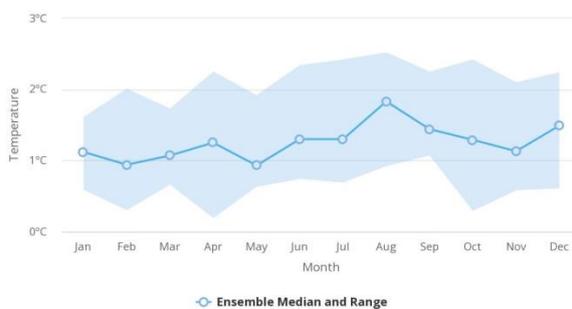


Figure 26 Projected Change in Monthly Temperature for Sohag under RCP 4.5 (World Bank, 2019)

Projected Change in Monthly Temperature for Egypt at Location (31.70,26.54) for 2020-2039



Projected Change in Monthly Temperature for Egypt at Location (31.70,26.54) for 2080-2099

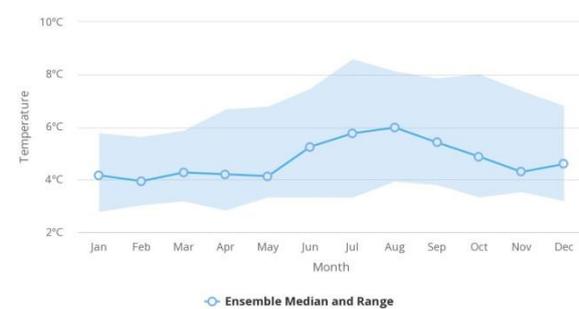
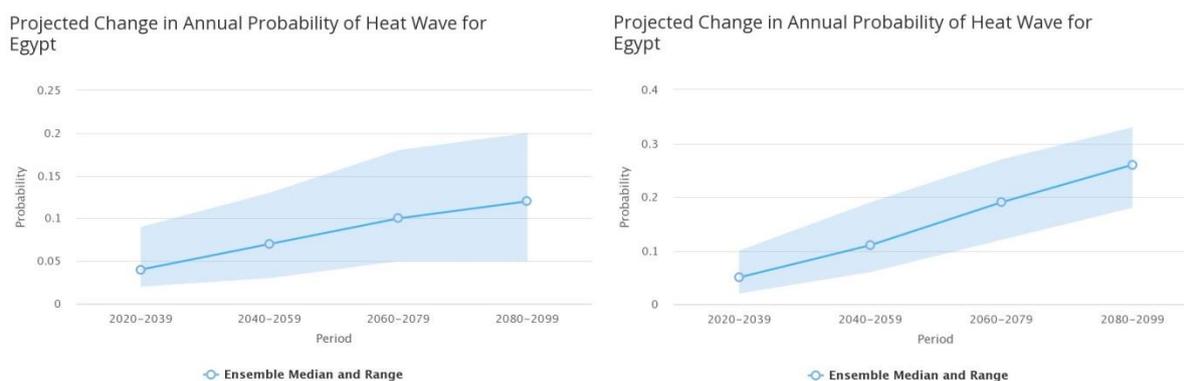


Figure 27 Projected Change in Monthly Temperature for Sohag under RCP 8.5 (World Bank, 2019)

Projections show a similar trend for Sohag. Under the RCP 4.5 scenario, the monthly temperature will increase and the median increase is almost doubled for every month as we go from the 2020-2039 period to the 2080-2099 period. The highest increase will also be in August reaching more than 3°C by 2080-2099. While for the RCP 8.5 scenario, the increase will be much higher with no less than 1°C for 2020-2039 and reaching around 1.8°C in August. On the longer term, the increase will surpass 4°C reaching a maximum median of 6°C in August.



**Figure 28 Projected Change in Annual Probability of Heat Wave for Egypt under RCP 4.5 (left) and RCP 8.5 (right)**

The frequency of occurrence of heat waves is most likely to increase in the future. Under the RCP 4.5 scenario, the annual probability of heat waves for Egypt increases with time starting with a median value of 0.03 for the 2020-2039 period until it reaches 0.12 for the 2080-2099 period. The probability almost doubles with the RCP 8.5 scenario starting with a median value of 0.05 for the 2020-2039 period until it reaches around 0.27 for the 2080-2099 period. This index shows the daily probability of observing a heat wave which is- according to the World Bank Climate Change Knowledge Portal- a 3 or more-day sequence where the daily temperature is above the long-term 95<sup>th</sup> percentile of daily mean temperature.

### **Impact of Climate Change on Crops (CARD Analysis)**

Climate change is expected to have a major impact on crops in Egypt. The figure below shows the impact of climate change on major crops in Egypt at a median risk for the period 2020-2039 relative to the projected 2020 baseline. The analysis uses IFAD's Climate Adaptation in Rural Development Assessment Tool (CARD).

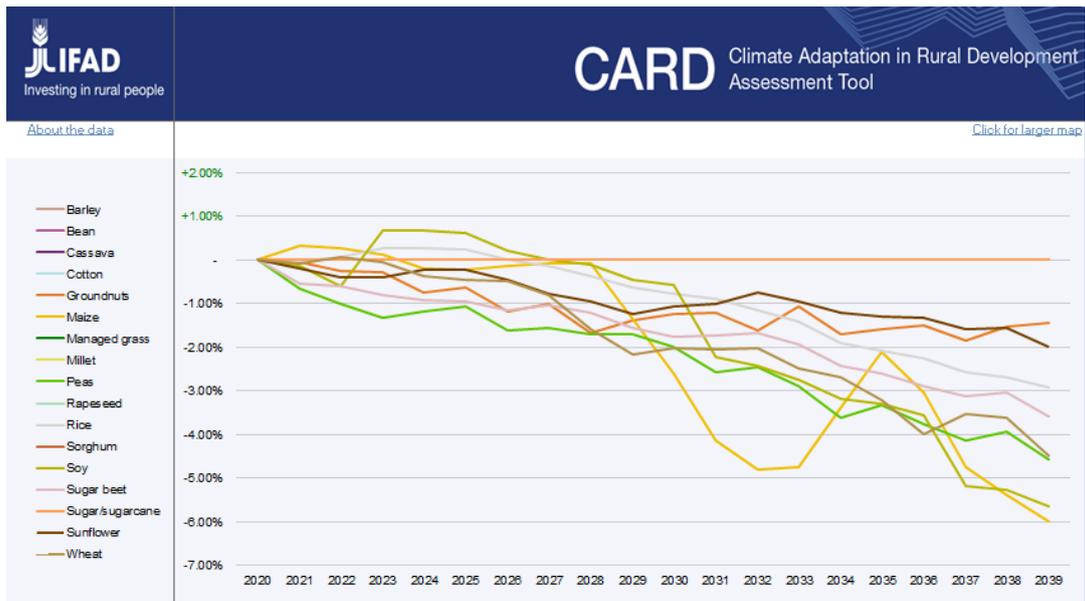


Figure 29 Predicted Impact of Climate Change on Crops in Egypt under Median Risk Scenario (2020-2039)

Under the median risk scenario, almost all major crops- except sugarcane- will eventually suffer a decline as we move towards 2039. Maize, rice and soy beans production will slightly increase in the first few years but will then decline drastically to reach -5.98%, -2.91% and -5.63% respectively by 2039. Wheat will also decline by around -4.47% by 2039.

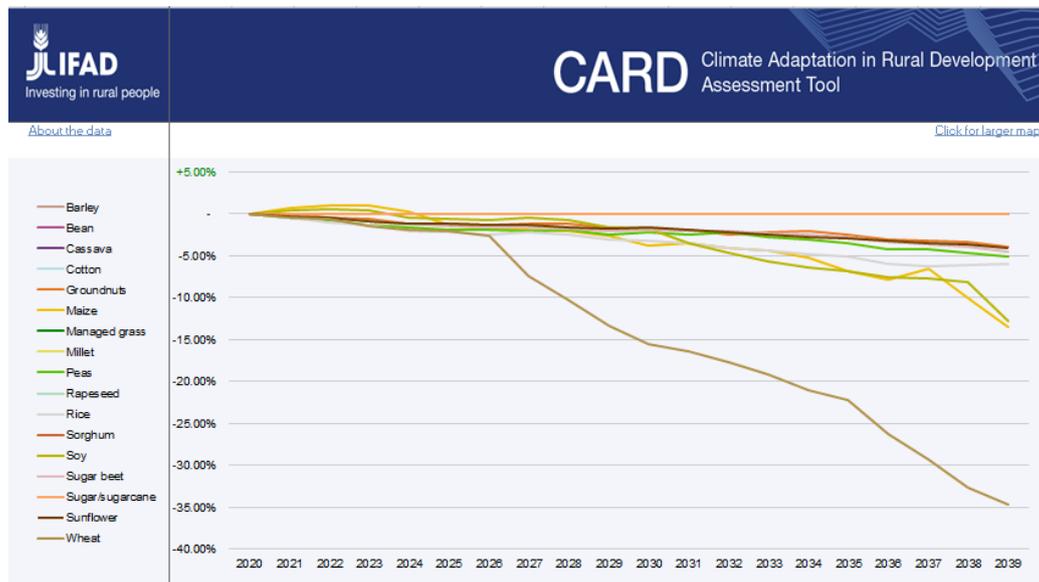


Figure 30 Predicted Impact of Climate Change on Crops in Egypt under Pessimistic Risk Scenario (2020-2039)

Under the pessimistic risk scenario, almost all major crops will eventually suffer a decline as we move towards 2039. Maize and soy beans production will slightly increase in the first few years but will then decline drastically to reach -13.56% and -12.72% respectively by 2039. In this scenario, wheat production will suffer the biggest decline with -34.65% in 2039.

## Annex 5.3: Alignment with National Strategies

The project objectives and components are well aligned with Egypt's main plans and strategies.

**Sustainable Development Strategy: Egypt Vision 2030.** Through this long-term strategy, Egypt looks to achieve sustainable development by 2030 taking into consideration the economic, social and environmental dimensions. The project will contribute- through both of its agricultural marketing and production components- towards achieving the 2030 target for percentage of female headed households living under the poverty line (0%); geographical gap in the percentage of population under poverty line (5%); percentage of population below the extreme poverty line (0%); unemployment rate (5%); female labour force participation (35%); Ratio of private sector contribution to GDP (75%); ratio of total water consumption (80%); percentage of loss in water transfer networks (<5%); and reduction of the expected increasing rates of greenhouse gas emissions.

**Sustainable Agriculture Development Strategy Towards 2030 (2009).** Through this strategy, Egypt aims to use natural agricultural resources in a sustainable way; increasing productivity of land and water units; improving food security with regards to strategic commodities; increase competitiveness of agricultural products in local and international markets; enhancing the climate for agricultural investment; and alleviating rural poverty. The project is well aligned with the strategy through both if its components that focus on water-efficient agricultural production; promoting soil conservation through better farming practices; demonstrating climate-resilient farming; enhancing marketing capabilities of smallholder farmers and reducing post-harvest losses; building capacities for micro-enterprises development; in addition to the project's poverty oriented targeting methodology.

**National Water Resources Plan 2037.** Through this strategy, Egypt aims to address water scarcity in the context of increasing demand due to rapid population growth taking into consideration water quantity and quality from economic, social and environmental perspectives. The project is well aligned with three of the four pillars of the strategy namely improving water quality, rationalising water use and enhancing the enabling environment for sound integrated water resources management. The project will contribute through more efficient irrigation systems; improved water quality through sustainable farming practices; and water asset management strategies at the governorate level.

**National Strategy for Adaptation to Climate Change and Disaster Risk Reduction (2011).** Through this strategy, Egypt aims increase the flexibility of its community when dealing with the risks and disasters that might be caused by climate change and its impact on different sectors and activities. It also aims at strengthening the capacity to absorb and reduce the risks and disasters to be caused by such changes. The project is well aligned with the strategy in terms of climate change adaptation measures for the water and agriculture sectors through more efficient irrigation networks; better management of land resources; improved agro-industry and marketing systems; capacity building for institutions and rural communities; and enhanced early warning systems.

**Egypt's Intended Nationally Determined Contributions (INDCs).** Egypt's INDC not only focuses on climate change mitigation but has a strong adaptation component as well to promote resilience across the different sectors. The project is well aligned with the INDC's adaptation policies in for the water and agriculture sectors through investing in more water-efficient irrigation systems, building institutional capacities to manage climate risks, developing agro-economic systems to manage crops in a climate-resilient manner. The project will also contribute to mitigation across the agriculture sector through the installation of solar pumps in irrigation systems and introducing better farming practices.

**National Strategy for Mainstreaming Gender in Climate Change in Egypt.**

Through this strategy, Egypt aims to mainstream gender considerations into national climate change initiatives and policies so that both men and women have equal opportunity to understand, participate and decide effective measures to implement mitigation and adaptation activities. The project is well aligned with this strategy as it will enhance rural women's access to technology and micro-credit for agricultural production; raise women's awareness on the importance of efficient water use; provide specific information to women on climate change and nutrition; and build women's capacities on the different adaptation techniques.

**National Disaster Risk Reduction Strategy 2030.** Through this strategy, Egypt aims at improving the national system of crisis/disaster management and Disaster Risk Reduction (DRR) by coordinating efforts on all levels, institutions and national sectors. The project is well aligned with this strategy by contributing to its fifth goal regarding increasing enhancing early warning systems; building capacities for addressing climate change; and improving disaster risk reduction. The project will work closely with the DRR committees/focal points at the governorate level with regards to all the climate change relevant activities.

**Egyptian Biodiversity Strategy and Action Plan (2015-2030).** Through this strategy, Egypt aims to conserve and manage terrestrial and aquatic biodiversity; use natural resources in a sustainable manner; enhance access to genetic resources and benefit sharing; improve understanding of how ecosystems work; prepare for climate change and combat desertification; and integrate biodiversity in all national frameworks. The project is well aligned with the strategy in promoting sustainable agricultural practices that conserve soil resources; installing more efficient irrigation systems; and promoting organic agriculture with minimal use of fertilizers and pesticides.

## **Annex 5.4: Environmental and Social Management Plan**

### **Grievance and Redress Mechanism (GRM)**

The programme will follow IFAD's Complaints Procedure which ensures that appropriate mechanisms are in place to allow individuals and communities to contact IFAD directly and file a complaint if they believe they are or might be adversely affected by an IFAD-funded project/programme not complying with IFAD's Social and Environmental Policies and mandatory aspects of SECAP.

IFAD's Grievance and Redress Mechanism shall be fully explained to stakeholders during the programme's start-up workshop and to beneficiaries during the programme's activities. The complainants should first bring the matter to the attention of the PMU or to the Ministry of Agriculture and Land Reclamation. If the PMU does not adequately respond, then the matter may be brought to the attention of IFAD. The issue may be brought straight to IFAD if the complainants feel they might be subject to retaliation if they went to the PMU directly.

Grievances shall be addressed at the field level by the project team which will be the first layer of redressal mechanism. If the grievance is not resolved at the field level, it will be escalated to the PMU and then to IFAD who will be responsible for addressing grievances related to violations of the Programme's SECAP or the Environmental and Social Policy of the Adaptation Fund (if co-financing from AF is made available). AfDB's, OFID's and WFP's complaints management mechanisms shall apply to any complaints regarding activities financed through their own funds.

All grievances received and action taken on them- including the ones received by AfDB, OFID and WFP- will be reported to the PMU and Steering committee. In this regard, the PMU shall coordinate with the AfDB, OFID and WFP to ensure that the all complaints received and actions taken to address them are included in the progress reports.

<b>Interventions</b>	<b>Social, Environmental &amp; Climate Risk Factors</b>	<b>Mitigating Measure</b>	<b>Monitoring</b>	<b>Responsible Institution</b>	<b>Cost</b>
<i>All interventions</i>	All possible risks	<ul style="list-style-type: none"> <li>Apply the Grievance Redress Mechanism (GRM) strictly.</li> <li>Ensure dissemination of the GRM to local communities prior to starting project activities.</li> <li>Maintain solid documentation for the received complaints during the operation of the project and track the level of responsiveness (provision of feedback).</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly review of the number of complaints received.</li> <li>Quarterly review of the number of complaints addressed, the mechanisms used and the time it took to address them.</li> </ul>	<ul style="list-style-type: none"> <li>PMU. If not solved then IFAD, AfDB, OFID or WFP depending on which activity the complaint is referring to.</li> </ul>	<ul style="list-style-type: none"> <li>\$2,000 (PMU admin budget)</li> </ul>
<i>All interventions</i>	<u>Social:</u> Beneficiary Dissatisfaction and Discrimination	<ul style="list-style-type: none"> <li>Collect feedback on project performance and beneficiary satisfaction from women and men of various age groups, especially the most vulnerable (landless, women head of households, youth, especially young girls), through focus group discussions.</li> </ul>	<ul style="list-style-type: none"> <li>Annual surveys.</li> </ul>	<ul style="list-style-type: none"> <li>PMU</li> </ul>	<ul style="list-style-type: none"> <li>\$5,000 (M&amp;E budget)</li> </ul>
<i>All interventions</i>	<u>Social:</u> Gender Issues and all forms of Gender Based Violence, including sexual	<ul style="list-style-type: none"> <li>Increasing local CDAs engagement to work with local leaders and male household's members to campaign for gender</li> </ul>	Annually collecting gender-disaggregated monitoring and evaluation data to track	<ul style="list-style-type: none"> <li>PMU</li> </ul>	<ul style="list-style-type: none"> <li>\$15,000 (Capacity building budget)</li> </ul>

	<p>harassment (due to the increasing mobilisation of women to participate in project activities; attend trainings, exchange visit, learning).</p>	<p>equality and against gender biases at community and household level.</p> <ul style="list-style-type: none"> <li>• Conducting gender-sensitive and participatory consultations while finalizing and designing the various sub-project activities (enterprise development Component 1.2) such as the selection of commodities and products, training activities, and capacity building initiatives related to IGA/entrepreneurial development for women. These have to include safe spaces/ women-only focus groups to encourage women's meaningful participation in consultations.</li> <li>• Create female only spaces for women to receive trainings and services.</li> <li>• Gender mainstreaming actions should be developed as part of a Gender Development Plan (GDP) prepared by the CDAs engaged in the implementation.</li> </ul>	<p>the extent to which women have been able to participate and benefit from project activities.</p>		
<b>Strengthening rural institutions, enterprises and markets</b>					
<p>1.1. Strengthening marketing institutions</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>• Women, Youth and other vulnerable categories are</li> </ul>	<ul style="list-style-type: none"> <li>• Conducting strong public information dissemination at different levels on the programme objectives, eligibility criteria, the</li> </ul>	<ul style="list-style-type: none"> <li>• Annually monitoring the indicators for the percentage of women and youth participating in</li> </ul>	<ul style="list-style-type: none"> <li>• PMU</li> </ul>	<ul style="list-style-type: none"> <li>• \$5,000 (M&amp;E budget)</li> </ul>

	<p>excluded from capacity building</p> <ul style="list-style-type: none"> <li>Farmers are unable to fully utilize digital technologies in marketing</li> </ul>	<p>selection process for capacity building activities</p>	<p>Marketing Associations.</p> <ul style="list-style-type: none"> <li>Annually monitoring the use of digital platforms (e.g. number of hits or downloads of applications)</li> </ul>		
<p>1.2. <i>Micro enterprises development</i></p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>Lack of ability of entrepreneurs with insufficient education or exposure to develop a good business plan</li> <li>Elite capture</li> </ul>	<ul style="list-style-type: none"> <li>Investing in capacity building for business plans development and enhancing entrepreneurial skills.</li> <li>Implementing the programme's targeting strategy to make sure the component reaches the poorest and landless beneficiaries</li> </ul>	<ul style="list-style-type: none"> <li>Conducting surveys to assess entrepreneurial skills during baseline assessments.</li> <li>Monitoring the percentage of poorest and landless who develop micro-enterprises during MTR and completion.</li> </ul>	<ul style="list-style-type: none"> <li>PMU</li> </ul>	<ul style="list-style-type: none"> <li>\$5,000 (Capacity building budget)</li> </ul>
<b>2. Improvement of smallholders productivity and resilience</b>					
<p>2.1. <i>Investments in irrigation infrastructure and management</i></p>	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>Environmental Impact due to irrigation infrastructure work</li> </ul> <p><u>Social:</u></p> <ul style="list-style-type: none"> <li>Poor smallholder farmers not benefitting from the programme</li> <li>Tension within Water Users Associations (WUAs)</li> <li>Farmers are unwilling to</li> </ul>	<ul style="list-style-type: none"> <li>The project will ensure complying with the national law regarding Environmental Impact Assessments. The project will follow the Environmental and Social Management Plan for each sub-component to ensure that the interventions are in line with IFAD's policies.</li> <li>Canal selection shall be based on canals that need rehabilitation and feeding the highest number of poorest villages (as defined by the governorates).</li> </ul>	<ul style="list-style-type: none"> <li>Applying the Grievance Redress Mechanism will ensure that communities have a channel to voice any complaints regarding any negative environmental or social impact of the project's interventions.</li> <li>The monitoring and evaluation officer in the Project Management Unit will report any negative impacts or complaints on monthly basis.</li> </ul>	<ul style="list-style-type: none"> <li>PMU. If not solved then IFAD, AfDB, OFID or WFP depending on which activity the complaint is referring to.</li> <li>PMU (for the indicators and surveys).</li> </ul>	<ul style="list-style-type: none"> <li>\$10,000 (M&amp;E budget and Capacity building budget)</li> </ul>

	<p>participate in the programme</p> <ul style="list-style-type: none"> <li>• Farmers are not aware of the cost recovery policy</li> <li>• Farmers are unwilling to use their land as demonstration plots.</li> </ul>	<ul style="list-style-type: none"> <li>• The programme will set up WUAs using a participatory design the builds credibility among farmers and allows them to participate in the design of improvement plans.</li> <li>• Participatory approach shall be taken through making WUAs fully responsible for the water management. WUAs shall operate, maintain, rehabilitate and improve the water management infrastructure.</li> <li>• WUAs should be fully aware of the cost of improvement and the terms of the cost recovery prior to the improvement taking place. Farmers could be linked to credits making them responsible for the financing from the beginning.</li> <li>• Incentives shall be given to farmers who are willing to participate through receiving demonstration credit which could be set to cover 50% of cost and only to be repaid based on actual pumping cost savings</li> </ul>	<ul style="list-style-type: none"> <li>• Targeting indicators will be reviewed to ensure reaching out the poorest on annual basis.</li> <li>• Surveys shall be conducted to assess farmers' and WUAs' satisfaction during MTR and completion.</li> </ul>		
2.2. Improved crop farming practices	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>• Women, Youth and other vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>• Conducting strong public information dissemination at different levels on the programme objectives,</li> </ul>	<ul style="list-style-type: none"> <li>• Annually monitoring the indicators for the percentage of women and youth</li> </ul>	<ul style="list-style-type: none"> <li>• PMU</li> </ul>	<ul style="list-style-type: none"> <li>• \$2,000 (Capacity building budget)</li> </ul>

	<p>categories are excluded from capacity building</p> <ul style="list-style-type: none"> <li>• Farmers are unable to fully utilize digital technologies in extension</li> <li>• Farmers are unwilling to use their land as demonstration plots.</li> <li>• Farmers are unwilling to share agricultural machinery</li> <li>• Young people are not willing to take part in the Young Professional Programme for on farm extension</li> </ul>	<p>eligibility criteria, the selection process for capacity building activities</p> <ul style="list-style-type: none"> <li>• Investing in capacity building for communities on digital agriculture</li> <li>• Incentives shall be given to farmers who are willing to participate through receiving demonstration credit which could be set to cover 50% of cost and only to be repaid based on actual increase in profit.</li> <li>• Investing in training for farmers on sharing agricultural awareness and increasing awareness on the cost efficiency of machinery sharing</li> <li>• The programme shall provide subsistence allowances to the young professionals and build their capacities in order to encourage future private extensions services</li> </ul>	<p>participating in Marketing Associations.</p> <ul style="list-style-type: none"> <li>• Annually monitoring the use of digital platforms (e.g. number of hits or downloads of applications)</li> <li>• Surveys shall be conducted to assess farmers' satisfaction annually.</li> <li>• Annual evaluation through surveys for the Young Professionals Programme</li> </ul>		
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## Annex 5.5: Guiding Questions for Environmental, Social and Climate Risk Screening

### Guiding questions for environment and social screening

Guiding questions for environment and social screening	Yes/no	Comments/explanation
<b>Category A – the following may have significant and often irreversible or not readily remedied adverse environmental and/or social implications.</b>		
<b>Project location</b>		
1. Would the project develop any wetlands? (Guidance statement 1)	No	
2. Would the project cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation and hydrological changes)? (Guidance statements 1, 2 and 5)	No	
3. Does the proposed project target area include ecologically sensitive areas, <sup>16</sup> areas of global/national significance for biodiversity conservation, and/or biodiversity-rich areas and habitats depended on by endangered species? (Guidance statement 1)	No	
4. Is the project location subjected to major destruction as a result of geophysical hazards (tsunamis, landslides, earthquakes, volcanic eruptions)?	No	
<b>Natural resources</b>		
5. Would the project lead to unsustainable natural resource management practices (fisheries, forestry, livestock) and/or result in	No	

<sup>16</sup> “Sensitive areas” include: protected areas (national parks, wildlife/nature reserves, biosphere reserves) and their buffer zones; areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation, areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance), and areas with high social vulnerability.

exceeding carrying capacity. For example, is the development happening in areas where little up-to-date information exists on sustainable yield/carrying capacity? (Guidance statements 4, 5 and 6)		
6. Would the project develop large-scale <sup>17</sup> aquaculture or mariculture projects, or where their development involves significant alteration of ecologically sensitive areas?	No	
7. Would the project result in significant use of agrochemicals which may lead to life-threatening illness and long-term public health and safety concerns? (Guidance statement 14)	No	
8. Does the project rely on water-based (groundwater and/or surface water) development where there is reason to believe that significant depletion and/or reduced flow has occurred from the effects of climate change or from overutilization? (Guidance statement 7)	Yes	The project will involve improving water-use efficiency precisely to reduce pressure on limited water resources. This may involve rehabilitation of irrigation schemes. This will only be done following exhaustive and rigorous assessment of renewable potential of pumping water.
9. Does the project pose a risk of introducing potentially invasive species or genetically modified organisms which might alter genetic traits of indigenous species or have an adverse effect on local biodiversity? (Guidance statement 1)	No	
10. Does the project make use of wastewater (e.g. industrial, mining, sewage effluent)? (Guidance statement 7)	Yes	The project MAY involve reuse of treated wastewater for agricultural purposes, with the objective of increasing water-use efficiency and reducing

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<sup>17</sup> The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. Some countries have regulations on minimum size (usually ranging from a unit area of 10 to 50 hectares) and these will be adopted where they exist. However, where there are no standards, it is proposed to use 25 hectares as an aquaculture unit size to trigger an ESIA.

		pressure on limited water resources.
<b>Infrastructure development</b>		
11. Does the project include the construction/ rehabilitation/upgrade of dam(s) and/or reservoir(s) meeting at least one of the following criteria? - more than 15 metre high wall; - more than 500 metre long crest; - more than 3 million m <sup>3</sup> reservoir capacity; or - incoming flood of more than 2,000 m <sup>3</sup> /s (Guidance statement 8)	No	
12. Does the project involve large-scale irrigation schemes rehabilitation and/or development (more than 100 hectares per scheme)? <sup>18</sup> (Guidance statement 7)	No	
13. Does the project include construction/ rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken? (Guidance statement 10). Will the works entail temporary and/or permanent resident workers?	No	
14. Does the project include drainage or correction of natural waterbodies (e.g. river training)? (Guidance statement 7)	No	
15. Does the project involve significant extraction/diversion/containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements? (Guidance statement 7)	No	
<b>Social</b>		
16. Would the project result in economic displacement <sup>19</sup> or physical resettlement of more than 20 people, or impacting more than 10 per cent of	No	

<sup>18</sup> The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. Some countries have regulations determining size of irrigation development requiring a full ESIA and these will be adopted where they exist. However, where there are no standards, it is proposed to use 100 hectares as an irrigation development unit size to trigger an ESIA.

<sup>19</sup> Economic displacement implies the loss of land, assets, access to assets, income sources, or means of livelihoods (guidance statement 13).

an individual household's assets? (Guidance statement 13)		
17. Would the project result in conversion and/or loss of physical cultural resources? (Guidance statement 9)	No	
18. Would the project generate significant social adverse risk/impacts to local communities (including disadvantaged and vulnerable groups, indigenous people, persons vulnerable to GBV and sexual exploitation and abuse and people with disabilities) or other project-affected parties? (Guidance statement 13)	No	
<b>Other</b>		
19. Does the project include the manufacture and transportation of hazardous and toxic materials which may affect the environment? (Guidance statement 2)	No	
20. Does the project include the construction of a large or medium-scale industrial plant?	No	
21. Does the project include the development of large-scale production forestry? (Guidance statement 5)	No	
<b>Rural finance</b>		
22. Does the project support any of the above (Question 1 to Question 21) through the provision of a line of credit to financial service providers? (Guidance statement 12)	No	
<b>Category B – the following may have some adverse environmental and/or social implications which can be readily remedied.</b>		
<b>Location</b>		
23. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas that may have adverse impacts on habitats, ecosystems and/or livelihoods? (Guidance statements 1, 2 and 12)	No	
<b>Natural resource management</b>		
24. Do the project activities include rangeland and livestock development? (Guidance statement 6)	No	

25. Does the project involve fisheries where there is information on stocks, fishing effort and sustainable yield? Is there any risk of overfishing, habitat damage and knowledge of fishing zones and seasons? (Guidance statement 4)	No	
26. Would the project activities include aquaculture and/or agriculture in newly introduced or intensively practiced areas? Do project activities include conversion of wetlands and clearing of coastal vegetation, change in hydrology or introduction of exotic species? (Guidance statement 4)	No	
27. Do the project activities include natural resource-based value chain development? (Guidance statements 1, 6 and 12)	No	
28. Do the project activities include watershed management or rehabilitation?	No	
29. Does the project include large-scale soil and water conservation measures? (Guidance statements 1 and 5)	No	
<b>Infrastructure</b>		
30. Does the project include small-scale irrigation and drainage, and small and medium dam subprojects (capacity < 3 million m <sup>3</sup> )? (Guidance statements 7 and 8)	No	
31. Does the project include small and microenterprise development subprojects? (Guidance statements 12 and 13)	No	
32. Does the project include the development of agroprocessing facilities? (Guidance statements 2, 6 and 12)	Yes	The project will work on strengthening of marketing infrastructure which can include construction of small agro processing facilities such as small cooling and packing facilities
33. Would the construction or operation of the project cause an increase in traffic on rural roads? (Guidance statement 10)		

<b>Social</b>		
34. Would any of the project activities have minor adverse impacts on physical cultural resources? (Guidance statement 9)	No	
35. Would the project result in physical resettlement of 20 people or less, or impacting less than 10 per cent of an individual household's assets (Guidance statement 13)?	No	
36. Would the project result in short-term public health and safety concerns? (Guidance statement 14)	No	
37. Would the project require a migrant workforce or seasonal workers (for construction, planting and/or harvesting)? (Guidance statement 13)	No	
<b>Rural finance</b>		
38. Does the project support any of the above (Question 23 to Question 37) through the provision of a line of credit to financial service providers? (Guidance statement 12)	Yes	Financing of Agribusinesses and marketing infrastructure

### **Guiding questions for climate risk screening**

	Yes	No	Additional explanation of "yes" response*
1. Is the project area subject to extreme climatic events, such as flooding, drought, tropical storms or heat waves?	Yes		Extreme weather events such as storms and flooding are more frequent and may increase in future. Heavy rains and flooding affected the Assuit, Red Sea, Sohag, South Sinai and Qena governorates in December 2016
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over its lifetime?	Yes		A strong increase in the duration of heat waves is projected.
3. Would the project make investments in low-lying coastal areas/zones exposed to tropical storms?		No	

4. Would the project make investments in glacial areas and mountains zones?		No	
5. Would the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes or floodplains)?		No	
6. Is the project located in areas where rural development projects have experienced significant weather-related losses and damages in the past?		No	
7. Would the project develop/install infrastructure in areas with a track record of extreme weather events?	Yes		The project will invest in construction/upscaling of marketing infrastructure such as warehouses, post-harvest processing facilities. Additionally, access roads will be constructed to enhance market linkages. Heavy rains and flooding has effects on the proposed area of intervention, though its occasional.
8. Is the project target group entirely dependent on natural resources (such as seasonal crops, rainfed agricultural plots, migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?		No	
9. Would climate variability likely affect agricultural productivity (crops/livestock/fisheries), access to markets and/or the associated incidence of pests and diseases for the project target groups?		No	
10. Would weather-related risks or climatic extremes likely adversely impact	Yes		Heat waves and rise in temperatures will reduce yields for crops which are sensitive to climate change. As part of the

upon key stages of identified value chains in the project (from production to markets)?			mitigation measures for STAR, the project will assess the possibility of introducing climate resistant varieties
11. Is the project investing in climate-sensitive livelihoods that are diversified?		No	
12. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?	Yes		Heat waves, flooding and heavy rains occur occasionally in the proposed project area
13. Is the project investing in institutional development and capacity-building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous areas?		No	
14. Does the project have the potential to become more resilient through the adoption of green technologies at a reasonable cost?	Yes		The introduction of solar pumps for irrigation will have a positive impact
15. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?	Yes		
16. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector strategies and policies?		No	
17. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g. improved building codes, capacity-building, or including climate risk		No	

issues in policy processes)?			
18. Based on the information available would the project benefit from a more thorough accounting of GHG emission ?		No	

## **Egypt**

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# **Sustainable Transformation for Agricultural Resilience in Upper Egypt Project Design Report**

## **Annex 6: First Annual Work Plan and Budget (AWPB)**

Document Date: 29/10/2019  
Project No. 2000002202  
Report No. 5141-EG

Near East, North Africa and Europe Division  
Programme Management Department



## Annex 6: First Annual Work Plan and Budget (AWPB)

Annual Work Plan & Budget of the project "Sustainable Transformation for Agricultural Resilience in Upper Egypt [STAR]"

Description of activity by Category	Description of activity by Component/subcomponent	Unit	Quantity	Cumulative Expenditure ( 000'USD)		The expected results of the project for 2019						Financier Rule ( 2020 and half 2021) usd 000							National rat cha so		
				Plan ( 18 month)	Actual %	#/ha/deddan			HH/ppl			IFAD Loan	IFAD Grant	Govt	OFID	WFP	AF	Beneficiary		AFDB	PFI
						Plan	Actual	%	Plan	Actual	%										
<b>1. Strengthening rural institutions, enterprises and markets</b>																					
<b>Subcomponent 1.1. "Strengthening marketing institutions"</b>																					
	<b>A. Studies and training material developed by service providers</b>																				
TA_AND_CONS	Service provider for preparation of training material /a	lumpsum	-	30								-	30.00	-	-	-	-				
TWM	Community mobilization, awareness package, training material preparation and guidelines /b	lumpsum	-	76								-	76.00	-	-	-	-				
TA_AND_CONS	Institutional need assessment /c	no. of studies	3	15								-	15.00	-	-	-	-				
TA_AND_CONS	Market studies /d	no. of studies	3	15								-	15.00	-	-	-	-				
TA_AND_CONS	Agribusiness landscape and opportunities /e	no. of studies	3	15								-	15.00	-	-	-	-				
TA_AND_CONS	Quantitative assessment on access to finance, demand and supply	no. of studies	1	8								-	-	-	-	-	-				
TA_AND_CONS	Analysis of climate risks	local VC	40	81								-	-	-	-	-	80.68				
	<b>B. Sensitisation and mobilisation for CDAs, cooperatives, women groups and MAs</b>																				
TWM	Training of trainers /f	training sessions	5	25								-	-	-	-	25.38	-				
TWM	Communication and mobilisation campaign /g	lumpsum	-	23								-	-	-	-	22.82	-				











	development and network graph theory implementation																				
TA_AND_CONS	AIDA tool customization and implementation	lumpsum	-	57							50	7				-	-				
TA_AND_CONS	Digital hackathon for pitching 3 ideas - POC to pilot and handholding	lumpsum	-	6							5	1				-	-				
TWM	Input dealer certified courses - private extension model - linking it to input supply - extension performance /a	lumpsum	-	-							-	-				-	-				
TA_AND_CONS	Development of digital tools for early warning outreach	lumpsum	-	115							-	14				101	-				
	<b>II. Recurrent Costs</b>		-																		
			-																		
											#REF!										
<b>Total of subcomponent 2.2.</b>				<b>9,830.42</b>							<b>5,035.14</b>	<b>-</b>	<b>1,207.24</b>	<b>-</b>	<b>-</b>	<b>785.45</b>	<b>313.12</b>	<b>563.96</b>	<b>1,925.51</b>		
<b>Total of Component 2</b>				<b>13,002.50</b>							<b>5,797.78</b>	<b>30.26</b>	<b>1,509.76</b>	<b>332.77</b>	<b>-</b>	<b>785.45</b>	<b>521.10</b>	<b>1,496.74</b>	<b>2,528.65</b>		
<b>3. Programme management and policy engagement</b>																					
<b>Component 3.1" Project Management</b>																					
<b>A. Investment Costs</b>																					
<b>1. Investment Costs</b>																					
GSI	MIS System & Installation	no.	1	46							-	46									
GSI	STAR specific accounting software /a	no.	1	11							-	11									
GSI	Vehicles	vehicle	10	230							-	230									
GSI	Laptops	no.	30	14							-	14									
GSI	Printers	no.	5	3							-	3									
GSI	Photocopier	No	2	2							-	2									
GSI	Fax / telephone	No	10	1							-	1									
GSI	Tabs with open data kits	no.	400	138							-	138									
GSI	Handicam and video production equipments	no.	160	74							-	74									
GSI	Pico projectors / neat projectors	no.	80	28							-	28									





	<b>A. M&amp;E studies and activities</b>		-																
TA_AND_CONS	Baseline survey	lumpsum	1	115						101	14								
TA_AND_CONS	Completion survey	lumpsum	-	-						-	-								
TA_AND_CONS	Annual Outcome surveys	lumpsum	1	15						13	2								
TWM	Annual M&E and planning workshop	lumpsum	1	6						5	1								
TA_AND_CONS	Knowledge management activities	lumpsum	1	12						10	1								
TA_AND_CONS	M&E data collection activities	lumpsum	2	9						8	1								
TA_AND_CONS	Technical assistance	lumpsum	1	17						15	2								
TA_AND_CONS	Website and social media	lumpsum	2	5						-	5								
TA_AND_CONS	Impact assessment	study	-	-						-	-								
TWM	Communication and KM products on success stories	lumpsum	5	52						46	6								
TA_AND_CONS	Audit	audit	1	5						4	1								
										-									
										-									
<b>Total of Component 3.</b>				<b>2,490</b>	-	-				<b>955</b>	-	<b>1,016</b>	-	-	<b>519</b>	-	-	-	
<b>Grand Total of the Project</b>				<b>52,241</b>						<b>25,831</b>	<b>412</b>	<b>3,250</b>	<b>793</b>	<b>7,085</b>	<b>1,689</b>	<b>1,210</b>	<b>4,005</b>	<b>7,968</b>	

**Footnotes for Component 1.1:**

\a Responsible also for the training of trainer

\b Done by the service provider; related to community mobilisation, development of rural institutions, business plan development; including farming as a business and crop budget module, marketing modules, business modules, financial management modules;

revisi

\c One per governorate

\d One per governorate

\e One per governorate

\f Training workshop 30 members per w/s, SP trains Yps, and CDTs.

\g Per cluster; carried out by the mobilisers in CDTs, CDT and Yps based on awareness package developed by the service provider

\h Per village; roll out carried out by the CDAs and Yps and CDTs

\i 20 women per village; this will also include buyers orientation workshops

\j this includes guidance on Wealth ranking Exercise

\k Learning village to village on different topics: agriculture/off-farm enterprise  
\l 20 women per village  
\m 10 people per village  
\n per cluster  
\o Machinery and equipment  
\p Estimated one collection centre per cluster  
\q One per cluster  
\r Including campaigns, publicity, group discussions  
\s Mentoring 3 pilot projects

**Footnotes for Component 1.2:**

\a At start, mid-term and completion  
\b At start, mid-term and completion  
\c 15 demos per cluster identified  
\d 2 demos per cluster identified  
\e 5 demos per cluster identified  
\f 1 demo per cluster identified  
\g 15 demos per cluster identified  
\h expertise on insurance, credit guarantee, secured transactions

**Footnotes for Component 2.1:**

\a 10 demos per cluster identified  
\b This involves, mobilisation, training, capacity building and institutional development support to WUAs  
\c Electromagnetic flow meter model ex: FM600 / 6"), IoT master control RTU, communication booster, servo Stabilizer and an online UPS  
\d Electromagnetic flow meter model ex: FM600 / 6"), IoT master control RTU, communication booster, servo Stabilizer and an online UPS  
\e Two for each governorate

**Footnotes for Component 2.2:**

\a Piloted in 5 locations in each governorate every year

**Footnotes for Component 3**

\a Access to 5 users  
\b Attended by 6 project staff and 1 IFAD employee  
/consultant - in Cairo  
\c International  
consultant



## **Egypt**

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# **Sustainable Transformation for Agricultural Resilience in Upper Egypt Project Design Report**

## **Annex 7: Procurement Plan for first 18 months**

Document Date: 29/10/2019  
Project No. 2000002202  
Report No. 5141-EG

Near East, North Africa and Europe Division  
Programme Management Department







**CONSULTANTS**

Country/Organization: Egypt

Project/Programme: Sustainable Transformation for Agricultural Resilience in Upper Egypt

Loan #:

Drafter of this PP:

Procurement Method

OCBS

OBS

FBS

LCS

COS

SSS

SIC

IFAD prior review is required for Consultancy Services procurement value with more than USD 50,000

IFAD prior review is required for individual Consultants procurement value with more than USD 5,000

For other Financier, the procurement methods will be revised

Description	AW/PB Ref.	Selection method	Lump-sum or time-based	Estimated amount in US\$	Pre/Post-review	Plan vs. Actual	Request for expression of interest				Terms of Reference		Shortlist		Request for Proposal				Bid evaluations technical (T) and financial (F)				Contract Finalisation			
							Date published	Closing date	Date proposed	Date no-objected	Date proposed	Date no-objected	Plan vs. Actual	Date prepared	Date no-objected	Invitation date	Submission/opening date	Submission evaluation report (T)	no-objected evaluation report (T)	Opening Financial Proposal	Submission eval. Report (T) and (F)	no-objected eval. Report (T) and (F)	Plan vs. Actual	Contract amount in US\$	Contract award	Contract signature
							Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual	Plan vs. Actual
Recruitment of Individual Consultant for preparation of training material and providing training of trainer		SIC	Lump-sum	30,000	Prior	Actual	01-Sep-20	11-Sep-20	01-Aug-20	06-Aug-20	16-Sep-20	21-Sep-20	Actual	NA	NA	NA	NA	NA	NA	NA	26-Sep-20	01-Oct-20	Plan	21-Oct-20	21-Oct-20	
Recruitment of Consulting Firm for Community mobilization, awareness package, training material preparation and guidelines		QCBS	Lump-sum	75,000	Prior	Actual	01-Oct-20	16-Oct-20	01-Oct-20	08-Oct-20	26-Oct-20	02-Nov-20	Actual	12-Nov-20	19-Nov-20	20-Nov-20	20-Dec-20	09-Jan-21	19-Jan-21	26-Jan-21	30-Dec-20	06-Jan-21	Plan	26-Jan-21	05-Feb-21	
Recruitment of Consulting Firm for carrying out institutional need assessment, Market studies, Agribusiness landscape and Quantitative assessment on access to finance		QCBS	Lump-sum	55,000	Prior	Actual	15-Oct-20	30-Oct-20	15-Oct-20	22-Oct-20	09-Nov-20	16-Nov-20	Actual	26-Nov-20	03-Dec-20	04-Dec-20	03-Jan-21	23-Jan-21	02-Feb-21	09-Feb-21	13-Jan-21	20-Jan-21	Plan	09-Feb-21	19-Feb-21	
Recruitment of Consulting Firm for carrying out Analysis of climate risks		QCBS	Lump-sum	80,000	Prior	Actual	01-Nov-20	16-Nov-20	01-Nov-20	08-Nov-20	26-Nov-20	03-Dec-20	Actual	13-Dec-20	20-Dec-20	21-Dec-20	20-Jan-21	09-Feb-21	19-Feb-21	26-Feb-21	30-Jan-21	06-Feb-21	Plan	26-Feb-21	08-Mar-21	
Recruitment of Individual Consultant for providing training of trainer for mobilisation of CDAs, cooperatives, women groups and MAs		SIC	Lump-sum	15,000	Prior	Actual	01-Sep-20	11-Sep-20	01-Aug-20	06-Aug-20	16-Sep-20	21-Sep-20	Actual	NA	NA	NA	NA	NA	NA	NA	26-Sep-20	01-Oct-20	Plan	21-Oct-20	21-Oct-20	
Recruitment of Consulting Firm for carrying out Communication and mobilisation campaign		QCBS	Lump-sum	15,000	Post	Actual	15-Oct-20	30-Oct-20	15-Oct-20	22-Oct-20	09-Nov-20	16-Nov-20	Actual	26-Nov-20	03-Dec-20	04-Dec-20	03-Jan-21	23-Jan-21	02-Feb-21	09-Feb-21	13-Jan-21	20-Jan-21	Plan	09-Feb-21	19-Feb-21	
Recruitment of Individual Consultant for development of training material for TOT trainings on targeting and gender		SIC	Lump-sum	3,000	Post	Actual	01-Nov-20	11-Nov-20	01-Aug-20	06-Aug-20	16-Nov-20	21-Nov-20	Actual	NA	NA	NA	NA	NA	NA	NA	26-Nov-20	01-Dec-20	Plan	21-Dec-20	21-Dec-20	
Recruitment of Consulting Firm for providing post-harvest specialized technical assistance		QCBS	Lump-sum	29,000	Post	Actual	15-Oct-20	30-Oct-20	15-Oct-20	22-Oct-20	09-Nov-20	16-Nov-20	Actual	26-Nov-20	03-Dec-20	04-Dec-20	03-Jan-21	23-Jan-21	02-Feb-21	09-Feb-21	13-Jan-21	20-Jan-21	Plan	09-Feb-21	19-Feb-21	
Recruitment of Consulting Firm to provide capacity building on climate change issues		QCBS	Lump-sum	230,000	Prior	Actual	01-Nov-20	21-Nov-20	01-Nov-20	11-Nov-20	11-Dec-20	21-Dec-20	Actual	05-Jan-21	15-Jan-21	18-Jan-21	01-Mar-21	31-Mar-21	10-Apr-21	20-Apr-21	25-Apr-21	05-May-21	Plan	25-May-21	14-Jun-21	
Recruitment of Consulting Firm for the development of Digital market Platform and Customization of Baschaier of KEF		QCBS	Lump-sum	690,000	Prior	Actual	15-Dec-20	04-Jan-21	15-Dec-20	25-Dec-20	24-Jan-21	03-Feb-21	Actual	18-Feb-21	28-Feb-21	03-Mar-21	14-Apr-21	14-May-21	24-May-21	03-Jun-21	08-Jun-21	18-Jun-21	Plan	08-Jul-21	28-Jul-21	
Recruitment of Consulting Firm for the development of Digital Finance STAR Wallet and Mobile Money - Platform Integration		QCBS	Lump-sum	690,000	Prior	Actual	15-Jan-21	04-Feb-21	15-Jan-21	25-Jan-21	24-Feb-21	06-Mar-21	Actual	21-Mar-21	31-Mar-21	03-Apr-21	15-May-21	14-Jun-21	24-Jun-21	04-Jul-21	09-Jul-21	19-Jul-21	Plan	08-Aug-21	28-Aug-21	
Recruitment of Consulting Firm for the development of Visual agriculture marketing Module		QCBS	Lump-sum	460,000	Prior	Actual	15-Feb-21	07-Mar-21	15-Feb-21	25-Feb-21	27-Mar-21	06-Apr-21	Actual	21-Apr-21	01-May-21	04-May-21	15-Jun-21	15-Jul-21	25-Jul-21	04-Aug-21	09-Aug-21	19-Aug-21	Plan	08-Sep-21	28-Sep-21	
Recruitment of Consulting Firm for the development of Content development and inventory on digital agriculture		QCBS	Lump-sum	345,000	Prior	Actual	15-Mar-20	04-Apr-20	15-Mar-20	25-Mar-20	24-Apr-20	04-May-20	Actual	19-May-20	29-May-20	01-Jun-20	13-Jul-20	12-Aug-20	22-Aug-20	01-Sep-20	06-Sep-20	16-Sep-20	Plan	06-Oct-20	26-Oct-20	
Recruitment of Consulting Firm for the development of MOCCs platform		QCBS	Lump-sum	115,000	Prior	Actual	15-Apr-21	05-May-21	15-Apr-21	25-Apr-21	25-May-21	04-Jun-21	Actual	19-Jun-21	29-Jun-21	02-Jul-21	13-Aug-21	12-Sep-21	22-Sep-21	02-Oct-21	07-Oct-21	17-Oct-21	Plan	06-Nov-21	26-Nov-21	
Recruitment of Consulting Firm for providing Certified courses for operationalising capacity building on digital technology		QCBS	Lump-sum	170,000	Prior	Actual	01-May-21	21-May-21	01-May-21	11-May-21	10-Jun-21	20-Jun-21	Actual	05-Jul-21	15-Jul-21	18-Jul-21	29-Aug-21	28-Sep-21	08-Oct-21	18-Oct-21	23-Oct-21	02-Nov-21	Plan	22-Nov-21	12-Dec-21	
Recruitment of Individual Consultant for carrying out Gender Impact Assessment		SIC	Lump-sum	5,000	Prior	Actual	01-Oct-20	11-Oct-20	01-Aug-20	06-Aug-20	16-Oct-20	21-Oct-20	Actual	NA	NA	NA	NA	NA	NA	NA	26-Oct-20	31-Oct-20	Plan	20-Nov-20	20-Nov-20	
Recruitment of Individual Consultant for carrying out Poverty Impact Assessment		SIC	Lump-sum	5,000	Prior	Actual	15-Oct-20	25-Oct-20	01-Aug-20	06-Aug-20	30-Oct-20	04-Nov-20	Actual	NA	NA	NA	NA	NA	NA	NA	09-Nov-20	14-Nov-20	Plan	04-Dec-20	04-Dec-20	
Recruitment of Entrepreneurship and financing specialist		SIC	Lump-sum	17,000	Prior	Actual	01-Sep-20	11-Sep-20	01-Aug-20	06-Aug-20	16-Sep-20	21-Sep-20	Actual	NA	NA	NA	NA	NA	NA	NA	26-Sep-20	01-Oct-20	Plan	21-Oct-20	21-Oct-20	
Recruitment of Consulting Firm for providing training in business management to beneficiaries		QCBS	Lump-sum	29,000	Prior	Actual	01-Oct-20	16-Oct-20	01-Oct-20	08-Oct-20	26-Oct-20	02-Nov-20	Actual	12-Nov-20	19-Nov-20	20-Nov-20	20-Dec-20	09-Jan-21	19-Jan-21	26-Jan-21	30-Dec-20	06-Jan-21	Plan	26-Jan-21	05-Feb-21	
Recruitment of Consulting Firm for carrying out Study on opportunities for microinsurance and Assessment and mapping of the demand for credit		QCBS	Lump-sum	160,000	Prior	Actual	01-Oct-20	21-Oct-20	01-Oct-20	11-Oct-20	10-Nov-20	20-Nov-20	Actual	05-Dec-20	15-Dec-20	18-Dec-20	29-Jan-21	28-Feb-21	10-Mar-21	20-Mar-21	25-Mar-21	04-Apr-21	Plan	24-Apr-21	14-May-21	
Recruitment of Consulting Firm for providing technical assistance on rural finance issues		QCBS	Lump-sum	170,000	Prior	Actual	01-Nov-20	21-Nov-20	01-Nov-20	11-Nov-20	11-Dec-20	21-Dec-20	Actual	05-Jan-21	15-Jan-21	18-Jan-21	01-Mar-21	31-Mar-21	10-Apr-21	20-Apr-21	25-Apr-21	05-May-21	Plan	25-May-21	14-Jun-21	
Recruitment of Consulting Firm for carrying out Production related training and capacity building		QCBS	Lump-sum	14,000	Post	Actual	01-Dec-20	16-Dec-20	01-Dec-20	08-Dec-20	26-Dec-20	02-Jan-21	Actual	12-Jan-21	19-Jan-21	20-Jan-21	19-Feb-21	11-Mar-21	21-Mar-21	28-Mar-21	01-Mar-21	08-Mar-21	Plan	28-Mar-21	07-Apr-21	
Recruitment of Consulting Firm for development of Digital Platform development (STAR Platform) Dashboard, Databases, Design,		QCBS	Lump-sum	1,380,000	Prior	Actual	01-Nov-20	21-Nov-20	01-Nov-20	11-Nov-20	11-Dec-20	21-Dec-20	Actual	05-Jan-21	15-Jan-21	18-Jan-21	01-Mar-21	31-Mar-21	10-Apr-21	20-Apr-21	25-Apr-21	05-May-21	Plan	25-May-21	14-Jun-21	
Recruitment of Consulting Firm for development of Video extension strategy, digital green model		QCBS	Lump-sum	1,150,000	Prior	Actual	01-Dec-20	21-Dec-20	01-Dec-20	11-Dec-20	10-Jan-21	20-Jan-21	Actual	04-Feb-21	14-Feb-21	17-Feb-21	31-Mar-21	30-Apr-21	10-May-21	20-May-21	25-May-21	04-Jun-21	Plan	24-Jun-21	14-Jul-21	
Recruitment of Consulting Firm for STAR integrated app development design development and content development		QCBS	Lump-sum	245,000	Prior	Actual	15-Dec-20	04-Jan-21	15-Dec-20	25-Dec-20	24-Jan-21	03-Feb-21	Actual	18-Feb-21	28-Feb-21	03-Mar-21	14-Apr-21	14-May-21	24-May-21	03-Jun-21	08-Jun-21	18-Jun-21	Plan	08-Jul-21	28-Jul-21	
Recruitment of Consulting Firm for development of MODCs platform development and course development execution, input dealer certified training		QCBS	Lump-sum	57,000	Prior	Actual	01-Oct-20	16-Oct-20	01-Oct-20	08-Oct-20	26-Oct-20	02-Nov-20	Actual	12-Nov-20	19-Nov-20	20-Nov-20	20-Dec-20	09-Jan-21	19-Jan-21	26-Jan-21	30-Dec-20	06-Jan-21	Plan	26-Jan-21	05-Feb-21	
Recruitment of Consulting Firm for development of Social media and whatsapp components - Content development and network graph theory implementation		QCBS	Lump-sum	52,000	Prior	Actual	15-Oct-20	30-Oct-20	15-Oct-20	22-Oct-20	09-Nov-20	16-Nov-20	Actual	26-Nov-20	03-Dec-20	04-Dec-20	03-Jan-21	23-Jan-21	02-Feb-21	09-Feb-21	13-Jan-21	20-Jan-21	Plan	09-Feb-21	19-Feb-21	
Recruitment of Consulting Firm for AIDA tool customization and implementation		QCBS	Lump-sum	57,000	Prior	Actual	01-Nov-20	16-Nov-20	01-Nov-20	08-Nov-20	26-Nov-20	03-Dec-20	Actual	13-Dec-20	20-Dec-20	21-Dec-20	20-Jan-21	09-Feb-21	19-Feb-21	26-Feb-21	30-Jan-21	06-Feb-21	Plan	26-Feb-21	08-Mar-21	
Recruitment of Consulting Firm for development of digital tools for early warning outreach		QCBS	Lump-sum	115,000	Prior	Actual	15-Nov-20	05-Dec-20	15-Nov-20	25-Nov-20	25-Dec-20	04-Jan-21	Actual	19-Jan-21	29-Jan-21	01-Feb-21	15-Mar-21	14-Apr-21	24-Apr-21	04-May-21	09-May-21	19-May-21	Plan	08-Jun-21	28-Jun-21	
Recruitment of Consulting Firm to carry out Programme Baseline survey		QCBS	Lump-sum	115,000	Prior	Actual	01-Sep-20	21-Sep-20	01-Sep-20	11-Sep-20	11-Oct-20	21-Oct-20	Actual	05-Nov-20	15-Nov-20	18-Nov-20	30-Dec-20	29-Jan-21	08-Feb-21	18-Feb-21	23-Feb-21	05-Mar-21	Plan	25-Mar-21	14-Apr-21	
Recruitment of Individual Consultant for M&E Technical assistance		SIC	Lump-sum	30,000	Prior	Actual	01-Sep-20	11-Sep-20	01-Sep-20	06-Sep-20	16-Sep-20	21-Sep-20	Actual	NA	NA	NA	NA	NA	NA	NA	26-Sep-20	01-Oct-20	Plan	21-Oct-20	21-Oct-20	
Recruitment of Digital Technology advisor		SIC	Lump-sum	85,000	Prior	Actual	01-Oct-20	21-Oct-20	01-Oct-20	08-Oct-20	31-Oct-20	07-Nov-20	Actual	NA	NA	NA	NA	NA	NA	NA	17-Nov-20	24-Nov-20	Plan	14-Dec-20	14-Dec-20	



## **Egypt**

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# **Sustainable Transformation for Agricultural Resilience in Upper Egypt Project Design Report**

## **Annex 8: Project Implementation Manual (PIM)**

Document Date: 29/10/2019  
Project No. 2000002202  
Report No. 5141-EG

Near East, North Africa and Europe Division  
Programme Management Department



Arab Republic OF Egypt  
and

The International Fund for Agricultural Development  
(IFAD)

Sustainable Transformation for Agricultural  
Resilience in Upper Egypt (STAR)

Project Implementation Manual (PIM)

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## Abbreviations and Acronyms

AB	Agent Bank
ABE	Agricultural Bank of Egypt
AC	Agricultural Cooperative
ADP	Agricultural Development Plan
AF	Adaptation Fund
AFD	Agence Française de Développement
AfDB	African Development Bank
AFI	Alliance for Financial Inclusion
AOS	Annual Outcome Survey
BMGF	Bill and Melinda Gates Foundation
BMS	Business Development and Marketing Specialist
CB	Commercial Banks
CBE	Central Bank of Egypt
CC	Credit Cooperatives
CDA	Community Development Association
CFI	Cooperating Financial Institution
CGC	Credit Guarantee Company
CIB	Commercial International Bank
CPMI	Community Production and Marketing Institution
CW	Credit Wholesalers
ECM	Environment and Climate Manager
EDHS	Egypt Demographic and Health Survey
EGP	Egyptian Pound (1USD=16.6EGP)
EMFF	Egyptian Micro Finance Federation
ESC	Executive steering committee
FC	Finance Coordinator
FIGI	Financial Inclusion Initiative
FM	Finance Manager
FRA	Financial Regulatory Authority
FSS	Financial Services Specialist
GA	GPCU Agronomist
GDM	Governorate Deputy Manager
GFA	GPCU Accountant
GoE	Government of Egypt
GoE	Government of Egypt
GPC	Governorate Programme Coordinator
GPCU	Governorate Programme Coordination Unit
GSC	Governorate Steering Committee
GSM	Gender and Social Inclusion Manager
HRA	HR and Administration Assistant
HRM	HR and Administration Manager
IAMP	Irrigation Asset Management Plan
IAS	Irrigation Advisory Services
ICB	Institutional Capacity Building
IDB	Industrial Bank of Egypt
IE	Infrastructure Engineer
IGE	Income generation and enterprise
IIS	Irrigation improvement Sector
ITU	International Telecommunications Union
KM	Knowledge Management
KYC	Know your Customer
LSP	Lead Service Provider
M&E	Monitoring and Evaluation
MA	Marketing Association
MALR	Ministry of Agriculture and Land Reforms
MF	Microfinance
MFI	Micro Finance Institution
MFP	M&E Focal Point
MIC	Ministry of investment and International Cooperation
MKIS	M&E, KM and ICT Specialist

MKM	M&E and KM Manager
MKS	M&E and KM Specialists
MoF	Ministry of Finance
MoSS	Ministry of Social Solidarity
MSME	Micro/Small Medium Enterprise
MSMEDA	Micro and Small Medium Enterprises Development Agency
MWRI	Ministry of water resources and irrigation
NBFI	Non-Bank Financial Institution
NC	National Coordinator
NGO	Non-Governmental Organisation
NGO-MFI	NGO Microfinance Institutions
NPCU	National Programme Coordination Unit
NPL	Non-Performing Loan
NPM	National Programme Manager
OFIDO	On-farm Irrigation Development Project in Old-lands
ORMS	The Operational and Results Management System
PAR	Portfolio at Risk
PB	Participating Bank
PCR	Project Completion Review
PM	Procurement Manager
PMA	Production and Marketing Association
PRIDE	Promoting Resilience in Desert Environments
PRIME	Promotion of Rural Incomes through Market Enhancement Project
PS	Procurement Specialist
PSC	Programme steering committee
SAIL	Sustainable Agricultural Investments and Livelihoods
SC	Subcomponent
SCS	Social and Community Mobilization Specialist
STS	STAR Technical Specialist
SYP	Star Young Professional
ToT	Training of Trainers
VC	Value chain
VIP	Village Implementation Plan
VIP	Village Implementation Plan
WRMP	Water Resources Management Plan
WUA	Water Users Association
YCF	Young Community Facilitators

## Map of the Programme Area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 08-07-2019

## Chapter 1: Introduction and background

1. **Governance and administration:** The Arab Republic of Egypt is spread in an area of 1 million km<sup>2</sup> and is divided into four regions of which the Nile valley and delta region is considered most important. It is the only cultivable part of the country and though it covers just 5% of the total land area, about 95% of the country's total population of around 98.5 million lives in this part. The southern part of this region covering the Nile Valley area is referred to as Upper Egypt while the northern part, which is the Nile delta area, is referred to as Lower Egypt. The country is divided into 27 Governorates which are further subdivided into many districts and numerous villages for administrative purposes.

2. **Political and economic context:** Following the revolution in 2011, Egypt was thrown into period of political and economic turmoil during which the elected government was unseated, the annual GDP growth rate slowed down to 2.5%, inflation increased to 33% and the current account deficit reached alarming levels. The current government, sworn-in in 2014, initiated a series of reforms to spur the economy which included the passage of the VAT law, reducing energy subsidies, currency liberalisation and containing wage bills. These reforms have gradually restored economic confidence, increased stability, promoted investments and enhanced exports. In 2018 Egypt reported an increase in the GDP growth rate to 5.4%, reduction of inflation to 14% and unemployment rate at 9%, leading to the re-election of the government in the presidential elections held during the same year.

3. Much of Egypt's economic reform has come, unfortunately, at the cost of taking on more debt. In December 2018, Egypt's foreign debt totalled to an all-time high of US\$ 96.6 billion which was compounded by domestic debt of around US\$ 240 billion. In response, the government has introduced austerity measures including liberalising the price of bread flour and slashing fuel and transportation subsidies. The Government has also initiated deeper review of all new external debt proposals to prevent non-essential borrowings from adding to the debt burden. Only those external debt proposals are accepted that are structured in a way that allows the government (as much as possible) to use financial institutions to deliver and recover the external debt financed investments after they have stimulated growth in various sectors.

4. **State of fragility:** About 95% of Egypt is covered by desert land without human habitation. The remaining 5% area of the country, which is mainly the Nile valley and delta region, supports almost the entire population of the country. The total cultivated land is restricted to only 30,000 km<sup>2</sup> (3%) of the total land area and comprises both 'old lands' (two-thirds) in the Nile valley and the delta region and reclaimed 'new lands' (one-third) to ease the pressure on the old lands.

5. In the old lands, the pressure on farm land and water resources has increased rapidly over the last two decades as a result of the fast-paced increase in Egypt's population from 65 million (1998) to 98.5 million people (2018). The population pressure has caused high levels of land fragmentation with 43% (upper Egypt) and 30% (lower Egypt) of all farms falling below 1 feddan land-holding size. Almost 50-60% of these farms are less than 0.5 feddans in size that are currently used only for subsistence farming which is a major reason for the presence of widespread poverty in these areas. The population pressure has also increased the demand for irrigation water from the Nile. However, the irrigation systems, challenged by inadequate investment in their development and maintenance, are unable to respond to the increased demand for water, resulting in shortages at the end of the irrigation networks where the farmlands are usually dominated by smallholder farmers. It is well known that the availability of Nile water can suffer fluctuations in the future due to climate change and upstream dam

construction in Ethiopia. To develop resilience against potential water shortage in the future the Government has identified the command areas that are suitable for shifting to drip irrigation practices. However, at the farm level there is little impact of these threats (water shortage) and policies (for water conservation) and farmers continue to use surface irrigation to cultivate their crops leading to low water application efficiency of 50%. The main factors which challenge the adoption of water saving technologies are the lack of awareness and demonstration of these technologies, lack of finance, gap in advisory services and absence of high value marketing linkages to maximise household income by adopting these technologies.

6. In the new lands, the adoption of sprinkler and drip irrigation has improved water efficiency. However, there are questions surrounding the depletion of aquifers while using groundwater for irrigating the new lands. Other common challenges across both land types are drainage problems, salinity, low productivity, soil depletion and continued degradation of soil fertility. Over the next 20 years, the population is projected to grow to around 150 million and there is growing concern that water scarcity, land scarcity and low productivity of the lands can trigger widespread food shortages.

7. **Poverty:** Poverty in Egypt, is measured in monetary terms through the National Poverty Line defined at LE 736 per person per month. Poverty has increased steadily since the beginning of the millennium from around 17% (1999-00) to 27.8% (2015-16) and according to some reports currently it could be as high as 35%. An additional 25% of the population lives just above the poverty line and are highly vulnerable and susceptible to sliding back into poverty with minor shocks. Disparities in poverty follow geographic and gender lines. In general, about 57% of the population lives in rural areas and 33% of the rural population is poor. However, in the governorates in upper Egypt about 75% of the population live in rural areas and experiences much higher poverty (52% compared to the national average of 27.8%), with women and children facing multi-dimensional poverty. Poverty in upper Egypt is mainly structural, driven by high population growth rate, high level of land fragmentation, illiteracy, lack of employment opportunities and low levels of investment in infrastructure and human capital. Women are subject more than men to experience multi-dimensional poverty specially women head of households being most vulnerable (11% of rural households are women headed). The incidence of poverty is widely variable across governorates, with the prevalence of income poverty most critical in Assuit (66%), Sohag (65.8%) and Menya (56.7%) governorates in Upper Egypt.

8. *Poverty reduction programs at National level:* In March 2015, the GoE, with the support of the World Bank launched "Takafol and Karama" (solidarity and dignity) as a targeted cash transfer scheme for reducing poverty. Takafol and karama is a conditional cash transfer program that seeks to provide income support to the poor and most vulnerable; namely poor families with children (under 18 years of age), poor elderly (aged 65 years and above) and persons with severe disability. The project provides conditional cash transfer to families to ensure that such subsidy is directed toward investment in children education, mothers and children health care, enhance mother's awareness about healthy nutrition practices and family planning, in addition to preserving the rights of disabled, aging and orphans' persons. The programme is implemented by the Ministry of Social Solidarity (MoSS) and has so far reached about 9.4 million individuals or 10% of the country's population. According to IFPRI (2018), who conducted an impact evaluation on the scheme, 90 % of beneficiaries are poor and ultra-poor rural women.

9. **Agriculture development:** The agriculture sector accounts for about 13% of GDP and 20% of total exports and foreign exchange earnings and employs more than 55% of rural household. Crucially, agriculture-related industries such as processing and marketing and input supplies account for a further 20% of GDP. About 25% of the labour force is engaged in agriculture and in upper Egypt, this figure is more than 55%.

However, the agricultural sector is affected by low productivity and low efficiency, gaps in market information and weak linkages to high-value markets, lack of access to affordable agricultural finance including agricultural insurance, and ineffective rural institutions.

10. *Main agricultural produce:* There are five national strategic crops, cotton, maize, wheat, potatoes and rice. Their yields improvements have slowed down markedly in recent years. Fruits and vegetables grown by smallholders include tomatoes, potatoes, beets, oranges, onions, grapes, and dates among others. Potatoes and tomatoes together make up around 24% while beets, oranges, onions, grapes, and dates all contribute about 44% of the gross fruits and vegetable production in Egypt. The yield of these crops is much below potential and there are high margins for improvement. Yield is affected by outdated technologies and tools for land preparation, irrigation, and harvesting leading to high production costs, reduced yields, decreased soil fertility.

11. *Export and domestic demand for agricultural produce:* There is a growing demand for Egyptian agricultural produce both in the export and the domestic markets. The main agricultural exports are cotton, potatoes, onions, tomatoes, legumes, other vegetables (frozen, dried, preserved), citrus, grapes, melons, frozen fruits and nuts. The exports of fruits and vegetables have increased from around 2.0 to 2.8 million tons over the last decade supported by friendly export policies, improved compliance with export quality standards and success in opening new markets for Egyptian produce in the EU and countries such as Canada, China, Taiwan, Nigeria, Tanzania and South Africa in addition to the Arab countries. The export demand of medicinal and aromatic plants (MAPS) such as basil, chamomile, fennel, cumin and caraway has also increased with 10-12% annual growth in their export over the last 4-5 years. There is also a growing domestic market for agricultural produce. The domestic fruits and vegetable market is expected to grow from US\$ 5.5 billion in 2017 to US\$ 6.2 billion in 2023. Egypt produces around 6,000 tons of milk annually with 300 dairy production factories across the country. These figures indicate considerable economic opportunities related to the production, processing and supply of agricultural produce.

12. *Smallholder farmers:* The agricultural sector is dominated by smallholder farmers mainly using traditional farming practices. Farms are predominantly small with a total of 81% of farmers owning less than three feddan. Families of holding areas less than one feddan are the largest group, comprising about 37.7 percent of the agricultural population. Landless represent around 16.5% of the total rural population. The traditional smallholder farming system is based on a mixed and integrated crop-livestock system. In general, smallholders are the primary producers of the main food and fodder crops for domestic consumption. The income generated from farms of less than three feddans (from different farming activities and utilizing family labour) does not meet the poverty line of US\$1.25 per day per capita. Therefore, holders of less than three feddans are considered by many experts to be the most vulnerable category of farmers in Egypt. The key constraints facing smallholder farmers are described below:

13. *Gaps in access to remunerative markets:* Smallholders usually sell perishable commodities (vegetables, fruits, poultry) directly to the consumers in very small retail shops in weekly or bi-weekly markets resulting in limited but regular cash flows. Surplus grain and other non-perishable crops are usually sold to local traders with the help of village-based middlemen who broker the deals between the smallholders and the traders for a commission which reduces the net income of the smallholder. The traders resell to consumers or to larger traders and wholesalers who in turn supply to food processors and larger distributors.

## Chapter 2: The Programme

### A. Programme Goal and Objectives

14. The **programme goal** is to contribute to improved living standards of smallholder farmers and poor and vulnerable women and youth in the rural areas in upper Egypt.

15. STAR's **development objective** is to improve the income and resilience of smallholder and landless families through better marketing linkages, sustainable and climate change adapted agricultural intensification, small rural businesses and inclusive policies, building on women and youth potentials as untapped resources for family resilience. The development objective is in line with the IFAD Egypt COSOP framework SO1, focus on enhancing productivity and profitability of agriculture-related activities) and SO2 addressing the development of enhanced policies to support rural transformation. The development objective is also aligned to the IFAD strategic framework SO1 as it focuses on increasing poor people's productive capacities and income levels; SO2, as it supports poor people's market participation and SO3 as it addresses environmental sustainability and climate change. STAR is also aligned to the IFAD mainstreaming priorities of climate and environment, gender and youth inclusion.

16. **Programme duration:** The STAR programme duration is seven years.

17. **Programme outreach:** STAR will provide services to 240,000 poor rural households (1.2 million individuals with an average of 5 members per household), across 160 villages in 24 command area based clusters in the three Governorates of Menya, Asyut and Suhag. The target households are divided into 'direct' and 'indirect' categories. The direct target group consists of 160,000 smallholder households (800,000 individuals) who will receive the full set of STAR services. These producers will be drawn mainly from the categories of extra small and small landholders (less than 3 feddans) with special emphasis on the inclusion of women, women-headed households and youth (aged 18-35). The indirect target group comprises 80,000 households (400,000 individuals) residing within the command areas who will also benefit from the rehabilitated water infrastructures and their inclusion as transformation drivers in STAR supported WUAs and Production and Marketing Associations (PMA). However, many of these households will comprise possibly the relatively better-off (above three feddans), who can forge linkages to markets, financing institutions, input suppliers and agricultural service providers on their own.

18. **Key outcomes and impact indicators:** Key impacts/outcomes of the STAR programme include: i) 10% reduction in percentage of rural households living below the national poverty line in the targeted areas, ii) 50% increase average HH income, iii) 12,555 new jobs created, iv) 50% of rural producers' organizations reporting increase in sales, v) 60% of households reporting increase in production, vi) 60% of households reporting reduced water shortage vis-à-vis production needs, and vii) 2 policies or strategies proposed to policy makers for approval, ratification or amendment

19. **STAR supported commodities:** STAR investments will support activities related to fresh and processed fruits and vegetables, medicinal and aromatic plants, field crops relevant to smallholders and other livelihood diversification options such as poultry, small ruminants and beekeeping. To a limited extent, STAR will support dairy, fisheries and other farm-based opportunities relevant to the profitability of the target groups.

20. **Programmatic approach:** STAR will aim at rural transformation in the selected governorates following a programmatic approach. The current IFAD funding cycle of seven years will support Phase 1 of the programme which will enable STAR to reach 160

villages, or 20% of the 850 villages in the three governorates. The subsequent phases will be implemented with the objective of building on the Phase 1 success stories and expanding the STAR benefits to the other villages and other governorates in a systematic manner. The key aspects embedded in the implementation arrangements of Phase 1 to enable STAR to make a smooth transition to the next phase are, i) strengthen MALR capacity and develop its readiness for the next phase; ii) develop standardized implementation arrangements for the successful interventions identified for the next phase; iii) convene government and donor resources to support the next phase; iv) capacitate and orient the CFIs to expand their STAR oriented portfolios to potential clusters for the next phase; v) widely disseminate success stories and their implementation mechanisms using digital technologies; vi) facilitate the strong partner CDAs and ACs to mentor other CDAs/ACs in potential clusters for the next phase; and vii) develop a network of service providers to continue strengthening STAR's achievements in the next phase.

**21. Implementation stages:** STAR Phase 1 will have two implementation stages, the 'calibration stage' and the 'scaling up' stage. In the *calibration stage (Years 1 to 3)* STAR will focus on consolidating and showcasing the achievements in 20-30 villages (across the 24 clusters in the three governorates) where previous IFAD and other donor supported projects have already produced success stories. These villages will have strong CDAs already experienced in partnering with previous projects. STAR will partner with such CDAs and develop model villages by introducing a range of STAR demonstrations and expanding the outreach of the STAR benefits to the target households. Year 1 will be devoted to programme start-up, focusing on preparatory activities, embedding the STAR innovations in the programme delivery structures and strengthening the partnerships with the development partners, with limited thrust on achieving village level outreach. *Scaling-up stage (Years 4 to 7):* During the calibration stage STAR will prepare itself for the scaling-up stage by i) developing and strengthening the CDAs in the other STAR villages ( 130-140 villages in the 24 clusters); ii) exposing the target households in the other villages to demonstrations both using physical study trips and digital extension methodologies and iii) preparing the CFIs to lend to target households in the other villages. STAR will build on these preparations and expand its outreach to an additional 130-140 villages which fulfil a set of preconditions and demonstrate their preparedness for STAR implementation.

## **B. Project Area and Geographical targeting**

**22. Geographic area and poverty:** STAR will be implemented in three Governorates of Upper Egypt: Menya, Assuyt and Sohag. The geographic area has been identified on the basis of the high poverty and food insecurity level. Around 12 million people live in the rural areas in these Governorates and 6.7 million (56%) are poor and cannot meet their basic needs. Upper Egypt continues to be the most food insecure and deprived region in all aspects of access to food. In terms of population numbers, the largest population with poor access to food in Upper Egypt is registered in Asyut with 2.4 Million and 2.1 million in Sohag (WFP, 2013) and poverty level for the three governorates are: Assuit (66 percent), Sohag (65.8 percent) and Menya (56.7 percent) according to EDHS 2014.

**23. Irrigation command area based village cluster selection (Geographic Targeting):** The geographic entry point to select target villages will consider a command area (following a cluster approach) targeting villages served by the same branch canals in need of rehabilitation and work with them based on various programme services. These include among others: (i) improved water infrastructures and water management practices; (ii) improvement of farming practices to introduce productive, sustainable and resource-efficient techniques; (iii) better market linkages, value addition

and outlets for their produce; and (iv) establishment of small service and processing enterprises linked to agricultural value chains targeting the poor and more vulnerable households, women and youth.

As a lesson learned from PRIME and OFIDO, STAR will provide the full package of project interventions (production improvement, access to market and finance, and support for micro enterprises) to villages with high incidence of poverty in concentrated geographical areas (water units/clusters), in order to avoid that synergies between the various project interventions get diluted and the achievements of impacts in terms of empowerment and poverty alleviation are limited. This will also allow for the demonstration of a water unit based intervention model that can be scaled up. During the field visit the mission observed a correlation between poverty, insufficient access to water and the need for water infrastructure rehabilitation. Irrigation branch canals and at mesqa level effectively providing water are vital for the livelihood of poor farmers, who cannot afford to drill their own boreholes/ wells (most vulnerable households with 0.5 to 1 feddan).

24. The targeted water units/command areas are expected to present a composition of landholding in line with the findings from the Agriculture Farm Income Survey (AFIS) for Upper Egypt (42.3% below 1 feddan; 35.8% between 1 to 3 feddan; 10.9% between 3 to 5 and 10.8 % above 5 feddans). Therefore, the targeting strategy at water unit/command area level will be inclusive of all typology of households classified on the basis of landownership: land-less and extra-small, small, medium and large landholders.

25. The Selection criteria of irrigation command areas would be: (i) higher concentration of poverty; (ii) the main and second order branch canals and the drainage system are in good working condition and there is no need for major investments for their upstream improvements; (iii) adequate quantity of good quality water is available for irrigation from the second order canal; (iv) there are no major social and environmental problems that require mitigation by the programme; and (v) there is willingness by farmers served by the command area to participate in the programme.

26. Once the clusters are identified according to the above, the list of the selected villages forming a cluster (command area) is expected to have 160 villages and 32 Cluster, with an average number of 5 villages per cluster (appraisal stage). The list will be accompanied by a brief explanation on the selection and especially the coherence supporting the integrated set of interventions within the identified clusters and poverty level. A map, as a result of the mapping exercise jointly undertaken by OFIDO, the Directorates of Irrigation, Agriculture and Social Solidarity in each governorate will help to identify the branch canals (third and fourth order which need rehabilitation and at the same time serves villages with high or medium presence/incidence of poorest population. IFAD design Mission has provided a proposed methodology with ranking criteria to ease the exercise and sped up the process of village selection in line with poverty targeting criteria.

27. **Community institutions in the programme area:** The different community institutions (CI) present in the programme area are i) Agricultural Cooperatives (AC), present in each village and used by MALR to supply subsidized agricultural inputs to farmers. Their marketing function is very weak, and their management is dominated by larger farmers; ii) Community Development Associations (CDA) are considered as NGOs, registered and supervised by the Ministry of Social Solidarity (MoSS). They have a general assembly with 50-400 community members and partner with larger NGOs and donors projects to implement development programmes at the village level; iii) Marketing Associations (MA) are special interest groups supporting members' produce marketing. They lack legal status and are function under the umbrella of the village CDAs. STAR will refer to these groups as Production and Marketing Associations (PMA) to reflect both production and marketing related functions carried out by them; iv) Income generation and enterprise groups (IGE) are informal groups focused on savings, internal

loans, income generation and microenterprise activities. They too function under the CDA; v) Water Users Associations (WUA) are legal entities established under Ministerial decrees as specialized associations performing functions related to water management. They are not involved in marketing activities.

## C. Target Groups and Targeting Strategy:

28. STAR will provide services to a total of 240,000 poor rural household engaged in agriculture production (or about 1.2 Million individuals based on average of 5 household members). While 160,000 households (direct beneficiaries) will receive the full set of programme services, an additional number of 80,000 Household (indirect beneficiaries) will be covered by services related mainly to improved water infrastructure, given their proximity in the command area.

29. The programme primary target groups are 160,000 households of smallholder farmers (800,000 individuals, direct beneficiaries), with the majority of producers within the categories of extra small and small landholders (less than three feddans of land) with special emphasis on the inclusion of women, women-headed households and youth (aged 18-35) often ranking among the poorest and asset less, hence landless or near landless.

30. All will be benefiting from programme services that cut across the needs of all types of households and which are delivered working with organisations inclusive of all groups: (i) water infrastructure rehabilitation and management through Water Users Associations (WUA); (ii) market linkages through Market Associations; and (iii) outreach and agricultural extension work through Cooperatives and/or Community Development Associations (CDAs). There will be specific services and activities directly targeted to poorer and most vulnerable households depending on their income levels, overall production capacity, market linkages, financing capacity, division of role and responsibilities (gender and youth) and vulnerability.

31. An additional number of 80,000 households (400,000 indirect beneficiaries) residing within the command areas are expected to benefit, by virtue of their proximity, of rehabilitated water infrastructures and better market linkages created by STAR. They are expected to benefit from creation of Water User Associations (WUAs) as well as other grassroots institutions such as Producers and Marketing Associations (MA) and become members. However, it is possible that those households will be from better-off quintile (above 3 feddan) and able to mobilize their own financial resources to finance the production-related activities and forge their own linkages with financing institutions.

32. **Direct beneficiaries can be classified into five target groups**, described mainly on the basis of poverty level<sup>1</sup>, land ownership and access to market. Given their internal differentiations in terms of socio-economic levels, the project will provide services and targeted activities, considering the following classification as an additional targeting instrument to better identify and serve the intended beneficiaries: (i) Very poor households living below the poverty line, with limited agriculture productive assets, considered as landless and near landless (less than 0.5) and ranking among the poorest;

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<sup>1</sup> The poverty line was revised in 2019: The poverty line for Egypt is: 8827 Egyptian Pounds per person per year (735.6 Egyptian Pounds per person per month). The extreme poverty line for Egypt is: 5889.6 Egyptian Pounds per person per year (490.8 Egyptian Pounds per person per month). The poverty line for Rural Upper Egypt: 8865.6 Egyptian Pounds per person per year (738.8 Egyptian Pounds per person per month). The extreme poverty line for Rural Upper Egypt is: 5896.5 Egyptian Pounds per person per year (491.375 Egyptian Pounds per person per month).

see source - only in Arabic

[https://www.capmas.gov.eg/Pages/StaticPages.aspx?page\\_id=7183](https://www.capmas.gov.eg/Pages/StaticPages.aspx?page_id=7183)

(ii) poor smallholder subsistence households living below the poverty line, farming on very limited land holding (below 1 feddan) and experiencing very limited access to market and income generation due to low surplus; (iii) market-oriented smallholder households with small land holding size (1-3 feddans) with access to market but limited return due to low prices, high production and transaction costs, and low bargaining power. They are slightly above the poverty line but considered as vulnerable and transitory poor due to the risks to slide back into poverty; (v) youth (18-35) from the targeted communities (skilled, graduated as well as unskilled) with low opportunities of employment and self-employment in general and specifically in agriculture (either as farming as a business or skilled/unskilled labors) and allied sector (agro-entrepreneurship, service provision, extension). The programme will consider direct targeted interventions for specific categories (direct targeting).

33. Another target group that the project will consider are transformation drivers, better off households, including: medium and large holder farmers (land average size above 3 feddans) traders, processors, aggregators and other actors along the value chains; supplier, traders, entrepreneurs and other private sector actors that the project will engage with to catalyse the expected transformation.

34. Based on the above data on presence distribution on type of farming households and landholding (FAO publication based on Agriculture Census 2010 on farming population)<sup>2</sup>, STAR will target: 20 percent of very poor households living below the poverty line, 50 percent (majority) of poor smallholder subsistence households (below 1 feddan); 25 percent of market-oriented smallholder households with small land holding size (1-3 feddans) and a limited percentage of better off (5 percent).

35. The calculation on proportion and number of direct beneficiaries is based on 160,000 households, as they are those receiving full package of STAR support. Men will be 40 per cent, Women will be overall 35 percent and youth (young men and young women) will represent 25 percent of direct beneficiaries.

### 36. **Detailed description of target groups**

37. **Landless, near landless and very poor households**, including women headed households: Those households will comprise 20% of the total target beneficiaries (or 32,000 HHs). They are worse-off households of landless and near landless with less than 0.5 feddan and unable to make their living out of poverty. Typically, those households are composed of high number of members/dependants with limited productive capacity, unable to fulfil households' basic needs. Within this category households' livelihood is mainly focused on animal husbandry (small ruminants, poultry). The project, in line with principles of leave no one behind and putting emphasis on a strong social inclusion strategy, will include 32,000 households from this category, focusing on women which are expected to be more than 70% beneficiaries from this category, while 30% will be youth. It is expected that households ranking among the poorest and poorer in the selected communities will be interested in moving out of poverty by participating in pro-poor services promoted by the STAR project (i.e. saving and credit/finance literacy for women, alternative income generating activities on farm and off farm/ alternative enterprises for groups of very poor households and especially women and youth).

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<sup>2</sup> According to a FAO study, using data from the 2009-10 agricultural census, the population among farming families is nearly 28.4 million, which is 38 percent of Egypt's total population and two-thirds of the rural population. Families of holding areas less than one feddan are the largest group, comprising about 37.7 percent of the agricultural population. The population within the SSF category (<3 feddans) is about 69 percent of the total family farming population, landless represent 16.5 percent of the total family farming population in 2010. The remaining landholders (with three feddans or more) represent only 14.5 percent of the total agricultural population in Egypt.

38. Based on their socio-economic characteristics, it is expected that households from these categories will mainly join groups and associations formed under STAR, for Income Generating Activities (about 24,000 HHs) developed under component 1.2 (creation of enterprise development) and another 8,000 HHs will join Production and Marketing Associations in existing CDAs (Component 1.1 strengthening Market Institutions). Due to the low income and assets ownership level, it is not expected that households from this category will be joining Cooperatives (as most of them are landless) and Independent marketing institutions at this stage (more suitable for household already economically active as described below). Women joining this groups are also expected, in addition to technical trainings provided by the technical components, to receive leadership trainings, as part of strengthening market institutions and women in leadership positions. At Least 20% of women joining the producers and marketing associations in existing CDAs will attend the leadership trainings and become leaders (expected 1,600 women leaders from this category).

39. **Poor subsistence smallholders' households (less than 1 feddan):** The project will target 80,000 poor subsistence smallholder households (corresponding to 50% total direct beneficiaries). Farmers in this category practice subsistence agriculture (0.5 -1 feddan), with low surplus for selling and low income due to low prices. Project services will be equally provided to men and women (minimum 30% women) in line with the activities/responsibilities they are engaged in the farming sector: i.e crop production mostly dominated by adult men, versus animal husbandry (small ruminants, poultry and ducks) and dairy activities for women. They process cheese and other products for household use and occasional informal sales. Proceeds from agricultural activities make the major contribution to the viability of their livelihood. To strengthen household resilience, the project will consider specific activities for men (land consolidation and improved agriculture practices, among others) and also for women (on farm as well as off farm) along the value chains (post processing-added value). Youth can be found in those household typology as: (i) unpaid family labour (mostly in subsistence farming) or (ii) unskilled labourers for minimum-wage at larger farms/processing units or (iii) youth interested to practice agriculture using technologies, green houses for example, or engage as service providers in extension and allied sectors.

40. Based on their socio-economic characteristics, it is expected that households from this category will be joining in large majority the Producers and Marketing Associations, in line with the following proportion: 16,000 HHs Income Generating Groups (component 1.2 creation of enterprise development, with large majority of women); 42,700 HHs (men and women producers) joining the Producers and Marketing associations in existing CDAs (Component 1.1 strengthening Market Institutions) while 10,600 HHs Independent marketing institutions, and 10,600 Agricultural Cooperatives and WUAs (Component 2 Improvement of smallholders' productivity and resilience). Women producers from this group will also be selected to attend the women's leadership trainings and be representatives within P&MA associated to CDAs. They are expected to have leadership roles (at least 20%, corresponding to 8,500 Women's Leaders) and ensure that women's producers needs and view are constantly provided and taken into account.

41. **Market oriented smallholders' households (1-3 feddan):** The project will target 40,000 market-oriented smallholder households (corresponding to 25% of the total direct beneficiaries). Farmers in this category are considered borderline poor as they are above the poverty line but at risk to slide back into poverty due to stress and external shocks. They are men and women smallholders (and/or small-scale processors) who typically own 1 to 3 feddans, 1 to 2 cows and buffalos and 5 to 6 small ruminants. They have sufficient labour and skills as well as high production but lack affordable inputs, connectivity to profitable networks and markets, technical capacity, scale and bargaining power. They produce a range of products which are sold at a low price through formal and informal outlets such as neighbours, domestic markets, brokers,

aggregators. Women in this category practice agriculture activities as described above: animal husbandry, small animals fattening (ruminants) and ducks rearing and dairy production for informal sale to complement household income. As above, with similar characteristics, youth can also be found in this category.

42. Based on their market capacity and income level, it is expected that households from this category will not be interested to join the Income Generating Groups (more suitable for the most vulnerable and subsistence-level households, especially for woman and youth) but will be present in larger number forming Producers and Marketing Associations in existing CDAs (Component 1.1 strengthening Market Institutions) accounting for 26,700 Households, while another 6,600 HHs are expected to be part of independent producers and marketing institutions, and 6,600 of Agricultural Cooperatives and WUAs (Component 2 Improvement of smallholders' productivity and resilience). As Above a 20% of women are expected to hold leadership positions in producers and marketing associations.

43. Better off households. This target group include actors at least one step higher in the agriculture value chain, including lead farmers (large farmers with 3 feddan and above), agro-enterprises and processors who can serve as aggregators and models to demonstrate the viability of new approaches to increase rural resilience and provide potential development pathways for the poor, including generating employment opportunities. The project will engage with them as linkage for market services. Given the commercial nature of their involvement in the value chain, project takes into consideration of their influence and outreach potential to serve other producers with market linkages/services.

44. They are 5% of the targeted beneficiaries, comprising a total of about 8,000 households including a smaller percentage of women and youth. Youth in this category correspond to young men and women graduated from universities (young professionals) and interested in agriculture from different angle: agronomy, business and market orientation, veterinary.

45. It is expected that households from this category will be joining the following groups: 4,000 HHs Producers and Marketing associations in existing CDAs (Component 1.1 strengthening Market Institutions) 1,900 HHs Independent producers and marketing institutions, and 1,900 Agricultural Cooperatives and WUAs (Component 2 Improvement of smallholders' productivity and resilience).

46. **Youth (18-35):** Youth are found in the above categories (poor, transitory poor and better off). The higher percentage of them is from the very poor and poor categories (outlines above) and a smaller percentage from the better off as young professionals. Overall this target group includes (i) young men and women who are engaged (on full time or part time basis) in rural activities at subsistence level (family labour/ or subsistence) with an interest to further expand their activities to make it as a business, make use of technologies and increase their income, and (ii) unemployed (or seasonal workers at minimum wage) young men and women who are not directly engaged in rural activities and represent beneficiaries who are interested to explore the sector, identify and engage in better employment and self-employment opportunities offered by the cluster development, especially in agri-business, service provision and allied sectors; (iii) young graduated in agriculture, interested to apply their skills in the agriculture sectors as professionals service providers.

47. **Self targeting:** STAR programme applies a self-targeting approach as the activities promoted are expected to be of interest for all target groups, ranging from: pro-poor intervention for the most vulnerable to strengthen resilience to adaptation of new technologies with higher capital investment to transform the sector for better off farmer (transformation drivers). In line, the type of groups, grassroots institutions and

association formed/strengthen under STAR are expected to provide services according to the different socio-economic characteristics and needs of the beneficiaries. The programme will be implemented applying a combination of self-targeting and direct targeting approach: while some interventions will be of interest for all target groups, STAR will promote activities which will exclusively be directed to a specific target group: women and youth. In doing so, the implementing partners will be encouraged to adopt a pro-poor focus and ensure inclusion of the most vulnerable groups: very poor landless and poor subsistence households, especially women and unemployed youth and engage with them accordingly.

48. **Direct targeting and financial support to specific categories:** Specific activities for entrepreneurial opportunities and skilled development will be mainly dedicated to landless and most vulnerable households, with focus on women and youth. Small-scale farmers' households, depending on their production capacity and landholding, will also receive dedicated interventions and aligned type of financial support. While low-income families of subsistence farmers will be more interested (among others) in activities that generate income (IGA) and strengthen the household resilience, other better-off farmers, will be more oriented towards (among others) adoption of new technologies which will require a higher capital for investments and risk taking behaviour.

49. On the basis of the above typologies of beneficiaries, including their different economic productive, economic and financial capacities, the type of financing will be aligned. Activities directed to low-income subsistence households, including unemployed youth and women, will be partially covered by grant financing. Investments activities (i.e. processing and packaging facilities and new more efficient and sustainable agricultural practice and technologies) targeting groups, market oriented smallholders and better off households (transformation drivers) will be financed under the loan through credits securing a high reflow rate to the government.

50. **Direct targeting for nutrition intervention:** Direct targeted interventions for selected target groups will be associated with nutrition directed to women: Curriculum on nutrition will be developed and integrated in the training plans and will include, among others, sensitization on nutrition-sensitive agriculture, basic nutrition knowledge, ability to promote nutritious food and adequate consumption pattern in varied agro ecological situations. Furthermore, promotion of roof-top gardening, to enable poor and food insecure women and their families to increase adoption and implementation of nutrition-sensitive interventions, will be promoted.

51. **Identification and selection of participants.** Participant selection will be based on self-targeting (farmer's motivation/commitment/interest) as well as purposive targeting mechanisms as per categories defined in the targeting section and percentage of their participation on the basis of the reality in the ground: 20 percent of very poor households living below the poverty line landless and near landless, 50 percent (majority) of poor smallholder subsistence households (below 1 feddan); 25 percent of market-oriented smallholder households with small land holding size (1-3 feddans) and a limited percentage of better off (5 percent). In addition to the above, especially for inclusion of poorer and more vulnerable households, identification of groups will be based on clear selection criteria, which will consider among other: (i) assets, (ii) level of income dependent on the farm production activities, (iii) willingness and preparedness to participate in the programme, (iv) age (v) gender including consideration of affirmative quotas (not less than 45% women and 41% youth).

52. To ensure that the intervention will reach the intended target groups and avoid elite capture, implementing partners supporting the process of selection (Cluster Support Team and CDAs gender and social development focal points) will receive induction

training at the start up phase of the Programme. The gender and social development expert at national level (CPMU) will be responsible for the trainings and any follow up.

53. **Youth mainstreaming strategy:** Young beneficiaries will have the potential to be economically active in self-employment and potentially create economically viable projects by: (a) receiving training on agribusiness, trade and services provision; (b) improving entrepreneurial capacities through non-financial services to allow beneficiaries to be later linked with existing microfinance institutions and related financing scheme (programmes) dedicated to youth.

54. It is expected that young men and women will join the groups as following: 10,000 men and 10,000 young women in income generating groups (component 1.2 creation of enterprise development); 12,000 young women and 24,000 young men in producers and marketing associations in existing CDAs (Component 1.1 strengthening market institutions) while a minor number of 2,800 women and 5,700 young men will form Independent producers and marketing institutions.

55. Youth will also benefit from the young professional program. The program will give the young professionals an opportunity to rapidly gain substantial field experience, and build their CV and capacities in working with farmers, bringing in new ideas including digital solutions and adapt these to the conditions and needs of smallholder farmers.

56. **Gender mainstreaming strategy:** The project will address gender disparities and the key constraints that limit women's participation in economic opportunities and accessing financial services by: (a) ensuring that women have equal access to capacity building, training and opportunity by creating an enabling environment which ensure their mobility and participation in the economic activities (b) promoting productive opportunities that are suitable for women's by ensuring that analysis are done capturing women's needs and priorities; (c) increase women's access to skills and knowledge by providing women's skills in financial literacy, digital literacy, managing and saving money as well as business development; (d) promote women's leadership and women representatives in the grassroots institutions and organisation (producers and marketing associations); Furthermore, the programme will provide women with nutrition education.

57. Women are expected to largely participate in income generating groups (formed under component 1.2 creation of enterprise development) and marketing associations in existing CDAs (Component 1.1 strengthening Market Institutions) accounting for 20,000 and 20,300 respectively. A minor number is expected to be seen in independent marketing institutions and Cooperatives (2,800 and 3,800 respectively) at this stage of the programme. The low level of women membership in agriculture cooperatives is due to the low (almost absent) women land owners (about 3%). The membership in groups reflect the distribution of women based on their interests and the activities they are mostly engaged.

58. **Women's leaders:** The programme will provide women leaders trainings and ensure that 20 percent women are in leadership positions within the producers and marketing associations created/strengthened under STAR.

59. **Social Inclusion:** The targeting and social inclusion strategy will rely on a strong mobilisation strategy to be undertaken at the beginning of the programme. It is expected that the Cluster Support Teams (CST) and community facilitators will play a crucial role in mobilising communities and have specific focus group discussions with women and youth groups.

60. **Implementation Modalities:** Programme Support Units (PSU) will be established in the 3 selected Governorates, staffed by specialists who would supervise the technical interventions. Each PSU will also have dedicated gender and social development

specialists in addition to the technical staff. At village level, local CDAs will appoint gender and social development focal points and the Programme staff will make sure the gender focal points fulfil requirements to undertake related responsibilities. A gender and social development expert will be recruited in the CPMU at national level with responsibility for the overall supervision of related activities and action plan.

61. **Project Coordination and Monitoring:** The M&E system will give strong emphasis to monitoring of targeting performance. All implementers will be required to provide disaggregated data on women and youth participation, in relation to overall project targets.

62. The M&E system will collect and analyze information about project outreach, effectiveness of the targeting strategy and specific benefits for women and youth. This requires strong coordination and collaboration between the M&E unit and the Gender and Social Development experts at all levels. Impact will be assessed on the basis of methodologically gender sensitive baseline, mid-term and completion surveys which will use key indicators to measure women's empowerment.

63. Service providers supporting the implementation of activities (particularly those directly dealing with producers and groups) should have a demonstrable commitment to gender inclusive approaches, youth engagement etc. In order to ensure adequate knowledge of relevant gender and youth issues and how to tackle them during implementation of activities.

64. **Community mobilisation.** The Cluster Support Team (CST) will be responsible for community mobilisation. They will work in synergy at community level, including the involvement of CDAs and community-based organisations and local/traditional institutions to mobilise and sensitize communities to get buy in to the Programme and enhance the demand driven nature of the intervention. This activity will be undertaken at the village level and will consist of public consultations with the community as a whole and separate interaction with special groups, such as women and youth. The gender and social expert at Governorate and village levels (CDAs gender and social development focal points) will be directly responsible for separate consultation with those groups and their consequent mobilisation within the proposed activities.

65. **Orientation and Outreach:** During community mobilisation at the beginning of the project intervention, orientation sessions to disseminate information about the economic inclusion activities among the target groups around potential livelihood opportunities and different pathways will be explained to beneficiaries. The project will closely work with Ministry of Social Solidarity (MOSS) and local CDAs, to: (i) create community space to identify the needs of each local community and also social segments (based on the target groups identified); (ii) identify the poorer and most vulnerable households to be eligible for STAR support dedicated activities (mainly for entrepreneurial opportunities); (iii) engage with male household members and community traditional leaders to create the necessary awareness enabling women (especially young women) to fully participate. Gender awareness campaigns will accompany the orientation process.

66. **Social Assessment:** Existing social and poverty assessments, as well as available vulnerability studies have been conducted as part of the work on targeting the poorest by several agencies, including the Ministry of Social Solidarity (MoSS) for the development of safety net programmes. Takaful and Karama is a conditional cash transfer program that seeks to provide income support to the poor and most vulnerable people; namely

poor families with children (under 18 years of age), poor elderly (aged 65 years and above) and persons with severe disability<sup>3</sup>.

67. Data collected for the social assessment undertaken prior to implementation of the above programme (as well as others<sup>4</sup>) are available at Governorate level and they are constantly updated. Collaboration with MOSS can be useful to identify vulnerable households at cluster and village level for specific targeting activities of STAR social inclusion. On the basis of the existing social assessments and in addition to the wealth ranking exercise which will be done by community workers and supervised by the social and development focal points at CDAs level, the programme will determine the presence of intended beneficiaries, strategy for their mobilization and final integration into the respective productive sector based on socio-economic profile.

68. **Profiling at village level:** Social development focal points from CDAs and community workers will support wealth-ranking criteria exercise (under the supervision of the PSU Gender and Social development expert) to identify eligible households, especially for the landless and very poor, and collecting information related to their background, demographic characteristics, income level and household number of dependency (among others).

69. The information will also help to implement a profiling system to identify the target group and type of economic activities. This profiling activity will include a typology/assessment of heterogeneity across groups to determine which economic inclusion packages will be tailored for homogeneous groups according to their characteristics and labor market barriers.

70. **Groups formation and trainings for women and youth:** Once beneficiaries are identified, the programme, through the CST will establish groups on the basis of their interest (i.e. income generation/ enterprise creation) and related trainings/services will be delivered to respective beneficiaries. Women and youth organized in (separate) groups around interests, will receive (indicatively) the following trainings: financial literacy, small scale enterprise management, support development of market access, market information and business plans, including planned approach to ensure market demand for sustainability of income generating activities undertook and increase value-added. Group formation will be the responsibility of the CST, community workers (mobilisers) and CDAs Gender and Social Development Focal points (including leadership training for women leaders).

71. **Technical assistance for specific training modules for women and youth** (ILO package trainings) For trainings of women and youth the programme might consider the following training packages developed by ILO: 1) The training package Gender and Entrepreneurship Together – GET Ahead for Women in Enterprise – aims to assist organizations in promoting enterprise development among women in poverty who want to start or are already engaged in small-scale business. For training of youth: Star and Improve Your Business (SIYB). This is one of the largest global business management training programmes. It has four training package that respond to stages of business development. Master trainers are responsible for youth

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<sup>3</sup> Takafol exclusion criteria: owned a car, owned more than 1 feddan of land, had a government job or pension, received transfers from abroad, or had a formal private sector job with insurance.

<sup>4</sup> as part of pro-poor initiatives such as Takafol and Karma started in 2015 and Decent life initiatives launched by the President al-Sisi in 2019, Governorates, led by MoSS, have been engaged in exercises to identify the poorer and poorest villages and families. Data and information have been collected and are available (upon request ) at Ministry of Social Solidarity ( MoSS) with whom the program will closely collaborate during preparation and implementation.

groups of 10-20 individuals and of selection, formation, training and mentoring for one year.

72. Considering that ILO is actively engaged in promoting women and youth enterprises in Egypt through various programmes at national level, adoption of this training packages has resulted in creation of in country presence of master trainers, thus having GET and SIYB Master trainers are available in Egypt, it is proposed that master trainers will be engaged (as Technical Assistance) to train women and youth.

73. As model for Women's groups formation the programme may consider the following: **Village Savings and Loans Associations (VSLAs)** – functional as income generation and enterprise groups. In line with the joint efforts implemented, National Council for Women (NCW) and UN Women Egypt have been advocating for implementing and expanding a tested model on reaching the most vulnerable and marginalized women in society through sustaining and transforming the social capital of Village Savings and Loans Associations (VSLAs) into a broad base platform for financial inclusion of Egyptian women.

74. The VSLAs target poor and marginalized women in rural communities, empowering them through participation in savings and loan groups, supporting them to better manage household cash whilst investing in income generating activities. In one programme alone, in partnership with Care International and funded by the European Union, UN Women Egypt have supported the establishment of 1,036 VSLA groups in Assiut, Menia and Beni Suef, comprising of 18,844 members (92% of which are women) with a total savings of EGP 4,577,190, alongside financial literacy trainings and non-financial services.

75. Applying the SDGs principle of "leaving no one behind", capitalizing on the social capital of women is necessary for the progress of any public or private stakeholder. The VSLA offers a ready platform for accessing the furthest left behind first which is appealing to Micro Financial Institutions because of significant lower "acquisition" cost as they develop women clientele from the bottom of the pyramid. It is also appealing for banks as the approach builds on the savings concept and not on loans that carry the perceived risk of debt.

## Chapter 3: Programme Components

76. STAR is designed with two inter-related technical components and a programme management and policy component: Component 1: Strengthening rural institutions, enterprises and markets; ii) Component 2: Improvement of smallholders' productivity and resilience and iii) Component 3: Programme management and policy engagement.

### 77. **Component 1: Strengthening rural institutions, enterprises and markets**

78. This component will increase the marketing of produce and profitability by increasing the target households' participation in the relevant Community Institutions (CI), i.e. CDAs, ACs, WUAs, PMAs and IGEs), strengthening the CIs, linking them to domestic and export markets and increasing their business opportunities in the rural areas. There are two subcomponents (SC): SC 1.1: Strengthening marketing institutions and partnerships; and SC 2.2: Microenterprise development.

### 79. **Sub-component 1.1: Strengthening marketing institutions**

80. This sub-component will strengthen the CIs and increase their outreach to the target households. It will support around 160 CDC and ACs; 150 WUAs and 1,000 PMAs. The strengthened CIs and ACs will serve as collective platforms to facilitate their member-producers to engage and benefit from agribusiness partnerships, domestic market opportunities and improved marketing infrastructure facilities. Agribusinesses (export-oriented and local) will develop 4-Ps marketing partnerships and incentivise the CI member-producers to increase their income by improving the quality and quantity of produce. The CIs will develop business plans (BPs), form marketing linkages with buyers (exporters, processors, wholesalers) and start affordable credit linkages with cooperating financial institutions (CFIs) to implement the BPs.

81. **Preparatory studies and assessments:** STAR will contract a service provider (SP) to carry out a set of studies/surveys to i) assess the landscape, capacities and needs of the CIs in the programme areas; ii) prioritise the commodities with more 'market potential' and assess their value chains, market channels (domestic and export), competitiveness and marketing infrastructure needs; iii) assess the agribusiness landscape and pre-screen the agribusiness which have more potential to partner with the CIs in the STAR programme area. Also based on the assessment identify opportunities for supporting businesses related to value addition, agricultural service provision (e.g. nurseries, rental of farm equipment) and particularly income generation for youth and women (e.g. homestead processing); and iv) assess the financial institutions landscape and pre-screen potential financial institutions that have more potential to partner with the CIs and target households in the programme area based on their technical capacities, geographical/sector specific focus, availability of value chain financing products, and focus on savings culture development; v) identify potential digital agricultural services and capacity building needs to support their implementation; vi) utilise resources from the Adaptation Fund (AF) to assess potential climate risks and develop a preliminary list of measures to address these.

82. STAR will select the LSPs from available private, public, university, and NGO resources through competitive bidding with performance-based contracts. Description of some of the main SPs is presented in Annex 1. STAR will prefer to select a single, reliable, and capable LSP to carry out all the studies. However, to save time, more than one LSP, focusing on different surveys/assessment topics, can be contracted.

83. STAR will complete the selection of the command area/water-unit based village clusters before the above-mentioned surveys/studies carried out by the SP so that the studies/surveys can focus identifying the opportunities specific to the villages in the Star

supported clusters. To the extent possible the SP will implement these surveys at the Governorate level in partnership with strong CDAs there are already present in the identified village clusters with a track record of strong implementation partnership with PRIME and other developmental partners

**84. Develop a pool of master trainers through ToTs: *Training modules***

*development.* The SP will develop a set of training modules based on the findings of the studies/surveys. These modules will focus on a range of topics broadly pertaining to i) institutional capacity building of the CIs and detailed implementation guidelines for these relevant CIs to implement STAR supported activities in the community level; ii) assisting CIs with identification of marketing opportunities (export and domestic) and guidelines for negotiating and developing marketing contracts; iii) orienting the CIs to the basics of microenterprise development and management along with guidelines for supporting the market linkages and production performance of these microenterprises; iv) guidelines for sensitising the CIs to the range of financial products available in the region, financing institutions and the terms of conditions for accessing these products; v) training the target households on farming as a business; vi) orienting and guiding target households to develop and operate savings and credit activities and inculcate savings culture within the various community institutions; vi) capacitating the CIs to develop high quality business plans (BPs) that can serve as the basis for developing marketing linkages, mobilise financing and starting business activities.

85. The STAR team at the NPMU in consultation with the GPMU teams will approved the training modules developed by the SP. Following the approval of these modules STAR will organise a series of Training of Trainer (ToT) workshops for preparing a group of "master trainers" who can further roll out these training and capacity building inputs to the target households in the future. The participants in the ToTs will include young community facilitators nominated by the CDAs operating in the STAR programme area. The CDAs will later on use these representatives as community mobilisers; relevant STAR staff members; some of the agricultural officers, particularly the extension officers, working in the agricultural directorates in the STAR supported governorates; young professionals (YPs) who are already recruited by STAR; and a set of participants nominated by other NGOs, donor programs and private consultancy firms active in the programme area. The SPs will provide "master trainer" certificates to the successful participants at the end of the training workshops. Based on performance STAR will retain the SP to update the training modules and develop new ones if relevant and conduct refresher ToTs on an annual basis.

**86. Select and strengthen partner CDAs and ACs:**

87. STAR will initially target rural community institutions at the target command area level, identifying CDA's (and where relevant Cooperatives). Though CDA's have a multisectoral approach, they are well established community institutions, and present in most villages. However capacities, scope and outreach of these institutions vary.

88. CDAs will be dominantly selected as STAR partners with some instances of partner ACs selection, if ACs are found active in marketing activities in some villages. STAR will select the partner CDA and ACs from the shortlist prepared by the LSP. The partner CDAs and ACs will serve as the STAR entry point in a village and it is within these structures that both the PMAs and the microenterprises will be initially established.

89. STAR will select the CDA in the villages identified for programme interventions from shortlisted CDA prepared by the SP at the beginning of implementation. The villages selected for the 'calibration phase' will already have active CDAs in the area of agricultural development. STAR will identify a set of partner CDAs from this list based on criteria such as i) the track record of the partnership with prime or other developmental programmes; ii) governance and management structure iii) focus on STAR target group

based on the proportion of members from very poor and poor target households; iii) outreach orientation and growth in membership over the last 2 to 3 years; and iv) previous experiences in mentoring PMAs, brokering market linkages with buyers, supporting microenterprises, dealing with financial institutions and serving as financial intermediary and carrying out climate change related activities. The MoSS will also be consulted for assisting the final selection of the CDA.

90. STAR will encourage the formation of new CDA's in those villages in the programme clusters which do not have CDAs or where the CDAs are very weak to serve as programme partners as indicated by the results of the survey carried out at the beginning. The STAR teams at the GPCUs in coordination with the SP will give special attention to mobilisation and strengthening of the CDAs in these villages so that they are ready as STAR partners during the scaling up phase.

91. *Organizational Capacity Building of CDAs and Cooperatives:* STAR will build the capacity of the CDAs as apex institutional platforms to facilitate the improved marketing and productivity of smallholder farmers. It is within these structures that both the PMAs and the microenterprises will be initially established. STAR will support the capacity development of the CDAs focusing on governance, managerial and organizational development aspects. The capacity building inputs will also enhance the CDAs' project management, book keeping, monitoring and reporting capacities. Inputs will be directed to empower the CDAs leadership (board members, and Committee) to better represent its members and enhance the quality of their technical and economic services. Special emphasis will be placed on transparent financial management. Further the capacity building inputs will enhance the business inclination of the CDAs and at the same time generate a strong pro-poor orientation with focus on increasing CDA membership to include at least 60% members from very poor and poor categories, women and youth. Clear protocols for consultative decision-making and conflict resolutions will be established.

92. *Strengthening CDAs and ACs:* STAR will facilitate capacity development of the partner CDAs and ACs focusing on, stronger governance, leadership and management; transparent financial system to manage the income earned directly or indirectly from STAR supported businesses; developing members rules and regulations, book keeping, monitoring and reporting capacities; enhancing business inclination and pro-poor orientation, with the aim to reach at least 60% members from very poor and poor categories; establishing protocols for consultative decision-making and conflict resolution; and orientation to address climate change and environmental risks. STAR will support the registration of these institutions and the opening of their bank accounts and strengthening their offices through basic office furnishing and equipment; STAR will assist the partner CDAs and ACs to pay the allowances and engage a YCFs to implement STAR related activities in the villages.

93. **Community sensitisation and mobilisation:** The community sensitisation and mobilisation activities result in the development of PDAs (component 1.1), IGEs (Component 1.2) and WUA (Component 2.1). The expected membership and the outreach of these institutions is presented below;

**Table 2: Membership and outreach of community institutions**

Type of community institution	Members /beneficiaries	Approximate STAR outreach	Women and youth	Poor and very poor
- Water user associations (refer C2.1)	150-500	30,000	60%	70%
- Production and marketing associations	25-75	55,000		
- Income generation and enterprise groups (refer C 2.2)	20-30	40,000		
- Youth enterprise groups (refer C 2.2)	20-200	22,500		
- MSMEs (enterprise CDAs, companies)	50-300	12,500		
<b>Total</b>		<b>160,000</b>		

94. The GPCUs will carry out intense community mobilisation and sensitisation activities in the programme villages through the engagement of the partner CDA which will select 2 to 3 community mobilisers in each village and also appoint some youth volunteers to facilitate the community mobilisation activities. The GPCUs will anchor the community mobilisation activities through young professionals and partner community development associations and the master trainers where relevant. Capacity building and sensitization activities will be directed in particular targeting the poor, women and youth with the aim of raising awareness on the potential market and livelihood opportunities and the benefits of collective action. The activities will include i) communication campaigns in the villages in the selected command areas, including social media and rural radio programmes; ii) capacity building of youth volunteers to organise small group meetings and house visits to develop the awareness of target households about the benefits of STAR activities and how to participate in these; iii) meetings with local authorities in the three governorates, agribusinesses and private operators and selected institutions and service providers; (iii) special communication events on market days, harvest days, as well as sensitization events targeting producers and their organizations (iv) visits to more mature well established CDAs, Cooperatives, WUAs and marketing associations. This sensitisation will be linked with the awareness raising sessions on livelihood opportunities and specialised coaching on entrepreneurship.

95. **Forming and strengthening production and marketing associations:** The STAR programme area has significant advantages for producing fresh vegetables, fresh fruits, herbs and spices, dried vegetables and processed produce. For smallholder farmers to benefit from these opportunities farming should be seen as a business, one that is integrated into domestic and export markets and value chains and is able to respond to market incentives and signals. To facilitate the integration of smallholder producers with marketing opportunities the GPCUs, with the help of the partner CDAs, will initially establish 1-2 PMAs per village, in order to showcase success and promising implementation approaches, and to build up trust and buy-in from the community, and build replicable and scalable models. Each village is expected to have 8-10 PMAs by the end of the programme.

96. The PMAs will comprise around 50 members with at least 60% members drawn from the poor and very poor category households. In particular, the STAR programme will focus on the formation of women's PMAs as women play significant role in production/rearing and processing at the homestead level in the STAR governorates. Each PMA will identify 3-5 member steering committee, including women and youth. The PMAs will be informal groups housed in the CDAs referred to as the host CDAs. All members of a PMA must also be members of the general assembly of the host CDA. Each host CDA will form a 3-5 member PMA committee to focus on activities pertaining to the development of the PMAs. The PMA committees will appoint 1-2 focal points to directly engage with the PMA steering committee on a regular basis.

97. The host CDA will open a separate bank account for each of the PMAs hosted by it. The head of the PMA steering committee will be one of the signatories to this account. For transparency, the host CDA will manage all financial transactions pertaining to a PMA through the dedicated PMA account. The PMA steering committee will assign a membership fee for the PMA members. In addition, all PMAs will adopt regular savings by the members as a key activity. The host CDAs will capacity the PMAs to carry out regular savings activities and also to retain a part of their profits from collective marketing activities as retained earnings before distributing revenue to the members. The savings and retained earnings will serve as internal capital of the PMAs. The PMAs will use their internal capital for carrying out internal credit activities designed mainly to support individual PMA members to meet the production costs of the commodities collected and marketed by the PMAs.

98. *Services of the PMAs:* The PMAs will provide its members with both marketing and production related services. The marketing services will include identification of remunerative markets, negotiating attractive marketing contracts and payment terms, developing marketing/delivery/selling arrangements for supplying the produce to the buyers, facilitating certification, packaging, grading, branding and labelling of the produce to improve their market appeal. PMAs will also facilitate production-oriented services e.g. access to inputs and machinery services (refer component 2.2). The PMAs will also benefit the buyers (e.g. agribusinesses) who can ensure economies of scale by buying in bulk from the PMAs which will aggregate the produce of their members, instead of sourcing one by one from individual small-holder fragmented farm.

99. Based on the requirements of the marketing contracts the PMAs will also facilitate production-oriented services for the members such as partnerships with quality input suppliers, linkages to machinery service providers and access to technical service providers. The production related services are elaborated further in component 2.2. The presence of the PMAs will also benefit the buyers (e.g. agribusinesses) who can ensure economies of scale by buying in bulk from the PMAs which will aggregate the produce of their members, instead of sourcing one by one from individual small-holder fragmented farm.

100. *PMA institutional development:* PMAs will be trained on, farming as a business and crop budgeting; market analysis, access to market information, marketing partnerships and contract negotiation, financial literacy, access to credit and repayment, public-private producers' partnerships (4Ps) provision of business advisory services; productivity and production efficiencies (under component 2.2); and technologies to address climate change and environment related challenges and issues of water availability.

101. *PMA graduation model:* Initially 1-2 PMAs per village will be established to showcase success and build replicable and scalable models. Each village is expected to have 8-10 PMAs by the end of the programme. A graduation model will be developed to facilitate the progression of mature PMAs from operating as sub-entities of the CDAs into independent income generating associations and private enterprises. The host CDAs will be responsible for capacitating the PMA steering committees to gradually accept more responsibility and eventually manage independently the PMA's external marketing, financial and production related linkages. Other factors based on which PMAs will be graduated will include, increase in membership/beneficiaries (e.g. from 25-75 members/beneficiaries to 100-300 members/beneficiaries); increase in the volume of business; capability to diversify marketing contracts and increase demand for produce; and accumulated internal capital; STAR will incentivise the PMA graduation process by assisting the legal formalities and costs for registering and facilitating larger credit linkages.

102. **Business plan development:** The GPCUs will make an open call for business plans (BPs) from the CIs in the programme supported villages once the partner CDAs in these villages are identified and have received initial rounds of institutional development training including training on BP development and implementation.

103. Two categories of BPs will be developed. The first category will mainly focus on PMAs offering marketing support and production linkages to its members with assistance from the host CDAs. The crop production activities can be carried out individually by the members or collectively through mechanisms such as land consolidation (Component 2.2). An integral part of these BPs will be their focus on select high-impact value chains and the establishment of contractual and public-private-producer partnerships. The second category of BPs will be developed by IEGs focusing on a range of income generation and microenterprise activities along different agricultural value chains (refer SC 1.2). (consider deleting this) Although in the course of implementation some overlap

between the two categories of BP will occur, in the PDR these are kept separate in order to give special emphasis on the development of microenterprises. Although the focus of the business areas will be different, the main elements and structure of both categories of BPs will be similar, as detailed below.

VIPs	Year 2*	Year 3	Year 4	Year 5	Year 6	Year 7	Total
CDAs and ACs (Total)	30	80	50				160
<b>BPs</b>							
PMAs and WUAs	60	180	350	340	200	20	1,150
IGEs, youth enterprises, graduated enterprises	90	330	565	480	225	10	1,700
<b>Total</b>	<b>150</b>	<b>510</b>	<b>915</b>	<b>820</b>	<b>425</b>	<b>30</b>	<b>2,850</b>

\* year 1 will be devoted to preparatory activities and partnership building with limited village level outreach

104. *Contents of the BPs:* These BPs will present a holistic outline of strategic, operational and financial elements of the businesses. They will include i) institutional details about the leadership, member composition and activities of the CI; ii) the description of the business concept/business model along with the background and rationale for selecting it; iii) target beneficiaries, particularly women and youth, along with socio economic category and projected increase in outreach of benefits over 3-5 years; iv) operational details outlining how the business will be operated and managed; v) marketing and market development plans for establishing the necessary contractual arrangements; (vi) market-oriented production plans and measures for improved production efficiencies, addressing the effects of climate change and sustainable use of natural resources (further elaborated and implemented under Component 2); vii) projected revenue and profitability over 3 to 5 years and revenue retention and reinvestment plans; viii) financing needs and sources of finance for meeting all organizational and technical capacity building requirements; production needs; market development and marketing plans and working capital requirements; and ix) impact on the income level, and nutrition and resilience of the target households. The businesses identified will be demand driven based on consultations between the CDA, PMAs, IGEs, target households and other stakeholders and would not necessarily be limited to one item or commodity. The business plans will mostly be 5-8 pages long.

105. The PMAs and the IEGs which are responsible for implementing the BPs will in principle be the owners of these BPs. However, since these are informal entities and have difficulty in linking directly with financial institutions and development partners, the support to these BPs will be directed through the host CDAs. Simultaneously, CDAs, cooperatives and private enterprises, especially when graduating from the PMAs and IEGs, are also eligible to prepare and submit BPs. CDAs and PMAs will be at different levels of maturity, ranging from mature CDAs/PMAs engaging in contract farming and processing, to newly created CDAs/PMAs which will still need support to strengthen their capacity and physical capital. Because of these varying levels of organizational maturity, STAR will seek opportunities to involve the more mature CDAs in the support of the younger organizations and will organise exchange visits and experience and knowledge-sharing events across CDAs and PMAs.

106. *BP development process:* A CIs interested in preparing a BP will draft a short concept note (1-2 pages) with the help of the community mobilisers and young professionals deployed by STAR. The host CDA will submit the concept note to STAR and the main STAR partner financial institutions that can potentially finance the implementation of the business. The concept note will be 1-3 pages long and will present a summary of the business idea, expected number of beneficiaries and their economic category, expected level of financing required, sources of finance, key risks and plans for

mitigating these. When a financial partner agrees to finance the business in principle, the GPCU will approve and provide suggestions for the development of a good quality BP. The community mobilisers and the YPs, who are already trained in the development of the BPs, will hold detailed discussions with the CI to assist them to think through their business idea and develop the detailed BPs. The investment officers of the financial institutions that have expressed interest in financing the implementation of the business plans will also be consulted to provide their inputs during the development of the BPs. The development and approval of the concept note will take around two weeks in the development of the BP will take another one month. Once ready, the business plan will be submitted to the STAR GPCUs through the partner CDA.

107. *BP review process:* STAR will form a BP review committee chaired by the GPCU Director and including technical representatives from the GPCU, CDA, MALR directorate, apex financing institution (MSMEDA, ADP) and local financial partner, as other members. BP review committee meeting will be organized quarterly to review and approve submitted BPs.

108. All BPs should demonstrate that the proposed activities and investments comply with the following eligibility criteria: suitable for financing by local financing partners; supporting efficient use of water and sustainable use of resources; beneficiary co-financing; social inclusiveness (generation of benefits to women, youth, very poor and poor households ); market prospects; plans for new jobs in the future that can absorb youth; no duplication of previous similar support to the same group; increasing livelihood, resilience and nutrition security for target households; and financial and organisational feasibility; prospects of partnership with other government and donor initiatives; measures to address environment and climate change concerns.

109. The business plans will be assessed based on the following criteria: i) Readiness and capacity: previous business history and financial performance; existing activity, capacities and group cohesiveness; ii) business plan quality: identification of market needs, prospective clients, realistic targets and pricing, etc.; iii) projected profitability/cash flow: the business plan should include a multi-annual cash flow analysis, including profitability indicators and demonstrated savings capacity for Operation and Maintenance and asset replacement; iv) funding sources: clear specification of public and private funding sources; v) demonstrated contractual and 4-Ps arrangements linkages: number and coverage of pre-agreed contracts, volume of sales, embedded services.

110. **Contract agreement and partnerships:** STAR aims to support smallholder farmer and PMAs to enter into inclusive commercial partnerships with other value-chain actors. This can either be done through public-private producers' partnerships/4Ps approach, and or direct contractual agreements. The aim of these partnerships is to secure volumes of sales and agreed pricing mechanisms (either fixed or spot), to facilitate finance and access embedded services from agribusiness on improved productivity and quality, as well as promote value-addition processing. The market development and marketing partnership development activities will be led by the Business Development and Marketing Specialist (BMS) with overall technical oversight and guidance from the STAR technical Specialist (STS) in the NPCU. They will support the marketing linkages and partnerships through: i) access to market information; ii) marketing partner identification; iii) partnership brokering; and (iii) start-up the partnership through partnership financing and other support.

111. *Access to market information:* STAR will adopt both direct and indirect measures to promote access to market information for target households. The direct measure will involve organising a set of buyers' orientation workshop at the beginning of the programme where the potential buyers (agribusinesses, exporters, domestic buyers) identified through the initial studies will be invited to learn about the STAR programme,

its approach, opportunities and benefits for the buyers. The representatives of the partner CDA's will also participate in these workshops. At the end of the workshops the interested buyers will be invited to express their interest in partnering with STAR supported the PMAs along with the broad details about the type of business relationship they are interested in. STAR will make the list of the interested buyers and the broad details of their offers available to the partner CDA's and the PMAs.

112. The indirect measures for promoting access to market information will involve STAR investment in to develop producers' knowledge of prices related to market quality demands, volume and timing of domestic and export markets, including seasonal variations. Further, STAR will also promote networking opportunities between value-chain stakeholders and will support participation of CDAs and PMAs in trade fairs, roundtables, information campaigns and fora to boost linkages and broker contracts with larger value chain actors (including institutional buyers).

113. *Marketing partner identification:* STAR will sensitise the PMAs on the set of factors to be considered for identifying marketing partners based on the information made available to them through the above-mentioned steps. These factors will include areas such as: i) type, quality and quantity of produce demanded by the buyer: ii) whether buyer will facilitate access to quality inputs and services (regular monitoring and agronomic advice) to achieve the quality standards; iii) produce delivery logistics; iv) pricing, mode of payment, time taken for; iv) willingness to pre-finance and broad terms and conditions for recovery of the financed amount; v) arrange production financing through financial institutions. The awareness about these factors will put PMAs and its members in a better position to negotiate contracts, establish 4-Ps, negotiate deals and receive a fair price from buyers. Price transparency will enable the PMAs to know when and where to sell, plan the next cropping schedule and help to target those buyers/off-takers offering the best financial return.

114. *Brokering partnerships:* STAR will organise and facilitate partnership workshops between the PMAS (with approved BPs) and the identified buyers before the start of the production season. These workshops will serve as platforms for both the PMAS and the buyers to raise and clarify their concerns, negotiate the terms and conditions of the partnership based on the factors discussed earlier, and finalise the different points of partnership. The partnerships can take various formalization levels: (i) business models resting on mainly informal agreements between PMAs and the buyers; (ii) integrated business models with a formalized agreements (e.g. contracts, fully integrated outgrowing schemes) and; (iii) joint-venture models with investment in joint facilities where the business' assets, ownership, revenues and expenditures are shared by producers and a private entrepreneur.

115. *Start-up the marketing partnerships:* STAR with the help of the partner PMAs start up the partnerships by ensuring the timely production of the quality and the quantity of produce contracted for supply to the buyer. Simultaneously, it will follow up with the buyer were irrelevant to ensure adequate and timely payment of these contracts according to prior agreements. To assist the PMA is to meet the quality and quantity standards STAR, along with the partner CDAs will support the PMAs in a range of areas including i) institutional capacity building of the PMAS in areas such as developing work plans to ensure timely delivery against the contracts, mobilisation of farmers and ensuring inclusive and fair participation and operational guidance during the production process; ii) facilitating linkages of the PMAs to agro dealers and machinery service providers for accessing quality inputs such as planting material and fertilisers, machinery service for production and post production functions and other infrastructure such as nets and micro irrigation systems; iii) supporting access to advisory services through linkages to government extension system, private sector crop production and post production advisory services and digital extension systems. These areas are detailed further in component 2.

**116. Other market development and marketing support interventions:** Some of the other areas in which STAR will invest to support market development and linkages between PMAS and buyers (domestic and export) are described below.

**117. Certification:** STAR will contract service providers to guide the CDAs and PMAs on the importance, mechanisms and process for obtaining different kinds of certification. The CDAs and the PMAs will become aware of organic certification, basic certification (e.g. pesticide free) for local markets and more demanding certification to comply with export and domestic food safety standards. STAR will facilitate the linkages with CDAs to apex professional associations in support of compliance, such as the Union of Producers and Exporters of Horticultural Crops (UPEHC) and the Horticultural Export Improvement Association (HEIA). PMAs can receive STAR support for meeting some of the cost for certification against (i) clear assessment in the BPs that certification will be an advantage for production and marketing and (ii) presence of clear marketing agreements (formal and informal) for the certified produce.

**118. Post-harvest processes and other marketing support:** STAR will provide technical assistance and facilitate investments in necessary equipment and technologies for improving post-harvest practices. STAR will contract technical service providers to provide practical demonstrations to the farmers on a range of post-harvest techniques including proper harvesting technique, cooling, cleaning, sorting and packing in order to increase the shelf life of the produce and reduce wastage and losses. Similarly, the project will provide technical assistance to the CDAs and PMAs, assist them to collaborate with other NGOs and other initiatives in the region, for developing product identity, brand development, packaging and labelling related initiatives that will facilitate the producers to earn higher margins from specially from the domestic markets. (UNIDO – this is an apt example). The STAR supported credit linkages to the CDAs and PMAs will help these institutions and the member producers to meet the cost of adopting post-harvest technologies and improve packaging and branding and labelling related activities.

**119. Market Infrastructure development:** STAR will support investment in market infrastructure development in order to ensure effectiveness of investments made under the BPs and to generate positive impacts on improving the physical environment for marketing and value addition. During the first year of the project, an inventory and needs assessment will be undertaken. This will be prioritized in close consultation of the concerned entities at the district and governorate level. Investments in marketing infrastructure will include collection centres, cold chains, markets, and storage facilities. A key criteria for prioritising specific items of marketing infrastructure and their locations will depend on the additional benefit it will deliver to the target households for marketing their produce resulting from the implementation of the STAR supported BPs. Secondly, the volume of such produce (from the implementation of the STAR supported BPs) that will be mediated to the final markets through the marketing infrastructure should also be clearly estimated.

**120.** STAR will also work in close consultation with the Ministry of Supply and Internal Trade Master Plan, in the promotion of formalised domestic trade through district level mobile markets and the development of 4 wholesale markets at governorate level in Upper Egypt. The programme will aim to rehabilitate or develop 3 market places (and/or market outlets) at selected strategic locations.

**121.** The STAR supported marketing infrastructure can either be private (e.g. private company setting up a cold storage facility), public (e.g. a government owned market) or semi-public (a collection center in a village owned by CDA) in nature. When private, STAR will facilitate the promoters to access technical services from STAR SPs for preparing feasibility studies, business plans and technical drawings with services charges

paid directly to the SP. For public, STAR will share the cost with the government and for semi-public, STAR will support 80% of the technical cost. Additionally, STAR will facilitate access to STAR supported credit for the implementation of all types of marketing infrastructure. Even in cases where their marketing infrastructure is supported through a public investment, STAR will encourage private management of these facilities by supporting the development of suitable public-private partnership models.

**122. Financing business plan implementation:** STAR will support the eligible community institutions to access credit at preferential interest rates and flexible collateral terms in order to implement their approved BPs. Given the long history of existing funds with preferential terms, supporting MSME's and agriculture in Egypt, STAR will employ existing financing channels to direct appropriate resources to its beneficiaries. It will establish a network including Credit Wholesalers (CW), Commercial Banks (CB), Microfinance Institutions (MFI), Credit Cooperatives (CC), and NGO-MFIs to make available access points for all types of beneficiaries. STAR will support four broad types of credit investment.

**123. Rehabilitation of on-farm irrigation infrastructure and crop production inputs:** About 85,000 target households, corresponding to 55% of total STAR outreach, will benefit from STAR supported credits for on-farm irrigation and crop production activities. **About 70%** of the STAR credit investments will be directed to support on-farm irrigation and crop production improvements to increase the income of the target households.

- *Irrigation improvement:* The average cost per feddan for on-farm irrigation rehabilitation is estimated to reach an amount of EGP 50,000 (US\$ 2,500-3,000). The amount will cover costs such as pumps, pipes, civil works, hydrants, water meters, digital technologies and model irrigation systems (drip or sprinkler) for improving irrigation efficiencies. The financial product structured for such type of beneficiaries will involve a credit line for loans between EGP 10,000 to EGP 60,000, with tenure of 5-6 years and one-year grace period. The smallholders will access these loans through WUAs with membership ranging from 250-500 members. The experiences and the lessons from the OFIDO project will be taken into account while implementing these activities. Most of the targeted households are poor and own less than a feddan and the average required investment per beneficiary is expected to be around EGP 25,000 (US\$ 1,500) with a projected repayment period of 5 years. Refer component 2.1 for details.
- *Production improvement:* The credit requirement per household for production improvement is estimated to range between EGP 5,000 -25,000 (US\$300-2,500). The amount will cover cost of production inputs (planting materials, fertilizer, etc.), mechanized services (e.g. tractor hire), technology adoption (solar, greenhouse, digital) for production improvement and addressing the effects of climate change, post-production (packaging, branding, labelling) activities and certification costs. These loans will be of 2-3 years duration with grace period of six months. The smallholders will access these loans through CDAs and PMAs based on the requirements presented in the approved BP's of these community institutions. The smallholders will access these loans through PMAs, with average membership of around 50 members, supported by CDA. Refer component 2.2 for details.

**124. Income generation activities:** About 25,000 target households, corresponding to 15% of total STAR outreach, will benefit from investments involves smallholders (men, women or youth) engaging in income-generating activities. STAR will propose a set of small investments in income generation activities such as small ruminants, poultry, crop, drying of fruits, vegetables and herbs, process fruits and vegetable, roof gardening, dairy produce. These activities will require investments ranging from EGP 5,000-20,000 (US\$ 500-1,500) with quick returns usually within a year. The appropriate financial

product for this investment type is a credit line for loans between EGP 1,000 to EGP 25,000, with one-year maturity, payable in quarterly installments and with the possibility of grace period of 2-3 months for repayment of the first installment. The target households with access credits for these activities based on business plans approved for the IGE groups connected to relevant CDAs. The CDA will establish revolving funds for managing these activities as discussed later. The smallholders will access these loans through IGEs comprising both women's, men's and youth income generation groups with average membership of around 20 members, supported by CDA.

125. *Youth enterprises and other small enterprises:* About 35,000 target households, corresponding to 20% of total STAR outreach, will benefit from youth enterprises and relatively larger enterprises (independent CDAs and companies mostly graduating from STAR supported enterprises) investing in a range of enterprise opportunities along the agricultural value chains. They will engage in a range of collective enterprises such as the production of handicrafts and artefacts from agricultural residue; dairy and fishery - related activities; provision of agro inputs and machinery services; businesses involving digital aggregation models; fruits and vegetables and herbs processing (jam, jelly, tomato paste) and commercial operations of marketing infrastructure such as cold storage, storage, etc. (PIM) The seed capital for such investments will come in the form of a credit line addressed to credit cooperatives that can demonstrate financial healthiness and produce appropriate guarantees (rather than to individuals that would not be able). STAR credit support from EGP 100,000 – 500,000 (US\$5,000-30,000) for youth enterprises and from EGP 0.5 to 1.5 million (USD 30,000-90,000) for larger enterprises which graduate mainly from the youth enterprises either as enterprise CDAs or small companies. The approximate tenure of these credits will be from 3 to 5 years with grace period around 12 months. The smallholders will access these loans through youth enterprise groups benefiting 20 to 50 youth members and enterprise CDA's and companies benefiting from 250 to 500 members.

**Table 3: Summary of STAR supported investments**

Type of investment	Investment Size (EGP)	Access through	Tenure (years)	Grace period (months)	No. of HH	Target bens. (approx. %)	STAR credit investments (%)	Items financed
<b>Agricultural production</b>								
- On farm Irrigation improvement	10,000 – 60,000	WUA	5-6	12	85,000	55%	70%	Pumps, pipes, civil works, hydrants, water meters, digital technologies and model irrigation systems (drip or sprinkler) for improving irrigation efficiency
- Production improvement	7,000-15,000	PMA, CDA, Coops	2-3	6				Inputs, mechanized services; technology adoption (solar, greenhouse, digital); post-production (packaging, branding, labelling); Certification.
<b>Microenterprises</b>								
- Income generating activities	1,000 – 20,000	IGE groups, CDA	1-2	3	40,000	25%	20%	Poultry, small ruminants, honey, homestead production; trading; fruits, vegetables, herbs drying and processing; dairy produce; roof garden.
- Collective youth enterprises	100,000-500,000	youth enterprise gps., CDA	3-5	12	35,000	20%	10%	agro-processing and agro-allied production e.g. handicrafts from agri-residue; dairy, fishery; agro-inputs and machinery services; digital aggregation models; processing (jam, jelly, tomato paste); commercial operation of cold storage, storage, etc.
- MSMEs	0.5-1.0 million	CDA, coops company						
<b>Total</b>					160,000	100%	100%	

126. Youth and women will be targeted horizontally through all four credit lines and their participation will be monitored closely. Overall, women's participation in MFI financing is currently close to 50% (EMFF data), indicating that most likely the introduction of women-specific credit lines will not be necessary. Youth, on the other hand, has been reported to be unable to meet collateral requirements. To overcome this impediment STAR will channeling larger investments (requiring collateral) through cooperatives (or CDAs), thus bypassing the need for collateral. Most MFIs (NGOs etc.) along with the ABE do not require collateral for micro-investments. Still, if collateral requirements prove to be a threat to STAR's smooth implementation, there is an

envelope of USD 1 million, to be used for setting up a credit guarantee with the CGC to promote unsecured loans at a higher premium.

127. STAR will utilize existing channels for disbursing the necessary financial resources to its beneficiaries. In this respect, it does not need to be inventive. Its innovative aspect will be seated on the way it engages with the several stakeholders, with the aim to instill among them an element of healthy competition and beneficial cooperation. It will do so by exploiting synergies among partners and promoting each other's comparative advantage. The ultimate goal being, enhanced efficiency from synergetic effects, improved capacity of rural financing institutions and an expanded financing spectrum for IFAD's target group.

128. Like previous IFAD's projects, STAR will use credit wholesalers (CWs – MSMEDA and ADP) for the implementation of this subcomponent. It will also engage with ABE (and any other commercial bank or eligible financial institution) to use its extensive branch network to reach some segments of the beneficiary group. Credit lines will be distributed on performance-based criteria to a selected group of financial institutions chosen through a competitive process. These institutions will receive credit lines for on-lending to MFIs, Credit Cooperatives (CCs) and NGOs, which in turn will offer the specified loan products to STAR beneficiaries.

129. Through the initial survey carried out by the service provider star will identify the potential financial institutions in brackets NGO MFIs, MFIs and bank branches) that are closer to the star supported clusters and are better suited for partnering with the target households. The GPCUs will further validate the results of this survey through assessments of the pre-screened financial institutions and prepare a short list of potential partners using the criteria presented below and also including other criteria that may be requested by the CWs). To the extent possible this assessment will be a joint exercise carried out in collaboration with the CWs. The shortlisted financial institutions will then be invited to respond to a call for proposals where participants will demonstrate their commitment to and understanding of the STAR's objectives and will be selected by the CWs in consultation with STAR on the basis of the following performance indicators:

- speed of processing loans,
- effectiveness and width of outreach network,
- quality of outreach (awareness activities to promote project value propositions to beneficiary groups),
- project portfolio size,
- project portfolio quality,
- competitiveness of offered interest rates,
- reduced collateral and own participation requirements,
- simplicity and user-friendliness of the loan application process,
- Monitoring of the performance of Financial Intermediaries (banks, MFIs, NGOs, CCs)
- Monitoring of the performance of investments (micro-level),
- Monitoring of repayment rates and support mechanism to instill a culture of responsible financing among the beneficiaries.
- Institutional Capacity Building (ICB) plan (for the institution and its partners/financial intermediaries)

130. Once the Cooperating Financial Institutions (CFIs) have been selected, they will receive consecutive tranches of credit lines for on lending. The tranches will be released on a first-come-first-served basis, i.e. CFIs with higher disbursement rates and better overall performance will be entrusted with larger tranches. STAR will maintain permanent staff in the NPCU and the GPCUs to monitor the process and intervene correctively whenever appropriate. Performance of CFIs will be monitored and re-

evaluated at regular intervals (twice a year) and corrective actions will be negotiated with the project's staff and the implementation support missions.

131. CFIs will be encouraged to undertake capacity building activities across the board (in fact this is one of their performance assessment criteria). The project may assist CFIs to identify capacity building needs and design relevant plans. It may additionally offer financial resources in the form of a loan. CFIs may borrow from the credit line proceeds to finance capacity-building activities, that they will have to repay at an agreed interval.

132. CFIs will then start on lending to their established network of partners (or directly to beneficiaries as in the case of MSMEDA and banks) who in turn will be lending to project's beneficiaries at market terms. STAR will not interfere on credit risk assessment procedures, or impose ceilings on interest rates and/or collateral and own participation requirements. The competitive process will clearly favor however, the avenues that will offer milder and more effective credit terms. The dedicated STAR staff will monitor the effectiveness of the system, and will assist in the resolution of eventual problems, or will come up with proposals for improvements. The STAR staff will have the option to revert to international expertise for support, whenever needed.

133. The contribution and engagement of the dedicated STAR staff responsible to promote the financing part of the programme is crucial and will be in the form of Financial Services Specialists in each GPCU who will be supported by the STAR technical specialist in the NPCU). They will have to act as brokers between beneficiaries, financial institutions and CFIs. They will be responsible for identifying beneficiary financing needs and map them against the several offerings of the financial sector. They will dilute information asymmetries by regularly updating this map and making it available to both demand and supply for credit stakeholders. Programme staff will identify capacity development needs on both the beneficiary side and the financial service provider's side and will package relevant training propositions accordingly. They will identify potential synergies among stakeholders in the sector and will leverage partnerships to capitalize on synergetic effects. They will be proactive in their work and act as leaders of this subcomponent's priorities.

134. CBE has recently adopted (and promotes) an agricultural development strategy very relevant and compatible to STAR's priorities and objectives. STAR staff will liaise with CBE to investigate mutually beneficial additionality. For instance, CBE's aspiration to introduce targeted incentivized funding to enhance banks and ABE to extend coverage at micro-level can directly benefit from STAR's value proposition. Similarly, STAR can benefit from CBE's SuSME project under which EBI is tasked to enhance the capacity of bankers, CGC, and NGOs through training. Both CBE and STAR are developing initiatives in digital agriculture. Co-ordination between them will leverage synergetic effects.

135. Under the principle of brokering beneficiary interests to the financial sector, STAR will also monitor the beneficiaries' ability to meet collateral and own participation requirements. For any eventual involvement, the project will consistently maintain a neutral position, trying not to introduce unnecessary distortions to the credit market. Doing so, it will allow the financial sector to respond positively and crowd-in additional financing resources to support the beneficiary investment needs; it will secure the credit-lines' sustainability and will leave a positive footprint on the sector itself. With this in mind, banks, MFIs, credit cooperatives, and NGOs will adjust collateral and own participation requirements as per their risk assessment procedures. In case this poses a problem to a segment of the target group, the project will encourage CFIs to reduce own participation and/or collateral requirements by increasing the entailed interest rate or recur to a system of credit guarantees. The project will cooperate with CGC to structure a relevant product and will promote more extensive use of moveable assets as collateral.

136. Previous IFAD credit lines in Egypt have been absorbed in the pool of funds of ADP and MSMEDA and reached the beneficiaries as their own funding. The beneficiaries never became aware of IFAD's participation and contribution. The project will make sure that on-lending partners disseminate information on IFAD's commitment and financial support to rural development.

137. *Other financial services for the target group*

138. A critical factor for the success of the project is the engagement of the target group on income-generating activities (and other types of investments that the project proposes). To make sure of that targeted beneficiaries are both interested and able to undertake such ventures, the project provides for a relevant training process. Together with capacity building activities on irrigation, production improvement, and marketing, the project will provide entrepreneurship and financial responsibility skills. Relevant exercises must be practical, realistic and hands-on, instead of theoretical, class-based. An indicative curriculum must include the following elements: a) why is investing good for me (risks and rewards of entrepreneurship); b) what is a business opportunity and how to identify it; c) how to evaluate an idea and assess if the market is ready for it; d) trial-runs to validate concepts and refine business plans; e) financial decisions a smallholder must make as early as possible; f) how to approach the financial sector; g) what are the pros and cons of getting registered and licensed; h) small business management and bookkeeping; i) how to make sure I can repay a loan and why this is important; j) the benefits of savings (you always have some money to save).

139. The project will be responsible for preparing and consolidating the curriculum (as it will do for other capacity-building activities at cluster level), yet it will entrust its delivery to two channels: a) the regular delivery mechanism that the project will adopt for all types of training and dissemination (including with digital means e.g. pico-projectors etc.), and b) CFIs will be encouraged to incorporate the curriculum as part of their outreach strategy.

140. Project staff will investigate and identify existing micro-insurance options pertinent to the beneficiaries. Since 2016, after the resolution No. 902 that set the terms of operation for micro-insurance, the industry has become active. Apart from the existing micro-insurance products, there is active analytical work on crop-insurance (MSMEDA) and rural micro-insurance (JICA). The project will tap on the findings of existing analysis and will promote further efforts in developing products for the target group, in partnership with the existing active players. Similarly, the project staff will investigate the possibility to develop leasing products for the beneficiaries.

141. Finally, the project will promote savings culture within the target group. Project staff will first investigate the possibility to structure savings products with collaborating financial institutions (free savings accounts – digital or not). It will then promote the benefits of using such products to the beneficiaries and the target group in general.

142. To finance these activities, the project provides for a capacity development pool. Project staff will revert to this pool for ad-hoc expert support, on any of the above topics. The pool will be used for training design and delivery, implementation support, brief technical contributions, and studies.

143. **Digital marketing technologies:**

144. Increased use of digital technologies will open up new markets and opportunities. STAR digital strategies will help introduce the data driven marketing applications by including the production data and farm profiling of target farmers. For this, an integrated marketing platform will be developed or piggybacking will be done either with Knowledge Economy Foundation's Bashaier Network or with eFinance Platform. The platform will be

available both in web app form and mobile app format. From the inventory of available market players and emerging traders, agribusiness and exporters, linkages will be built with the MAs. STAR Mobile App will have a component that allows sellers to submit a request for selling a specific produce/commodity. A mechanism will be built to pilot STAR Digital Marketing by demand aggregation.

145. Central to the Digital market Intervention is building a STAR market platform that will drive different activities.

#### 146. **STAR Market Platform**

147. The platform will be both on web based and mobile based. The platform will be anchored by department of agriculture and is facilitated by e-finance or by Bashaier. The content development and data upload will be facilitated by the project staff. If the platform has to be built afresh, the budget provision will be made for outsourcing the development and maintenance work. This will have cross links to the STAR Portal. The platform will have the following functionalities.

- **Market Players Inventory:** A database of market players and potential players will be maintained along with their contact details. The demand and supply data commodity- wise and quality wise will be maintained.
- **E Market Place:** Digitally connects farmers to the online market place, compares the prevalent market prices for the crop, determines farmer revenues & profitability and suggests the most optimal market price. The market prices of different commodities are displayed for the benefit of the farmers. This feature is linked to the aggregation feature. Farmers can choose an option for willingness to sell, upload their produce pictures, minimum sale price, willingness to aggregate etc., The buyers, entrepreneurs, agri-business players can view the details of the produce available for sale (at farmer, village, cluster, governorate level) on dynamic basis. The preconditions for getting the credit in kind (inputs are provided instead of cash) , such as group formation, registration, willingness to aggregate for the markets, type of produce, using collective decision etc., could be digitized. The data related to individual farmers, groups, credit profiling, crops grown, likely harvest dates, quality and visual marketing could be best harnessed. This can be linked with the production dimensions.
- **STAR Input Dealer Connect:** Digital display and access to inventory data of some of the most reliable agro input providers such as the seeds, fertilizers and pesticide dealers, agro equipment dealers and manufacturers, logistics and storage service providers etc.,
- **STAR Payment:** In the later stages of the project, the market platform will be linked to the payment gateways, subject to feasibility.

148. **Implementation Plan:** With intense campaigns and media support, the STAR Digital marketing will be piloted in three clusters covering the three governorates. This Proof of Concept will be put forth during the business meetings between newly formed agri-business entities (of STAR), major players (traders and exporters) for forging the further partnerships to roll out across the three governorates. The success indicators include better market price realization and revenues of target farmers increase by at least 20%, among many others.

#### 149. **Visual agriculture marketing**

150. In recent years, the visual agricultural platforms have upgraded traditional agriculture, deployed e-commerce to rural areas, upgraded store service, produced new orders and other forms in the market. The community development agencies or the

youth entrepreneurs can handle this work with low cost digital camera or a smart phone. At critical growth stages of the crop, photographs will be captured and placed on the digital marketing platform. This will give an assurance to the quality production of the agriculture produce that might interest exporters or the merchants. This will also generate huge data about the producers who register for the visual agricultural marketing scheme. The project may take help of WFP mechanism to convince farmers or a group of farmers. The platform can be integrated with the existing online market platforms.

151. "Visual agriculture" mainly refers to the use of the Internet, the Internet of Things, cloud computing, radar technology and modern video technology to present models, means and methods of cultivation or livestock. "Visual agriculture" also has a primary function, which is a reliable future order effect. Many agri-business / Merchants may use "visual agriculture" to observe and order remotely. We can observe the entire production and management process of products such as vegetables, fruits, poultry, cattle and sheep.

152. **Digital Finance:** The programme will pursue a longer term investment in digital finance. The programme will offer granular farmer level data (STAR Platform) for financial service providers such as banks and insurance companies for credit profiling. Based on the profiling and the production interventions undertaken during the programme, STAR finance cards will be made available in collaboration with leading financial institutions, such as CIB. The cards will provide the users with access to a minimum amount of credit. Cards will be made available for individual farmers as well as collective cards (for CDAs, NGOs and other associations), Using this card, the individual or groups can access credit for buying inputs at outlets that accept the cards / digital money. A cap will be worked out for each type of card. Digital transactions will be encouraged through these wallets for providing the time critical inputs from the dealers. In due course, STAR wallets will be promoted for digital market interventions (linking them with the market transactions). A rigorous campaign will be undertaken involving stakeholders. STAR Money (STAR Money which encompasses Mobile Wallet and Integrated App/Supply Chain) will be introduced during the 2nd tier of digital strategies (from 2023).

153. As the financial needs of every farmer are different, STAR activities may help financial agencies leverage technology to create and get the data metrics which would add value to their services while at the same time advise them on curating new schemes and plans to engage with farmers in a better way.

154. The e-finance platform can be customized to pilot financial inclusion component. At CPMU level, e-finance would be integrated with the STAR Digital Platform/ Dashboard. The dashboard will give complete data related to credit profiling of the farmers, current loan requirement, linking them with the crop/ enterprise, finally to efficient management adoption. Performance indicators do include the ability of the farmers to adopt innovative technologies in his field (contributing to any component - resilience, water saving, productivity enhancement, participation in e-market and aggregation).

155. The implementation steps for Digital Finance;

- The STAR digital finance strategy provides beneficiaries with the savings and insurance products. A comprehensive farmers data available with STAR Platform will be synergized with the financial data (credit requirements, profiles, insurance and savings etc.,).
- For this, a tender will be called for inviting financial institutions who may be interested in offering savings product for the poor farmers, digitally. And probably insurance will be introduced for both for crops and animal husbandry based on the need

- The winner gets the opportunity to partner with the STAR project.
- Star project will provide the capacity to the farmers and to the institutions as how to backstop the farmers. And the institutions will be responsible for providing a platform and the product.
- The institutions will get an opportunity to work with a scale of 180000 beneficiaries.
- This will be a pilot and based on the success the project will scale up to other regions as well.
- This may cost the project 1 million USD.

#### 156. **Sub-component 1.2: Microenterprise development**

157. This sub-component will increase women's involvement in economic activities, develop youth enterprises, support youth jobs creation and facilitate the graduation of microenterprises. It will invest to develop around 1,500 IGEs, 200 collective youth enterprises and 50 small and medium enterprises which will create around 20,000 part-time and 3,000 full-time jobs. SC 1.2 will help to develop microenterprise business ideas, strengthen entrepreneurial skills and provide technical knowhow around agricultural services delivery, agribusinesses and the management of marketing infrastructure with the aim of generating income opportunities and employment. It will (i) ensure that trained youth and women interested in starting or expanding small agribusiness receive business development and financial support. This can include homestead production, agro-processing and agriculture allied production, such as handicrafts from agricultural residue; and (ii) promote private agricultural services to complement public extension services, improve the provision of inputs, and other agricultural services, such as compost making, nurseries and renting of machinery.

This sub-component will focus on the poor and the extremely vulnerable, to provide income generating activities for the landless. It will lead to an increase in the number of microenterprises in the programme area catalysed by the business opportunities unlocked in the value chains through STAR supported activities.

158. **Formation of income generation and enterprise groups:** The CDCs will mobilise the IEGs with support from the YCF and the YPs at the village level. The IEGs will comprise between 20-30 individuals and can be categorised into women's groups, men's groups and youth groups. To the extent possible the members of these groups will belong to the same neighbourhood and will come together voluntarily. Each group will select a group leader, a secretary and a treasurer. The groups will meet at least once a month.

159. The groups will be informal in nature and will be developed under the umbrella of the host CDA. All the IGE members must be members of the general body of the CDA. The IGEs will carry out all formal financial transactions through the CDA. The host CDAs will open bank separate bank accounts dedicated to the IGE, with the IGE treasurer serving as one of the signatories to this account, to facilitate financial transactions for the IGE. The CDAs will also support the IGEs to develop the IGE bylaws, description of activities and rules and regulations.

160. The IGEs will start operations with regular savings activities. The accumulated savings will be distributed as short-term internal loans to members and the interest earned through this process will be recycled as loans. IGEs can also decide to invest the accumulated savings in collective income generation activities such as drying and processing activities. The goal of the IGEs will be to accumulate their capital in order to finance larger internal loans and invest more in collective enterprises. Therefore, the group funds will not be liquidated at the end of the year. If required, a part of the funds will be set aside to meet emergency expenses of the members. Based on the

performance of the internal savings and credit operations the CDAs will facilitate the IGEs to develop their BPs and access external credit to expand their business activities.

161. *IGE activities:* Women play significant role in production/rearing and processing at the homestead level in Upper Egypt. However, many are illiterate, have limited access to resources, and lack the skills due to limited educational opportunities. As a consequence, they have difficulty in taking advantage of economic opportunities. STAR will boost female beneficiaries' knowledge and skills, to become more self-reliant, self-confident and, therefore, empowered to take on a more active role in their families and communities. Specifically targeting women, the programme will promote poultry and small ruminants (e.g. ducks, goats, sheep) and homestead processing and services. Furthermore, roof and homestead gardens will be promoted, complemented with nutritional awareness campaigns and food conservation.

162. **Sensetisation and capacity building of the IEGs:** The LSP will prepare the training modules related to institutional development of IGEs, savings and credit activities and microenterprise development. The YPs and YCFs will be trained as master trainers at the village level. The YCF and the YPs will be responsible for the mobilising the IGEs, training them on basic aspects of institutional development and enterprise development and facilitating their activities based on the guidelines in the training modules. Capacity building and sensitization activities will be directed to the communities, in particular targeting the poor, women and youth with the aim of raising awareness on livelihood opportunities. These activities will be closely linked to mobilization activities for the marketing associations (under SC 1.1). These will include (i) communication campaigns targeting the target command areas, including social media and rural radio programmes; (ii) capacity building of youth volunteers to mobilise the communities (community and house visits); (iii) special communication events on market days, harvest days, as well as sensitization events targeting producers and their organizations (iv) showcasing of successful entrepreneurs and motivational talks by experienced entrepreneurs.

163. **Entrepreneurial and technical capacity development:** The lessons learned from PRIME and other projects show that lack of awareness of business opportunities, practical training and start-up capital are key constraints to sustainably engaging youth in agriculture and processing activities. Training packages, ensuring readiness for trainees with entrepreneurial skills and practical technical knowledge, coupled with access finance through a dedicated seed capital financing with favorable financing conditions will be provided.

164. The sub-component will invest in: (i) tailored entrepreneurial training, for example Start and Improve Your Own Business; (ii) Specific technical capacity building in production, processing and agricultural services and the marketing of these products; and (iii) applied skills and practical training through apprenticeship programs with established agribusiness; and (iv) mentoring and coaching from experienced entrepreneurs. The target households will receive practical, realistic and hands-on, instead of theoretical, training. The curriculum will include the following elements: a) why is investing good for me (risks and rewards of entrepreneurship); b) what is a business opportunity and how to identify it; c) how to evaluate an idea and assess if the market is ready for it; d) trial-runs to validate concepts and refine business plans; e) financial decisions a smallholder must make as early as possible; f) how to approach the financial sector; g) what are the pros and cons of getting registered and licensed; h) small business management and bookkeeping; i) how to make sure I can repay a loan and why this is important; j) the benefits of savings (you always have some money to save).

165. Service providers (e.g. financial institutions, NGOs, MESMEDA) with expertise in access to finance and financial education will assess the needs and adapt accordingly

training modules, key messages and delivery methods and tools. Financial education will combine one-off sessions with continuous multi-channel dissemination in order to support the changes in financial behaviours and attitudes over the long run. To develop and implement multi-channel communication STAR will take stock of technology-based information developed through the MIS (market information system). Fostering a savings culture, will also develop group cohesiveness amongst the target group.

166. *Service providers for supporting entrepreneurial capacity development:* While the YPs and CYFs will provide basic training for mobilisation and starting up the IEG groups, specialised entrepreneurship development training will be delivered through specialised service providers. These will include, i) CFIs which will incorporate the entrepreneurship and income generating training as a part of their outreach strategy; ii) specialised technical service providers such as MSMEDA, NGOs, hired through through a competitive bidding process, to diversify its existing training curricula, developing new modules on sources of finance and repayment; iii) ARC, MoI, Technical and Vocational Education and Training (TVET) to diversify curricula, developing new modules on (pre) processing, post-harvest, food conservation and processing, agricultural services, and digital agriculture, iv) UNIDO, on agro-processing such as tomato paste, sun dried tomatoes, and pomegranate; v) WFP technical training on processing; vi) Innovation and Technology Centres of the Ministry of Industry.

167. This subcomponent will establish these micro-enterprise groups (either collective (up to 9) or as individual), under existing CDAs, that will benefit from the formalized institutional structure and linkages with the MAs. Similarly, a graduation model will be developed to facilitate the progression of mature micro-enterprise groups into independent income generating associations and private enterprises.

168. **Enterprise graduation models:** STAR will incentivise a microenterprise graduation model to motivate leading microenterprises to grow and expand the outreach of their businesses. For example, the model will support the IGE enterprises to develop into collective youth enterprises and independent medium sized companies on achievement of a set of conditions such as a i) certain level of internal capital; ii) expanding membership base; ii) number of jobs supported; iv) proportion of very poor and poor, women and youth members; v) readiness to form independent credit linkages and other institutional linkages. The STAR will incentivise the enterprise graduation process by facilitating access to larger credit volumes, facilitating access to marketing infrastructure support, supporting technical and institutional capacity building needs, assisting the legal formalities and costs for registering and facilitating larger credit linkages.

169. **Business plan preparation:** Microenterprises must develop BPs in order to benefit from STAR credit support and other services. The BP development, review and approval process will be the same as described in SC 1.1. The YPs and the CYFs responsible for facilitating the BP development process will encourage, where possible, joint proposals between the entrepreneur/s and the marketing association, with contracting arrangements and joint resources already in place. These joint proposals could potentially benefit from additional programme support, both financially and in terms of technical assistance.

170. **Access to finance.** STAR will support the approved microenterprise BPs to access credit support from CFIs. The process for gaining access to finance, potential products, interest rates, collateral mechanisms and access to guarantee fund support will be the same as described in SC 1.1. STAR will use IFAD resources as well as co-financing resources from AfBD to support the relatively large 200 collective youth enterprises and the 50 independent small enterprises.

**171. Digital microenterprise solutions:** The sub-component will complement business development and financial services with the promotion of digital technology services. These digital services and applications are aimed at improving both the marketing and production of farming communities, while providing employment and business opportunities for the rural youth. For example, entrepreneurs can develop mobile based and on-line ordering system for delivery of fresh local produce to the consumers. Similarly, an "uber" model can be used as ride sharing technology to aggregate village level produce to the urban markets, or sharing farm technology such as tractors. Rural youth will also be involved in e-commerce activities particularly in door (field) delivery of the inputs, animal husbandry products, which at a scale this will prove to be an income generation activity. For small and medium scale enterprise will get digital support through project report, business risk, bank loan feasibility and relevant government schemes, subsidies and other options in the market to support such business and support their growth.

## **172. Component 2 Improvement of smallholders' productivity and resilience**

173. The objective of this component is to improve the resilience of smallholder crop producers by: securing their access to water resources, and active participation in water users associations (WUA); enhancing the efficiency and sustainability of their use of soil and water resources, and lower production costs; and ensuring compliance with market standards including good agricultural practices (GAP) and safe pesticide residues free food. It will have two subcomponents: SC 2.1 Investments in irrigation infrastructure and management; and SC 2.2 Improved crop farming practices.

### **174. Subcomponent 2.1: Investments in irrigation infrastructure and management**

175. The objective of this subcomponent is to improve water management and supply in branch canals and on-farm irrigation efficiency in the 24 selected command areas consisting of connected third and fourth order branch canals and mesqas in one water unit. This will be achieved through: i) improved irrigation water planning and asset management at governorate level for equitable and reliable water distribution considering current and future challenges from climate change; ii) establishment and strengthening of at least 320 WUAs to enhance participation of water users in irrigation investments, operation, maintenance, and management for sustainability; iii) rehabilitation of an estimated xx km of branch canals and upgrading of 320 mesqas level irrigation systems; and iv) improved on-farm irrigation systems, for more efficient use of irrigation water in 30,000 feddans.

176. The SC is a continuation of the interventions implemented under OFIDO. The intended results are irrigation command areas with reliable water supply for farmers (especially at the tail end), improved irrigation efficiency, increased land values at the tail end of the canals and piped mesqas, and water, energy, land and labour saving at programme completion. Irrigation efficiency will be improved primarily through reduction of losses in the water delivery system (branch canals mesqas and marwas) and at field level. These achievements will be complemented by SC 2.2 results and lead to more stable and increased production and productivity for smallholder farmers increasing their access to food and surplus for marketing. In addition, well defined models of water management, investment cost recovery, and on farm irrigation improvement interventions will be documented and can be scaled up by the three project governorates and by the national Government in other governorates.

177. The subcomponent will be implemented lead by the Irrigation Improvement Sector (IIS) of the Ministry of Water Resources and Irrigation (MWRI) and their Directorates at governorate level, in close collaboration with the Ministry of Agriculture and its

Directorates at governorate level, building on the lessons learned from OFIDO. It will support the following activities:

178. *Selection of irrigation command areas.* As explained under geographical targeting water units/command areas of third and fourth order branch canal and the connected mesqas will be selected for improvement under the programme. Improvement efforts would cover the whole command area, in order to be able to demonstrate impacts of interventions on production and productivity and water saving. The criteria for selection of command areas are included in the geographical targeting section. Two additional criteria, verified through engagement with farmers and villages, will be used to select command areas and mesqas to be prioritized for project investments in the first years of the project: (i) higher concentration of poverty; (ii) the main and second order branch canals and the drainage system are in good working condition and there is no need for major investments for their upstream improvements; (iii) adequate quantity of good quality water is available for irrigation from the second order canal; (i) there are no major social and environmental problems that require mitigation by the programme; and (ii) there is willingness by farmers served by the command area and mesqas to participate in the programme including forming WUAs, participate in the management of the branch canal, and agree on cost recovery mechanisms. It is expected that an estimated 24 branch canal command areas including 320 mesqas will be improved. To be confirmed based on the ongoing water infrastructure rehabilitation needs and poverty mapping exercise.

179. *Improved planning and asset management for equitable and reliable water distribution at governorate level.* To assist in the planning and management of water resources at governorate level, the programme will finance technical assistance for the development of a water resources management plan (WRMP) and an irrigation asset management plan in each governorate participating in the programme. The WRMPs will provide for the implementation of a local system of water management that covers all irrigation water used in the governorate and ensures high levels of water use efficiency are achieved. The WRMPs will consider the challenges from climate change with increased inter-year variability in the Nile water flow and plan for water distribution management in normal water flow years as well as years with low flows combined with an early warning system and advice to farmers on reduced water allocations. In addition, the irrigation assets serving each command area in each of the governorates will be identified, mapped and their condition ascertained. An asset management system will be developed that will identify the necessary frequency for maintenance, and rehabilitation and identify the required costs and financing. Maps of the water distribution networks, with key features, will be prepared.

180. The WUAs details and the individual pump details will be digitized and uploaded onto the STAR Platform. Digital water meters will be installed at strategic points in the selected branch canal areas to measure the quantity, frequency and quality of irrigation water. The data received from the digital water meters will be of immense utility for improving the efficiency of the irrigation systems. Empirical evidences of irrigation efficiency impacts will lead to data driven irrigation management and crop planning. The data driven irrigation management system is a proof of concept (POC) that could subsequently be moved upstream to second order and primary canals as a second phase in the digitalization at midterm of the STAR implementation.

181. In this second phase the automation of water supply, using wireless sensor networks, will help to solve problems of inconvenient irrigation schedules and enhancing the preparedness of future irrigation systems that will need to be more efficient. Wireless sensor networks can potentially pave the way for precision farming in Egypt. While this technology may not be scaled across the target geographies, each governorate could have one pilot covering the command area of 1-3 branch canals served by the same second order canal.

182. About 50 Water User Associations will be involved in this initiative. All the new installations of irrigation systems (electric and pipe delivery) will be equipped with the digital water meters (Electromagnetic Flow meter Model ex: FM600 / 6"), IoT Master Control RTU, Communication Booster, Servo Stabilizer and an online UPS. The digital water meters will be virtually connected through tab / Smart Phones / Data Logging Systems with the project staff. The data will be synced with the Digital Water Module/ dashboard of STAR Platform (based on the need – ideally on weekly basis). The quantity, quality and time of operation and many other parameters of importance will be collected and analyzed to improve the efficiency of irrigation system in 400 installations. This may require around 1.4 Million USD one time investment and 0.8 Million USD operational expenses.

183. The digital water management will be clubbed with the introduction of GSM/ Smart Phone based automated pump starters (in tier 2 – 2023). About 100 project intervention sites (where project is installing electric pumps and pipe delivery systems) will be selected for this and automated pump starters will be installed along with a SIM card. GSM/ Smart Phone based controller enables the farmer to operate the motor pump set from anywhere anytime using his mobile or landline. This activity will bring changes in the way the farmers operate the irrigation motors. This system will bring efficiency in planning irrigation scheduling, remote access, motor running status, warning alerts in built real time clock for accurate timing of irrigation etc., will transform the irrigation management in long run.

184. *Digitalisation of water management.* To support the effective implementation and continuous updating of the WRMPs, digital water meters will be installed at strategic points in the selected branch canal command areas to measure the quantity, frequency and quality of irrigation water. The data received from the digital water meters will be of immense utility for improving the efficiency of the irrigation systems and the WRMPs. Empirical evidences of irrigation efficiency impacts will lead to data driven irrigation management and crop planning. The data driven irrigation management system is a proof of concept (POC) that could subsequently be moved upstream to second order and primary canals as a second phase (tier 2) in the digitalization at midterm of the STAR implementation. In this second phase the automation of water supply, using wireless sensor networks, will help to solve problems of inconvenient irrigation schedules and enhancing the preparedness of future irrigation systems that will need to be more efficient. Wireless sensor networks can potentially pave the way for precision farming. While this technology may not be scaled across the target branch canals command areas, each governorate will be encouraged to select one pilot covering the command areas of 1-3 branch canals served by the same second order canal.

185. *Rehabilitation of branch canals and drainage systems.* The third and fourth level canals in identified command areas will be improved through reinforced concrete intakes, stone pitching, control structures (head and cross regulators if any), tail ends. Stone pitching of canals will be done in all areas where the soil conditions are prone to high levels of water infiltration. Drainage systems will be improved in the command areas. This will include the cleaning of large drains and installation of in-field subsurface drains as needed.

186. *Establishment and strengthening of WUAs to enhance participation of water users in irrigation investments and management.* Rehabilitation and upgrading needs for the mesqas in the selected branch canals will be mapped and discussed with the concerned farmers together with investment and improved irrigation management options. Farmers sharing the same mesqa and expressing interest in forming a WUA and investing in improvement of their mesqa as well as willingness to invest in improved field level irrigation systems will be selected for programme support by the governorate project team including representatives from the IIS/MWRI.

187. In accordance with the Law No 213, formation of WUAs by the beneficiary farmers is a prerequisite for the Government support for mesqa improvement. Under the programme, WUAs will be formed according to the guidelines developed by the Central Directorate of Irrigation Advisory Services of MWRI (IAS). The process includes five phases as defined by the IAS guidelines: a) build credibility with the farmers; b) formation of the water user association; c) participatory design for mesqa improvement; d) participation in mesqa improvement; v) Operation of the improved mesqa. The implementation of this process will be led by the IIS/IAS of the MWRI, with support from the MoA Directorates at governorate level. No mesqa improvement will be implemented unless the WUA is formed and involved in planning and decisions on the design of the improvements and the subsequent management and cost recovery mechanisms covering both investments and operation and maintenance costs. An implementation agreement will be signed between the WUA, IIS/MWRI and MoA agriculture Directorates at governorate level including the design of the improved irrigation infrastructures and works to be procured, budget and cost recovery conditions and mechanisms.

188. It is estimated that about 320 WUAs will be developed under the Management Transfer Model. This Model gives the full water management responsibilities and its financing (at mesqa level) to the WUAs and minimizes the need for government control. The role of the MWRI staffs (District Engineers) will be transformed from implementers to technical advisors and monitors. The WUAs will, within the Law and terms and conditions of the MWRI (as indicated in the implementation agreement), operate, maintain, rehabilitate and improve the water management infrastructure under their responsibility and provide the required resources from their own members and/or from external sources (e.g. MWRI, Local Government, MSMEDA, etc.).

189. WUAs will be trained in irrigation system operation and management tasks, water use efficient technologies and irrigation practices, and climate change impacts on Nile river flows and early warnings for periods with low river flows and crop planning actions to take in years with reduced water allocations. The WUAs will be supported in setting up a water management and fee system. The WUAs may also undertake activities that are indirectly linked to water management such as waste management to reduce the waste dumping in the canal system, which causes high maintenance costs. They may also decide to request training and technical advice from the programme for improving their crop farming (see SC 2.2).

190. *Improved irrigation systems at mesqa and on-farm for more rational use of irrigation water.* The programme will finance (under cost recovery and credit financing) the installation of electric pumps and pipe delivery systems (replacing open canals, that cause loss of land and water, and individual diesel-based pumping, that increases operation costs and pollution) to serve a group of farmers sharing a mesqa on an average of 180 feddans. Where solar electricity is feasible, this will be considered instead of connection to the grid for water pumping. In the periods where the solar energy is not needed for the pumping other alternative uses will be considered, such as for cold storage rooms.

191. As much as possible, lands under the improved command areas will be levelled using laser guided equipment. The programme will provide training in water-use efficient technologies and practices. In each WUA willing farmers will be identified as demonstration farmers to make the shift from surface irrigation to more water-use efficient technologies such as drip irrigation, punched holes and others. This will be done as on-farm demonstration plots covering at least 10% of land in each selected command area seeking at least one plot in each mesqa. The willing demonstration farmers will receive technical assistance and a demonstration credit to cover 50% of the price for installing the system on 1.5 feddan. This credit should only be repaid based on actual pumping cost savings (maintaining the same yields and as such increase in income)

demonstrated through a data log over water use time per week, crops cultivated, and their yields kept by the farmer and monitored by the WUA. The demonstration credit will facilitate that also risk adverse small and extra smallholders can participate as demonstration farmers which is important for creating examples to be taken up by other farmers with the same conditions.

192. With the implementation of digital water meter systems, the whole distribution network can be continuously monitored real time by any specified interval reads. This will allow for an incentive mechanism where WUAs compete against each other in reducing water use and increase use efficiency in their mesqas. The most successful WUAs in a branch canal area will be rewarded (could be in form of extra inputs or reduction in their credits, or other).

Farmers' perception in Upper Egypt is often that drip irrigation can only be used on sandy soils primarily found in the new lands and is not relevant for the loam clay soils found in the old lands. While it is easier to adjust drip irrigation systems to sandy soils it is totally possible to use drip irrigation in loam clay soils. In the latter case the drip frequency needs to be slower to allow for the extra time it takes for the soil to absorb the water and avoid ponding and runoff. Drip is used all over the world on many different types of soil. What is important is the need to design the drip irrigation system and practices to fit to the concrete soil type and cropping system. The system and practices used for sandy soils cannot directly be transferred to loam clay soils.

However, when it comes to managing salinity, areas with water quality and soils with the tendency of building up high levels of salt concentrations may need the salt to be washed down or out ones in a while, and that cannot always be done with drip. In some cases the drip irrigation therefor needs to be combined with the option of periodic flood irrigation, when needed.

193. *Investment cost recovery.* The MWRI is authorized to recover the full capital costs of mesqa improvement from the beneficiaries without interest over a 20-years period. Before any investments, arrangements will be discussed and put in place with the WUA for the full cost recovery and included in the implementation agreement, in accordance with the current legal framework. The WUA should be fully aware of the cost of improvements and the terms of the cost recovery prior to any improvement taking place. To ensure this and create ownership up-front by the WUAs, alternative approaches will be considered. For example, instead of MWRI pre-financing the capital cost and procure the equipment and works, farmers can be linked to credits, with the same conditions as set in the legal framework (without interest over a 20-years period), making them responsible for the financing from the beginning as well as making the WUA responsible for managing their own procurement process guided by the MWRI. As mentioned earlier, an implementation agreement will be signed, that clearly outlines the conditions and expectations from all parties. No mesqa improvement should be started without the implementation agreement is in place.

#### 194. **Subcomponent 2.2: Improved crop farming practices**

195. The objective of this subcomponent is to facilitate smallholder's adoption of improved crop cultivation practices mainly identified in the business plans under subcomponent 1.1. The improvements will consider market product requirements as well as current and future challenges from climate change and the sustainability of the use

and management of soil and water resources. This will be achieved through: i) strengthening of public, private and digital extension services; ii) participatory analysis of crop production challenges and identification of options for tolerant crops and varieties and improved practices and technologies; iii) training of 1000 farmers' groups stimulating their experimental learning; iv) technical and financial support for at least 640 demonstration farmers; and v) improved access to machinery.

196. The intended results are farmers accessing timely and scale adapted advise and technical assistance for improving their cropping systems and produce quality and safety, increasing nutrient and biomass recycling, soil sustainability and reducing costs for agrochemical inputs, and adopting practices that builds resilience against heatwaves and actions responding to early warning of reduced water availability in years with low Nile flow. These achievements will be complemented by SC 2.1 results and lead to more stable and increased production and productivity for smallholder farmers increasing their access to food and surplus for marketing.

197. The implementation of the subcomponent will be led by the MoA directorates of agriculture at the governorate level in partnership with the public Agriculture and IAS/MWRI extension services, farmer producer groups (marketing committees/ associations or WUAs), CDAs and other NGOs, Agricultural Research Institutions and Universities, and private providers of extension services.

198. The SC will provide training and assistance to farmers through two types of farmers' groups formed and/or selected under SC 1.2 and SC 2.1: 1) MAs organized under CDAs or Cooperatives and with a business plan (developed under SC 1.2) identifying their main crop production development needs, and where farmers may have their plots in different mesqas in the programme intervention area; and 2) farmers organized in WUAs (supported under SC 2.1) sharing the same mesqa who do not necessarily initially want to do joint marketing but who have a common interest in joint cultivation (land consolidation but conserving individual benefits from their own plots), adopting new crops and agronomic practices, or improving their soil, water and irrigation management technologies and practices. The approach to facilitating farmer's adoption of new crops, practices and technologies will focus on building their analytical and experimental learning skills, knowledge and skills in accessing quality information sources, and mutual sharing as a way to empower them to seek advice and inspiration beyond the public extension system recognizing its limited outreach. The SC will support the following activities:

199. *Strengthening of extension services.* The capacities and outreach of public extension services to smallholder farmers, bringing in innovations and jointly with farmers addressing barriers for adoption of new practices, are limited. With retirements of extension staff and the moratorium on hiring new staff, there are no prospects of generational renewal and improvements in these limitations. The SC will therefore support new and innovative solutions for providing access to extension services and quality, timely and implementable information relevant for smallholder farmers. These will include:

200. *Young professional program.* To expand the capacity of extension service providers and support STAR targeted farmer groups in adopting new crops, practices and technologies a young professional program for at least 180 newly agricultural and irrigation graduates from the programme governorates will be established. The program will give the young professionals an opportunity to rapidly gain substantial field experience and build their CV and capacities in working with farmers. An additional advantage of giving this opportunity to young professionals interested in agriculture and irrigation and linking them to the project is their ability to bring in new ideas including digital solutions and adapt these to the conditions and needs of smallholder farmers. It is expected that after the program a part of these graduates will be able to establish

private extension services or join companies or NGOs providing these services in the three governorates. They may also establish agribusinesses strengthening the agro value chains in upper Egypt. Each participant will be supported with subsistence allowances and complete a one to two years program with the STAR programme. The first activity would be their training in facilitation methodologies and simple instruments that can support farmer groups' in building their analytical and learning skills for adoption of new crops, practices and technologies. Another feature in their training program will be in the digital solutions that the programme is proposing to introduce, including their further development as lessons are learned with farmers ensuring their continuous adaptation to farmers' needs and ways of appropriating and using the tools.

201. *Training of CDAs and government extension staff:* To further strengthen the supply of facilitators also at least 160 CDA, irrigation and agricultural extension staff will be encouraged to participate in the facilitation training provided to the young professionals. They may also be trained in other modules for farmer group training and experimental learning including in climate resilient cropping systems (see module description later in this section).

202. *Digital Extension Services:* Digital transformation strategies of extension services will help bringing efficiency in production systems, extension services, early warning systems, irrigation management, capacity building and awareness campaigns (ex: nutrition). For driving the digital innovations, digital content and services tailored to smallholder farmers play an important role. For driving the digital innovations, most critical output is building a repository / platform with digital content and services. The project will build a robust knowledge repository that includes production know how, videos, prices, weather information, crop selection criteria, general package of practices, diagnostic information, input management, irrigation management, avenues for entrepreneurship development etc. The knowledge repository which is web based, will be accessed through various digital (video, smart phones, social media, WhatsApp, Television) and other non digital means (field schools, CDAs, Cooperatives, Field Staff).

203. The digital platform development will be led by the NPCU (Digital Agriculture Coordinator) with the digital core tea, comprising of representatives from Ministry for Agriculture and Land Reclamation (MALR) with close collaboration with the Ministry of Water Resources and Irrigation (MWRI) and with the Egyptian Financial Regulatory Agency. The core digital team may also comprise the project collaborators such as WFP, IFPRI, KEF, eFinance, DigitalGreen, civil society organizations etc.

204. The knowledge and service needs of target farmers will be assessed through a series of group discussions and a survey. This can be led by the department of agriculture. The CPMU will be responsible for the developing Information Architecture, design features, outsourcing the software development component. The content development, validation and contextualization can be led by ARC. The service components of the platform such as credit, input supply, inventory of dealers etc., will be anchored by eFinance or KEF (Bashaier) or both.

205. The knowledge repository platform will be build using a Content Management System by outsourcing. A series of content development workshops will be organized to develop and upload the content. This activity will be anchored by department of agriculture and will have all the stakeholders on board. The capacity of the stakeholder organizations will be built simultaneously. This will eventually develop into a Mobile App (STAR App) that will be hosted on Google play store.

206. At district level, uptake strategies will be deployed such as awareness generation to install and use the mobile app (Digital Pull). The videos available in knowledge repository will reach to farmers through video extension model involving community organizations, farmers field schools, NGOs and project staff. The project expects that

10% of the total target households will directly receive time critical knowledge and advises on production, marketing, finance, post harvest, marketing, nutrition and income generation activities.

207. Fortnightly video shows, sequenced based on local needs will be undertaken by Field Schools/CDA/NGOs. Adoption metrics will be updated on STAR Dashboard. Necessary capacities will be built with video extension workshops. The project staff decides the videos to be projected on fortnightly basis, in a participatory way. A trickle down plan will be developed as how to adopt the practices shown in CDA/NGO/ Field Schools.

208. The SMS gate way developed by WFP can be used for pushing SMS alerts to registered farmers: Stakeholders can upload the photograph of the crop / animal husbandry/ Poultry etc., at critical growth stages onto the STAR Platform. Images will get categorized based on location, type, of quality of produce etc., This will also help in creating visual agriculture marketing strategies.

209. IFPRI's AIDA will be customized to help farmers, entrepreneurs, agri-business and policy makers to make decisions on crop mix. During tier 2(2023), the project will identify the potential digital agri-start ups through Digital Hackathon. At least three best ideas pitched will be nurtured and piloted in target area.

210. As far as possible the STAR platform will have comprehensive information and service details pertaining to the three governorates/ While the content is useful to all the farmers of the three governorates, specific activities are undertaken by the project to "PUSH" the content and services to target farmers.

211. STAR Mobile App is developed to provide the farmers with personalized advisory without much external interventions. Meaningful, actionable good agricultural practices will be developed in response to the market demands. The good agricultural practices for five most important crops / animal husbandry / Poultry/ Allied activities will be developed by Agricultural Research Centre, in collaboration with other stakeholders. These are automatically calenderized based on the individual farmers data, integrated with feeds like weather, market price, transport, warehouses and other parameters.

212. Video Extension: This approach combines low-cost technology (pico/neat projectors with low cost handycams) with social organizations (civil society/ farmers groups) in resource poor settings to disseminate information for adoption and behaviour change. The community – based participatory approach empowers rural communities to develop and share knowledge through peer-to-peer social networks. Short videos are produced by local community members trained by the extension functionaries supported by the project staff. These video shows are planned sequentially based on the need of the farmers in each village. Few expert videos available with the stakeholders particularly from ARC and Agriculture channel will be curated to suit to the video extension approach. The video extension approach will be anchored by the extension wing of department of agriculture, technically supported by the Agriculture Research Centre. At village level, the video shows are organized by a STAR Volunteer/ facilitator from CDA/Field School Representative, Cooperative member, private dealer or local youth.

213. Digital Green (DG) model in India has created evidences of empowering smallholder farmers to lift themselves out of poverty by harnessing the power of technology and grassroots level partnerships. For the first two years, the video extension approach will be implemented in collaboration with Digital Green team. Its 'video-enabled extension approach', amplifies the reach and increases the effectiveness of existing private and public extension systems.

214. The model will directly benefit 160 villages by involving 80 video facilitators (one volunteer / CDA /Field School / Cooperative/ field staff – responsible for two villages each). It is expected that for 48 months, 96 video shows will be organized in each village directly reaching 40 farmers / farm women. For a total of 160 villages, the total number of videos shows will be 15,360 showcasing a minimum of 30,720 videos (few may repeat every season) with a direct reach of 6400 farmers/ farm women. This may trickle down to 12800 farmers / farm women through peer to peer sharing. The video will also be hosted on STAR platforms and Digital Green website simultaneously. It is proposed to reach out to a minimum of 80000 farmers / farmer women in the target villages over a period of 5 years using mobile app, social media and youtube.

215. The Extension wing of Department of Agriculture will be the lead organization in this strategy, but with equal partnership with the ARC. The core team from these two organizations may chalk out the technical program and capacity building activities in collaboration with Digital Green.

216. **Social Media & WhatsApp:** A well moderated digital forum for problem Solving using WhatsApp groups and Facebook will be initiated. Farmers can get their problems addressed on a real time basis by way of experience sharing, expert counseling, agri-business connect, nutrition education, domestic and finance advises. Particularly, this will revolve around the contingency alerts to be sent based on climate weather changes like heat waves, as part of the early warning system to extreme events.

217. The knowledge available on STAR Platform (production, market and irrigation components) will be calendarised and posted on weekly basis on social media (Facebook /STAR Page) and WhatsApp groups (Each Governorate having hierarchical groups numbering around 16 reaching 1600). From each stakeholder organization one member will be selected to moderate the group discussion. Specific interest groups for youth, women, entrepreneurs, agri-business will be encouraged. The videos available from STAR platforms and Digital Green will also be shared for deliberations and decision making among the group members.

218. Relevant experiences, content and success stories identified from the social media and WhatsApp groups will be appropriately uploaded onto STAR Platform for future use.

219. **Massive Open Online Courses (MOOCs):** A MOOCs platform for supporting the e-learning will be developed to help young professionals and other prospective entrepreneurs. The courses will be developed in consultation with the industry players. The MOOCs will be hosted on STAR platform. The courses can be accessed through smart phones as well.

220. The courses will be broadly classified into two components viz., production and marketing. The MOOCs platform development will be undertaken by NPCU. The production related courses will be anchored by the Extension Division of Department of Agriculture and the market related courses will be anchored by the Bashaier (KEF). The collaborating organizations under each of these components will be associated for course content and development of the courses.

221. **Climate Resilience with Digital Solutions:** The projects can only focus on adaptation strategies may be short term, medium term and long term. The STAR Platform will have an inventory of climate resilient crops or varieties available. The forewarning alerts, contingency advisories, calendarized advisory based on sowing dates, irrigation scheduling etc., will be digitally made available on STAR Platform. The same will also be personalized / customized to a specific area and pushed through SMS Gateway.

222. *Private extension services.* The programme will strengthen the capacity and outreach of private extension services through three main avenues: (i) through

agribusiness partnerships, embedded private extension services will be provided to small holder farmers (at subsidized rates) to ensure compliance to market requirements and/or food safety and standards; (ii) regulated extension services by input providers and agro-dealers; and (iii) agricultural services provided by rural youth, supported under SC 1.2.

223. *Analysis of challenges and identification of solutions.* Each farmer group will be supported by a young professional and CDA staff backed up by agriculture and irrigation extension staff in a participatory analysis of their production challenges and capacity gaps in terms of: introduction of high value and climate resilient crops and varieties; meeting market standards and producing safe produce; integrated pest management reducing use and costs of agrochemicals; improving the integration of soil quality (salinity, nutrients and physical characteristics) and irrigation management; and reducing production costs by maintaining healthy soils and cropping systems, minimizing the needs for chemical fertilizers, reducing water pumping costs through water use efficiency linked to management of soil salinity. To identify suitable solutions, the groups will be presented and discuss different options using: technical guidelines already developed for different high value crops and crop rotation systems; videos with farmers demonstrating their adoption of different practices, and by visiting or bringing successful demonstration farmers. The groups will be trained in how to do cost/benefit estimates of different practices and crop rotation systems, which will help them to make final decisions on which practices to adopt and in keeping simple logs and monitor their actual cost/benefits as they are applying the practices. This will enable them to adjust the practices or combination of practices as they gain experience.

224. *Modules for farmers group training and learning.* Depending on needs and demands resulting from the business development plans and the exercise analysing crop production challenges and solutions, different modules for farmer group trainings will be developed taking advantage of what already exists. The development and implementation of the different modules will mainly be done through specialized service providers and partners from agricultural research institutions and universities, NGOs, and private service providers. Examples of modules are:

225. Introduction of new short cycled, heat tolerant, high value, and/or less water demanding crops and varieties in cropping systems – optimize planting and harvesting dates based on weather forecasts to avoid ante and post-harvest losses and increase product quality in conformity with market demands

- Adoption of new irrigation technologies (drip and sprinkler) and optimization of irrigation and drainage practices integrated with management of soil salinity based on soil analysis
- Integrated Pest Management – use of biopesticides, insect traps, crop rotation, other organic methods, safe and precise use of chemical pesticides, establish traceability and avoid pesticide residuals in final produce, and safe handling of empty containers.
- Integrated soil facility management – use of compost, manure, integration of legumes in crop rotation, and safe, timely and targeted use of chemical fertilizers based on soil analysis and crop specific needs.
- Organic farming practices and requirements for certification

226. *Demonstration farmers.* The strongest impact on farmer's adoption of new crops and farming practices and technologies in Upper Egypt results from them seeing that it works and brings benefits for a similar farmer in their area. When challenges and solutions are established in an area, the programme will connect farmers with already successful farmers and demonstrations in the area and support additional demonstration

farmers in adoption of a full package of changed cropping system. Like for the demonstration of more efficient irrigation, demonstration farmers will be supported with a special demonstration credit covering the cost for 1.5 feddan. The repayment will be based on actual increase in profits from the introduction of the new practice demonstrated through a data log over crop cultivated, inputs, costs, yields and sales kept by the farmer and monitored by the supporting agricultural extension staff. Different demonstration plots relevant for the different groups (extra small, small and larger landholders) will be developed as well as for livestock activities (animal husbandry practices, fattening, poultry among others). Based on field visits it emerged that smallholder farmers with limited land available are not willing to use their land for demonstration, due to the potential risk associated. In order to further overcome this barrier and the availability of demonstrations relevant for all farmers with different holding sizes, the programme will consider using demonstration crop or animal loss insurance schemes for those willing to be demonstration farmers.

227. *Access to agricultural machinery.* As part of improving crop production practices and overcome productivity barriers, farmers' access to machinery may need to be facilitated, such as tractors and different implements, silage machines, residue cutters for composting, etc. The programme may train farmers groups in setting up machinery sharing schemes including the development of use, operation and maintenance regulations, and budget and fee systems to cover operation, maintenance, repair and depreciation costs. When these arrangements have been agreed and put in place and cash co-financing from beneficiaries have been raised (minimum 30%) the project may facilitate the CDA in accessing finance through the credit lines channelled through an APEX (see SC 1.2) and managing the procurement process.

### Component 3:

*Component 3.2: Policy engagement:* IFAD will engage with the Government of Egypt in evidence-based policy dialogue, with key decision makers in MALR, MWRI and Ministry of Supply and Internal Trade (MoSIT). This is in line with the COSOP Strategic Objective 2 supporting the development of enhanced policies for inclusive and sustainable rural transformation. At the request of the government, FAO in cooperation with IFAD are in discussion to revise the National Sustainable Agriculture Strategy (SADS) 2030 for Egypt, together with the Chapter on Agriculture in the Government Strategy Vision 2030, in close collaboration with MALR. This policy document determine the national agricultural development strategy up to 2030, and together with the a Medium-Term Action Plan to be prepared for a 5-10 year period. More specifically, STAR (and IFADs portfolio in Egypt) can play significant role in evidence-policy making specifically on (i) strengthening cooperatives and marketing associations and their regulatory environment; (ii) promoting inclusive rural financial systems for smallholder farmers; and (iii) provide digital solutions for agricultural and rural development. Furthermore, the government has requested that IFAD take a leading role in policy engagement in water management. IFAD was the first development partner tackling water issues in reclaimed lands, and pioneering on-farm irrigation in Upper Egypt. STAR focuses on modernising irrigation systems, and strengthening Water Use Associations, for collective water management and planning. Furthermore, policy briefs are to be prepared, based on the analyses and results of programme interventions, and shared in learning and policy dialogue events, both nationally and at the MENA region. Developing policy engagement mechanisms and inter-ministerial coordination are a key part of programme management and will be handled by the NPCU in close collaboration with the IFAD Country Director.

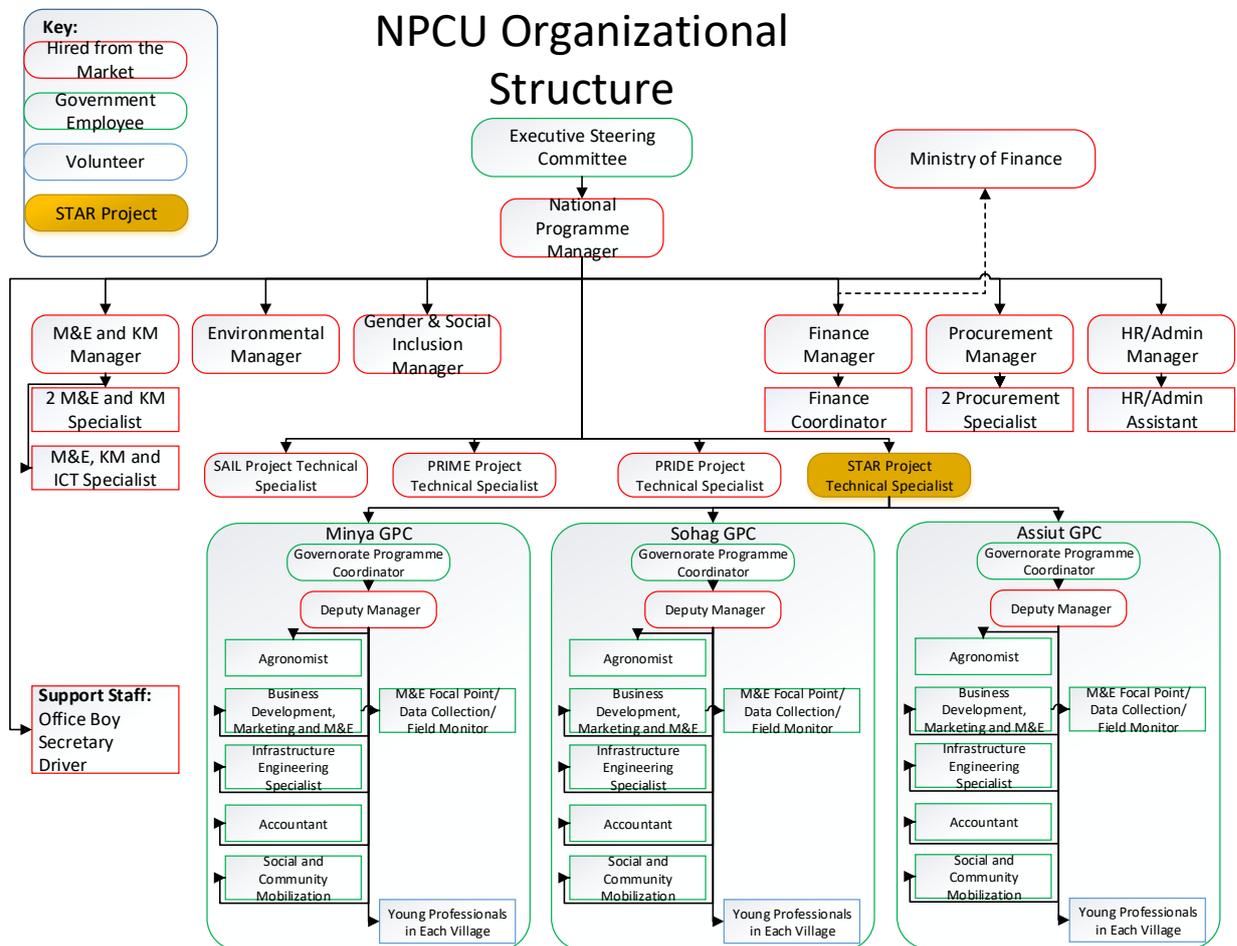


## Chapter 4: Programme implementation structure and responsibilities

### A. Project Management, Implementation Structure and Staffing

1. The Government's lead agency for the Programme will be the Ministry of Agriculture and Land Reclamation (MALR) with close collaboration with the Ministry of Water Resources and Irrigation and with the Egyptian Financial Regulatory Agency, the oversight body for all non-banking institutions (MFIs). STAR implementation will rely on a mix of community, public, the private sector and technical service providers. The beneficiary households will play a lead role in the programme through community institutions (CDAs, ACs, WUAs, PMA and IEGs).
2. **Programme Steering Committee (PSC):** A high ranking inter-ministerial Programme Steering Committee (PSC) would be set up for overall policy decisions and guidance at the National level. The Minister of MALR will designate the Chair of the PSC. Members of the PSC will include representatives of the Governorates implementing STAR, the Ministry of Investment and International Cooperation (MIC), Ministry of Water Resources and Irrigation (MWRI), partner Credit Wholesalers (CW), selected private sector representatives (agribusinesses, exporters).
3. The PSC would meet at least once quarterly, and on an ad hoc basis as and when necessary. It would have the primary responsibility of guiding the programme implementation activities and in all matters of programme policy. Specifically, the PSC would: (i) ensure that STAR activities are in compliance with the Government's policies; (ii) approve the consolidated STAR AWPBs; (iii) oversee the delivery of technical assistance for supporting all the components; (iv) oversee the effective coordination between the different component; (v) decide about innovative measures to use programme resources e.g. facilitating equity investments in agro-industries; (vi) ensure that STAR interventions are coordinated with other development programmes and projects; and (vii) oversee and monitor the systematic implementation of the programme and recommend changes where necessary in coordination with IFAD.
4. **Executive Steering Committee:** The PSC will constitute an Executive Steering Committee (ESC) at the National level comprising members drawn from the PSC. The ESC will serve as a standing committee empowered to meet whenever needed to resolve implementation bottlenecks that cannot be settled at the Governorate level and requires immediate attention.
5. **Governorate Steering Committee:** A Governorate Steering Committee (GSC) will be formed in each STAR Governorate to oversee planning, review progress, facilitate linkages between programme stakeholders and remove bottlenecks affecting smooth implementation. The Head of MALR in the Governorate will Chair the GSC. Other members will include the Governorates level heads of MWRI and MoSS, the representatives of the technical departments in these Directorates, partner CWs and representatives from STAR clusters and the private sector. The GSC will meet on a quarterly basis. The GSC will constitute a GSC Technical Committee from within the GSC members to meet whenever needed to resolve any programme implementation bottlenecks encountered within the Governorates.
6. **Implementation structure**
7. A two-level organisational structure will be established for STAR implementation. At the National level, the National Programme Coordination Unit (NPCU) will be established

for overall programme implementation. At the Governorate level, a Governorate Programme Coordination Unit (GPCU) (total 3, one in each Governorate) will be set up for managing STAR implementation at the Governorate level. Figure 1 below illustrates the organizational structure at both levels.



8. **National Programme Coordination Unit (NPCU):** The NPCU will be established in Cairo at the MALR as a unified coordination unit for consolidated management of all IFAD projects/programme in the country in the future. At the time of its inception (planned in 2020) the NPCU will be responsible for overseeing the implementation of STAR along with three other IFAD projects (PRIDE, PRIME, SAIL). The NPCU will assume the responsibility for the overall implementation of STAR on the ground. All NPCU staff members will be competitively recruited from the professional labour market and will work on a full-time basis for managing all the project/programmes (unless specified otherwise) under the NPCU umbrella.

9. The National Coordinator (NC) of the NPCU will be selected by the ESC amongst one of its members and will serve as the ESC focal person to provide oversight and strategic direction to the NPCU. The NPCU will be headed by the **National Programme Manager (NPM) to oversee the implementation of all the IFAD projects/programmes** in the NPCU. The NPM will be assisted by a National technical support team and a National operations support team with the following composition.

- **National technical support team:** This team will be responsible for overall technical planning, implementation oversight and technical guidance for implementation at the Governorate level. A STAR Technical Specialist (STS) will be recruited specifically to provide dedicated full-time technical oversight and guidance to STAR implementation at the National level. The rest of the team will

be responsible for implementing all NPCU projects including STAR and will comprise: i) one M&E and KM Manager (MKM) assisted by two M&E and KM Specialists (MKS) and one M&E, KM and ICT Specialist (MKIS); ii) one Environment and Climate Manager (ECM); and iii) one Gender and Social Inclusion Manager (GSM).

- *National operations support team:* This team will be responsible for programme financial planning, management and control; overseeing programme procurement, contracting and contract management and staff evaluation. Also, it will develop an internal system to monitor, record and report in detail all types of contributions from community, locality and state levels. The team will be responsible for implementing all NPCU projects including STAR and will consist of i) one Finance Manager (FM) assisted by one Finance Coordinator (FC), an accountant (dedicated to STAR) and an assistance accountant (dedicated to STAR); ii) one Procurement Manager (PM) supported by two Procurement Specialists (PS); and iii) one HR and Administration Manager (HRM) supported by a HR and Administration Assistant (HRA).

10. **Governorate Programme Coordination Unit (GPCU):** STAR will establish three GPCUs, one each in Minya, Sohag, and the Assiut Governorate. The GPCUs will be dedicated only to the implementation of STAR, unlike the NPCU where project management functions will be shared between different projects/programme. The GPCUs will be established as separate offices within the Directorate of MALR and will be headed by a Governorate Programme Coordinator (GPC) deployed from the Directorate of MALR in the Governorate. A Governorate Deputy Manager (GDM) will be competitively recruited from the professional labour market and will assist the GPC to manage the technical and administrative functions of the GPCU on full time basis.

11. The GPC and the GDM will be supported by set of seven full-time staff members seconded by the MALR with IFAD's final approval. These positions will be i) one GPCU Agronomist (GA); ii) one Business Development and Marketing Specialist (BMS); iii) one Infrastructure Engineer (IE); iv) one Social and Community Mobilisation Specialist (SCS) v) one Financial Services Specialist (FSS) vi) one M&E Focal point/data collection officer (MFP) and vii) one STAR Accountant (SA). The seven supporting positions in each GPCU will be directly managed by the GPC and the GDM while at the same time reporting to functional managers at the national level to strengthen the cohesion of implementation efforts.

12. **Village level implementation:** The GPCUs will carry out programme implementation at the village level with the support of partner CDAs and young professionals. At the beginning of the implementation process STAR will train (through ToTs) a pool of 5-10 Young Community Facilitators (YCF) in each village. During implementation, STAR will support the partner CDA in a village to pay allowances and engage 2-4 YCFs, as and when needed, from the pool of trained YCFs, to support STAR implementation at the village level. Additionally, STAR will support a STAR Young Professional (SYP) scheme which will train and deploy one SYP in each village. The SYP will report to the SCS in the GPCU and will support STAR implementation at the village level in close coordination with the CDA and the YCFs. The SYPs will be capacitated through training and technical assistance support, paid allowances, and provided with SYP certificate at the end of the programme. The support to the SYPs will contribute to IFAD's youth inclusion priority.

13. **Programmatic orientation of the NPCU and GPCUs:** The programme management structure and functions in the NPCU and the GPCUs will be capacitated and oriented to support the continuation of the STAR activities even after the completion of the current IFAD financing cycle after six years. Towards this objective the NPCU and the GPCU will adopt a set of specific initiatives such as: i) contract short-term technical

specialists in specific areas (rural finance, marketing, community mobilisation) from the open market to join the GPCU teams periodically with the responsibility to assist with work volumes, examine and improve the existing technical work processes, share knowledge, suggest improvements, and upgrade the knowledge and skills of the GPCU staff; ii) operate a "STAR programme support" initiative in the NPCU and GPCUs which will involve the MALR deputing young officers from different departments to these Units for 6 to 12 months on a rotational basis for orientation and hands-on experience of STAR implementation and iii) establish streamlined and clearly documented technical and administrative processes and regularly update the PIM, including staff roles, responsibilities and decision making authorities, to enable the smooth continuation of these units (Specially the GPCUs) even after IFAD support.

## **B. Planning and budgeting**

14. The main planning tool for STAR will be the Annual Work Plan and Budget (AWPB) which will be prepared using a participatory bottom-up approach within the clusters.

15. The AWPB is an essential covenant in the legal Financing Agreement. The failure to prepare it on a timely, annual basis, may lead to delay or suspension of loan and grant disbursements on the part of IFAD. AWPB serves both as a tool for guiding project implementation and as a collection of benchmarks against which actual implementation progress can be measured throughout the year. A poorly thought-through and prepared AWPB may cause a loss of purpose and direction in implementation, give rise to the need for resource-consuming ad-hoc problem solving when unforeseen (but foreseeable) obstacles to implementation surface during the year, and make it difficult to ascertain if implementation progress is on track.

16. The AWPB is the outcome of the annual project planning process. Through annual work planning, the project decides what activities will be carried out over the next 12 months, by whom, the resources and the time needed to complete them. The AWPB is therefore a planning and management tool that specifies what is expected to be done during the year, how and at what cost. The AWPB should be results-oriented and with clear descriptions of the results that the project is expected to achieve in the AWPB period.

17. Participatory bottom-up approach within the clusters. Once the priorities have been set at the cluster level and activities defined, the AWPB will be compiled for each governorate and the 3 GPCUs will combine the drafted AWPBs for their respective governorates and submit to the NPCU. The NPCU will consolidate and streamline the three AWPBs and submit it to PSC for review and approval. The PSC will insure the inclusion of STAR under the national budget. The draft AWPB will be sent to IFAD for review and no-objection 60 days prior to start of each year of implementation.

18. The NPCU will prepare the Annual Workplan and Budget Report using the following table of contents:

### **Main Text:**

#### A. Introduction

- Project Outline
- The Annual Planning Process and This AWPB

#### B. Implementation Progress and Performance

#### C. Project Strategy and Focus for the Coming Year

- Key Constraints and Required Actions
- Overall Strategic Focus
- Components

## D. Consolidated Annual Budget

### **Annexes:**

- Annex 1. The Logical Framework
- Annex 2. Procurement Plan
- Annex 3. Staff Development Plan
- Annex 4. Detailed Work Plans and Budgets

19. Data and information to be provided in each one of the above sections are described in the following paragraphs.

### **A. Introduction**

20. The introduction would give brief background information about the project and the AWPB in two sub-sections: (i) Project Outline; and (ii) the AWPB.

21. **The Project Outline** would give a quick overview of the project, summarizing the main features. This outline will be written once and used for all future AWPBs, with minor changes as may be necessary, as follows:

- The project cost and financiers (government, and financing agreements details);
- Key project dates (signing of agreements, project completion and closing dates);
- The project area and target group;
- The project goal and objectives;
- A short description of the project components and stating the purpose of the component, the types of interventions, and who is responsible for implementation;
- The main coordination and management bodies.

22. **Annual Plan and Budget:** This sub-section should briefly describe the process that has led to this AWPB, such as community-based planning that has taken place, consultations with other stakeholders, planning workshops held to discuss and synchronize the plans of various implementing agencies, etc.. It is useful to describe what really happened, and if there are weaknesses in the process, mention them and what should be done to improve the situation next year. This sub-section could also be used to highlight some key considerations that influenced the AWPB, for example: plans and budgets were reduced because they were considered too ambitious compared to implementation capacity and the performance of previous years. Finally, explain the structure of the AWPB itself, especially if it has changed since last time.

### **B. Implementation Progress and Performance**

23. This section of about 2-4 pages should present information on the project's current status, progress with implementation to date, problems experienced, lessons learned and changes in the external environment. The stage the project has reached in general terms and overall performance from a financial point of view could be illustrated with expenditure to date: this information can be based on last year's Annual Report and updated with data for the current year. It will set the stage for next year's plan. Since this section looks at the past, the information can to a large extent be copied from last year's Annual Report, and then updated based on experience of the current year. This section would summarize at least the overall performance of the project and progress by component over the past years and what specific outputs have been produced, what interventions have been successful and why, where implementation progress has been good and where it has been problematic. Presenting this information by component would provide a basis for setting priorities for the next year. The facts and figures should

be available from the M&E system, and analysis of implementation performance should be available in implementing agency reports and from (annual) review workshops.

### **C. Project Strategy and Focus for the Coming Year**

24. The AWPB should explain the activities expected to be carried out during the next year. This section should describe the annual planning process that took place, summarize critical constraints that have been identified and that need to be addressed, and describe the main focus for the year, new strategic directions, and the scope of activities for each project component. It would typically be 4-8 pages in size. This key narrative section should find a balance between simply listing proposed activities without sufficient explanation and justification, and too complicated presentation with excessive detail, in which case the AWPB would almost become another appraisal report.

25. **Key Constraints and Required Actions:** The purpose of this sub-section in the AWPB is to list the constraints that will need particular attention during the coming year; to identify what should be done to resolve these constraints; and to indicate who should be involved in problem solving. A simple table may be a good way to present this in the AWPB and the "actions required" in this table should be translated into project activities in the detailed activity and budget tables.

26. **Overall Strategic Focus:** Any changes in the logical framework, and the general focus and direction of project implementation, would be described and justified in this sub-section. This could include aspects such as proposed expansion of the project area; changes in the management structure or implementation responsibilities; launching a general capacity building campaign; and an indication whether the focus is on consolidation and replication of interventions of previous years or the opposite, on venturing into new research and pilot activities.

27. **Components:** This sub-section would describe the general focus; types of activities to be implemented and specific outputs to be produced by each component and specific outputs to be produced; whether there is any particular geographical focus; and whether new implementing institutions or a different division of responsibilities among implementing institutions will be put in place. Where necessary, reference would be made to the planning and budget tables in Annex 4, where details can be found for each specific activity.

### **D. Consolidated Annual Budget**

28. This section with budget summary tables should present a clear overview of the financial picture for the coming year: where and on what will the money be spent? As a minimum, budget summary tables should present three budget summaries: (a) consolidated budget by component and cost centres; (b) consolidated budget by category and cost centres 9); and (c) consolidated budget by financier.

29. Cost centres can be geographical areas where the project is implemented (e.g. the 3 governorates each could be a cost centre), or institutions, or both. For each component, category and cost centre, the budget amount should be given as the proportion of the total annual budget. This makes it easy to compare how the budget will be divided between different areas, institutions, components, and categories. The tables should be accompanied by brief comments; to explain anything that might raise questions in the tables, for example why a certain district will receive much less money or why a certain component takes such a high proportion of the overall budget.

### **Annex 1. The Logical Framework**

30. The Project's Logical Framework should be presented as a part of the AWPB. This matrix may be a different version from the one in the project design or from last year, in which case the changes that have been made should be pointed out.

### Annex 2. Procurement Plan

31. Procurement Plan for Works goods and services is an important requirement and should be included in the AWPB and updated every year. The format of the Procurement Plan should follow that of eth 18 Month Procurement Plan presented in Project Design Report and in Annex B4 of this Manual..

### Annex 3. Staff Development Plan

32. Staff capacity development involves defining the staff who should be involved in project implementation in the first place (numbers, qualifications and experience); and in addition, defining who should be trained, in what they should be trained, and how training should be carried out. This Annex should show the key areas where staff development will be focused, by listing the proposed capacity building activities for the year.

### Annex 4. Detailed Work Plans and Budgets

33. In addition to the main text, the AWPB should contain tables with detailed output/activity tables and their costs listed as line items, organized by component, geographical area, or institution. See the following AWPB Forms.

TABLE -1: ACTIVITY BY QUARTER AND AREA OF OPERATION								
Project Year: __ (1 July – 30 June 20__ )								
Component/ Sub-component: _____								
Items of Expenditure	Units	Physical Target				Total	Area of Operation	
		Qtr 1	Qtr 2	Qtr 3	Qtr 4		Governorate	Cluster
<b>I. Investment Costs</b>								
Sub-component 1								
Activity 1								
Activity 2								
Activity 3								
Sub-component 2								
Activity 1								
Activity 2								
Activity 3								
<b>II. Recurrent Costs</b>								
Sub-component 1								
Activity 1								
Activity 2								
Activity 3								
Sub-component 2								
Activity 1								
Activity 2								
Activity 3								

TABLE - 2: DETAILED BUDGET				
Project Year: __ (1 July – 30 June 20__ )				
Component/ Sub-component: _____				
	Units	Unit	Quantity	

Items of expenditure by Subcomponent	Cost	Cost (USD)					Category (according to Financing Agreement)
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total	
<b>I. Investment Costs</b>							
Sub-component 1							
Activity 1							
Activity 2							
Activity 3							
Sub-component 2							
Activity 1							
Activity 2							
<b>II. Recurrent Costs</b>							
Sub-component 1							
Activity 1							
Activity 2							
Activity 3							
Sub-component 2							
Activity 1							
<b>Total Recurrent Costs</b>							
<b>Total Costs</b>							

**TABLE - 3: DETAILED BUDGET BY COMPONENT; SUB-COMPONENT & FINANCIERS**  
Project Year: \_\_ (1 July – 30 June 20\_\_ )  
Component/ Sub-component: \_\_\_\_\_

Items of expenditure Component and Subcomponents	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total (USD)	Category	Financiers						
							GOE	IFAD	OFID	AfDB	WFP	Benef.	Others
<b>I. Investment Costs</b>													
Component 1													
Sub-component 1													
Activity 1													
Activity 2													
Sub-component 2													
Activity 1													
Component 2													
Sub-component 1													
<b>Total Investment Costs</b>													
<b>II. Recurrent Costs</b>													
Component 1													
Sub-component 1													
Activity 1													
Activity 2													

Sub-component 2														
Activity 1														
Activity 2														
<b>Total Recurrent Costs</b>														
<b>Total Costs</b>														

**TABLE -4: THE TIME PLAN OF ACTIONS**

Project Year: \_\_ (1 July – 30 June 20\_\_ )

Component: \_\_\_\_\_

No	Planned Activities	Activity Schedule											
		1 <sup>st</sup> Quarter			2 <sup>nd</sup> Quarter			3 <sup>rd</sup> Quarter			4 <sup>th</sup> Quarter		
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June
	Sub-component 1												
	Activity 1												
	Activity 2												
	Activity 3												
	Sub-component 2												
	Activity 1												
	Activity 2												
	Activity 3												

**TABLE -5 ANNUAL FINANCING PLAN**

Project Year: \_\_ (1 July – 30 June 20\_\_ )

Component/ Subcomponents		Total Cost (USD)	Disbursement Category	Financiers								
				GO E	IFAD		OFID	AfD B	WF P	Benef.	Others	
					Loan	Gant						
Component Sub-Component Activity	Activity Item 1											
	Activity Item 2											
	Activity Item 3											
Component Sub-Component Activity	Activity Item 1											
	Activity Item 2											
	Activity Item 3											
Component Sub-Component Activity	Activity Item 1											
	Activity Item 2											
	Activity Item 3											
Component Sub-Component Activity	Activity Item 1											
	Activity Item 2											
	Activity Item 3											
Component Sub-Component Activity	Activity Item 1											
	Activity Item 2											

	Activity Item 3											
Component Sub-Component Activity	Activity Item 1											
	Activity Item 2											
	Activity Item 3											
Component Sub-Component Activity	Activity Item 1											
	Activity Item 2											
	Activity Item 3											

### C. M and E

34. M&E for IFAD programme in Egypt has been consistently a low performing area for the programme. The necessary efforts to develop capacity to ensure the proper functioning of an M&E system has not been carefully supported enough by both sides. There has been very little data collection in relation to benefits achieved and over-emphasis on outputs - and not on the links between inputs and outcomes and impact. STAR will ensure that a strong M&E system is in place and will build on lessons learnt from IFAD interventions in the NEN region.

35. Monitoring and Evaluation (M&E) system for STAR will be developed by the NPCU M&E unit with the assistance of IFAD within the first year of the project as a tool for effective project implementation management. The M&E system will enable IFAD, MALR and the stakeholders to monitor Project's internal performance. The objective of the tool is to collect reliable data and information for measuring performance and progress towards achievement of results; and to provide information about success and failures, so that corrective measures can be taken for successful implementation of project activities. It will be also used as a learning tool to provide information for critical reflection on project strategies and operations and supporting decision-making at various levels as a basis for results based management. During the initial years, the project monitoring system will provide information to see how the project activities are being implemented and what adjustments are required to be made in the course of implementation, and later as a tool to assess achievement of outcomes and impacts.

#### Results Based Approach and Managing for Impact

36. The results-based approach will be adopted, involving regular recording of, and accounting for progress against AWPB targets; and routine, periodic assessments of movement towards beneficiary impact. The M&E and Knowledge Management unit will be responsible for all M&E activities, based on the IFAD Guide, which specifies a matrix and performance checklist to orient the selection of indicators, baseline data, methods for data collection, synthesis and a communication strategy for lessons learned. Service providers, contractors, and beneficiary groups will be the prime sources of data emanating from grass roots activities. The Project draft M&E matrix will be prepared in a participatory manner as part of the start-up activities in line with the logical framework.

37. Managing for impact means to respond to changing circumstances and increased understanding by adapting the project so that it will be more likely to achieve its intended impacts. This is only possible if there is reliable information about the progress of activities and their outcomes, the reasons for success and failure, and the context in which activities

are taking place. This information is the output of the M&E procedures. Analyzing this information with key stakeholders can support good decisions that improve the project. Box 1. illustrates how to assess how well the project is doing in terms of managing for impact.

<b>Box 1 Managing for Impact</b>		
<b>Elements</b>	<b>Project that manages for impact</b>	<b>Project that does not manage for impact</b>
<b>A focus on poverty</b>	The implementing partners, including primary stakeholders, collect data on impact and meet regularly to consider if impacts can be seen and whether they meet expectations	The project leaves impact assessment to outside organizations and only focuses on monitoring the implementation of activities
<b>A learning environment</b>	Project and partner staff and primary stakeholders regularly and openly discuss progress and problems. Problems and mistakes are the basis for learning how to work better. People feel safe enough to share their ideas and observations with higher authorities and peers.	Staff focus only on implementing activities, without asking if they are relevant to local poverty needs. Project/Partner organization staff feel that their ideas and observations are not valued and do not speak up when they see things going wrong. Primary stakeholders are rarely asked their opinions.
<b>Effective operations</b>	Clear systems exist for tracking staff performance, equipment use, etc. People are clear about their responsibilities and deadlines, and the resources they need to do their work are available. The managers allocate sufficient budget and are building capacity where needed.	People are often unclear about what they should be doing, when and where. Vehicles and other resources are poorly coordinated and often not available on time. Much time is wasted inactivity. No efforts are made to fill capacity gaps.
<b>A supportive M&amp;E system</b>	The project manager has quick and easy access to information about progress. Staff and partners generate information about outcomes and impact achievements. Information about progress is shared regularly with all stakeholders in a visually appropriate way. The walls of the project office show up-to-date information, graphs, pictures etc. about project progress. Studies are undertaken to explain any emerging problems. Project reports make interesting reading and tell both the good and bad and how improvements will be made.	Few people know what the project has achieved to date. There is little evidence about whether all the activities of the project are leading anywhere. M&E is seen largely as an external reporting function. Project reports are uninteresting, are not analytical, and exaggerated success while not mentioning problems. Little information is shared with project stakeholders.

38. To know how best to mobilize project resources and partnership for reducing poverty, the implementers need to understand the strategy and redirect it when problem arise. Guiding the strategy is largely about asking the right questions-and getting answers-at the right moments (Box 2). M&E processes are critical for making collaborative decisions about adjusting the project's direction.

<b>Box 2. Five Strategic M&amp;E questions to manage for impact</b>	
	<b>M&amp;E question</b>
<b>Relevance</b>	Is what we are doing now a good idea in terms of improving the situation at hand? Is it dealing with the priorities of the target groups? Why or why not?
<b>Effectiveness</b>	Have the plans (purposes, outputs and activities) been achieved? Is the intervention logic correct? Why or why not? Is what we are doing now the best way to maximize impact?
<b>Efficiency</b>	Are resources used in the best possible way? Why or why not? What could

	we do differently to improve implementation, thereby maximising impact, at an acceptable and sustainable cost?
<b>Impact</b>	To what extent has the Project contributed towards poverty reduction (or other long-term goals)? Why or why not? What unanticipated positive or negative consequences did the Project have? Why did they arise?
<b>Sustainability</b>	Will there be continued positive impacts as a result of the Project after the Project funds run out in 4-5 years? Why or why not?

### **Setting up the M&E system**

39. The M&E system is the set of planning, information gathering and synthesis, reflection and reporting processes, along with the necessary supporting conditions and capacities required for the outputs of M&E to make a valuable contribution to decision-making and learning. Key project stakeholders need to develop the different elements of the system together if they are all to use the outputs to improve implementation.

40. Setting up an M&E system involves six steps that need to be dealt with twice - generally at initial design and in detail at start-up:

1. Establishing the purpose and scope - Why do we need M&E and how comprehensive should our M&E system be?
2. Identifying performance questions, information needs and indicators - What do we need to know to monitor and evaluate the project in order to manage it well?
3. Planning information gathering and organizing - How will the required information be gathered and organized?
4. Planning critical reflection processes and events - How will we make sense of the information gathered and use it to make improvements?
5. Planning for quality communication and reporting - What, how and to whom do we want to communicate in terms of our project activities and processes?
6. Planning for the necessary conditions and capacities - What is needed to ensure that the M&E system actually works?

41. These steps can be used when initiating a new project or when revising and expanding the M&E system of an existing project. Existing projects might have planned for some of these M&E elements but miss or undervalue others, so M&E does not perform optimally. This might seem like a lot to remember but in practice is often quite clear.

42. The purpose of monitoring the activities and the different components of the project is to enable the management to track the progress or any obstacles facing the project and modify the plan if required. This requires designing a plan for monitoring and evaluation including the actual activities that are implemented and their indicators. In developing the M&E system, it was taken into consideration the IFAD requirements that were provided in the project design and the project implementation manual. In the following the tasks required for the monitoring and evaluation will be presented with highlighting the IFAD requirements.

### **The role of M&E in IFAD projects**

43. The following table summarizes the expected M&E tasks during the different stages in IFAD projects life cycle.

<b>Phase</b>	<b>Tasks</b>
<b>Early design phase (formulation and appraisal)</b>	<ul style="list-style-type: none"> <li>• Establish the scope and purpose of the M&amp;E system.</li> <li>• Indicate key performance questions and indicators, plus associated monitoring mechanisms.</li> <li>• Identify organizational arrangements for M&amp;E.</li> <li>• Develop terms of reference for M&amp;E staff.</li> </ul>

	<ul style="list-style-type: none"> <li>• Indicate the process for how M&amp;E is to be established during start-up.</li> <li>• Establish an indicative M&amp;E budget.</li> <li>• Document the above in the M&amp;E framework.</li> </ul>
<b><i>Start-up prior to loan effectiveness (with the Special Operating Fund)</i></b>	<ul style="list-style-type: none"> <li>• Revise performance questions, indicators and monitoring mechanisms after reviewing the project strategy.</li> <li>• Organize training with staff and partners likely to be involved in M&amp;E.</li> <li>• Initiate baseline studies, as appropriate.</li> <li>• Prepare a project implementation manual with key staff.</li> </ul>
<b><i>Start-up after loan effectiveness</i></b>	<ul style="list-style-type: none"> <li>• Review project design in relation to M&amp;E with key stakeholders.</li> <li>• Develop a detailed M&amp;E plan, taking into consideration existing mechanisms with partners.</li> <li>• Put in place necessary conditions and capacities for M&amp;E to be implemented.</li> </ul>
<b><i>Main implementation</i></b>	<ul style="list-style-type: none"> <li>• Ensure information needs for management are met.</li> <li>• Coordinate information gathering and management.</li> <li>• Facilitate informal information gathering and communication.</li> <li>• Support regular review meetings and processes with all implementers.</li> <li>• Prepare for supervision missions.</li> <li>• Prepare for and facilitate the annual project review.</li> <li>• Conduct focused studies on emerging questions.</li> <li>• Communicate results to stakeholders.</li> <li>• Prepare annual progress reports.</li> </ul>
<b><i>Mid-term review (MTR)</i></b>	<ul style="list-style-type: none"> <li>• Collate information for the mid-term review.</li> <li>• Facilitate the internal review process to prepare for the external review process.</li> <li>• Help respond to MTR feedback.</li> <li>• Adjust the M&amp;E system, as necessary.</li> </ul>
<b><i>Phasing-out and completion</i></b>	<ul style="list-style-type: none"> <li>• Assess what the implementers can do to sustain impact and sustain M&amp;E after closing down - and implement these ideas.</li> <li>• Hold workshops and do field studies with key stakeholders to assess impacts.</li> <li>• Identify lessons learned for the next phase and/or other projects.</li> </ul>

## **Operational Results Management System (ORMS)**

44. A revised Results and Impact Management System (RIMS), including new output and outcome Core Indicators (CIs), was approved by the Executive Management Committee (EMC) in January 2017 and endorsed by the Evaluation Committee and Executive Board in March and April 2017, respectively. The new RIMS CIs consist of a set of new and improved output and outcome indicators, that measure the more recurrent results achieved through IFAD operations. The new CIs and related measurement approaches have been developed to be consistent with and complementary to IFAD's impact assessment programme, thus ensuring that the performance of IFAD operations is measured across the results chain, i.e. at the output, outcome and impact levels.

45. The ORMS is a full-fledged online system that builds on interconnected templates for the online presentation, analysis, reporting, and approval of project design, supervision and completion documents. Although, the data entered into the system for the project will be done at IFAD level, yet the project will have to provide this data on an annual basis.

46. On an annual basis, the M&E unit will compile the progress of all indicators under the project log frame and send it to IFAD no later than the 31 January of the following year.

### **Annual Outcome Surveys**

47. The annual outcome survey (AOS) is a simple household survey that will be undertaken annually by project staff and will cover a small sample of around 200 households selected randomly. The survey will be conducted exclusively in villages targeted by the project or receiving project interventions, and will include both project beneficiaries and non beneficiaries (the latter used as control group). Overall, the exercise is expected to take no more than 3 months and can be implemented by project staff and extension officers, with or without external support. The main objectives of the survey are to: (i) measure changes happening at the household level in terms of livelihoods and food security during the project life; (ii) assess targeting efficiency; (iii) provide evidence of project success or failure; and (iv) provide timely performance information necessary to undertake corrective actions.

48. The AOS will provide information on "why" and "how" some outcomes were or were not achieved. The project will use the standard AOS questionnaire as the main frame for conducting the survey and will modify it accordingly as per the project thematic areas of intervention. The AOS will be implemented starting from the end of PY2.

### **Progress Reporting**

49. The progress reports are to be prepared semi-annually and, at a minimum, should address (i) quantitative and qualitative progress made in implementing the Project and achieving its objectives, (ii) problems encountered during the reporting period, (iii) steps taken or proposed to be taken to remedy these problems, and (iv) the proposed programme of activities and the progress expected during the following reporting period. Sufficient information must be made available about what money is spent on, how much is spent on what, and what the results are.

50. *The main functions of progress reports are:*

- (a) *Review current progress compared to planned activities, and expenditure compared to budget;*
- (b) *Provide overall status information on the project since it started, in terms of physical progress and total expenditure;*
- (c) *Identify problems during the reporting period and steps to solve these problems;*
- (d) *Analyse strengths and weaknesses, opportunities and threats;*
- (e) *Discuss quantitative and qualitative progress made in achieving overall objectives; and*
- (f) *Provide strategic direction for the next planning cycle.*

### **Preparation of Progress Reports**

51. Each Governorate will submit six-monthly progress report to NPCU through respective GPCU. The reports will record the financial and physical activities against AWP/B targets. The NPCU will prepare the reporting formats and contents to be submitted and be responsible for the compilation of six-monthly and annual reports. The reports will be submitted to PSC and IFAD with the format and content described in the following section, no later than two months after the end of each reporting period.

52. The six-monthly progress reports will be submitted to NCPU no later than 15 July and 15 January, each year. The NPCU will, in turn, submit the Project Progress reports to PSC and IFAD within one month from the end of these reporting periods ( no later than 31 July and 31 January respectively). The Project Progress Report will have the following format and content.

### **Format of Progress Reports**

53. **Section A – Introduction:** A brief summary of the Project Objectives and the design features as is given in the Project Design Report will be presented in this section. It will be written once and used for all future Progress Reports, with minor changes as may be necessary.

54. **Section B - Executive Summary:** A brief summary of the content of the report will be presented in this section, highlighting performance during the project period and to date; trends; explanations for large variations from the initially set Project Design Report targets and objectives; problems and issues, if any; and proposed action during the next reporting period and beyond.

55. **Section C - Detailed Report:** This section will include the following: (a) Descriptions of the Progress made during the reporting period and to date (by components, sub-components and activities); (b) Sources and Uses of Funds Statement; (c) Statement of Use of Funds by Expenditure Type and by Components; (d) Reconciliation of the IFAD funded Special Accounts; (e) Output Monitoring Report; (f) Procurement Report; and (g) Other Relevant Reports. The information contained in the above statements and tables will provide the linkages between physical and financial progress.

- (a) **Progress Made by the Project:** This part will be a summary of the most important aspects of project implementation to date including any special issues that have surfaced and with suggestions for resolution. It will concisely describe and highlight: progress of all key project components including physical works, implementation and project output, actual costs incurred vs. estimates, financing received from IFAD and GOE, as well as major expenditures, large procurements carried out and disbursement performance, critical studies undertaken, technical assistance and training received. It will assess performance in reaching and benefiting the intended target groups, in particular the poorer, as well as gender equity in participation and benefits. It will include numerical information on activities, numbers of participants (male and female) and information about the socio-economic status of individual participants.
- (b) **Sources and Uses of Funds Statement for the Reporting Period and Year-to-Date.** This table will indicate the opening cash and bank balances, listing of the sources and amounts of funds received and expenditures by project component and in line with the IFAD loan/ grant withdrawal schedule in the respective agreements, and the cash and bank balances. It also shows cumulative figures to date side by side.
- (c) **Statement of Use of Funds by Expenditure Type** - These tables list expenditures by component, by expenditure type, and by disbursement categories. An important feature of these tables will be the comparative listing of the actual expenditure figures with the estimates from the latest Annual Work Plan & Budget (AWPB) and the showing of the variances and appropriate explanation for each such variance. The total estimated base costs of the project components and expenditure categories as per the appraisal report will also be shown side by side.

- (d) **Output Monitoring Report** - Physical progress and expenditures in relation to such progress will be presented here. The output indicators will be taken from the physical performance targets set at appraisal. Here again, actual and targets set at appraisal will be compared and explanation provided for deviations.
- (e) **Procurement Report (Updated Procurement Plan)** - The Procurement Report consists of the approved Procurement Plan at grant effectiveness and duly up dated and all the key procurements made on behalf of the project and their status as at the end of the reporting period. The Procurement Report will also include all key procurement of works, vehicles, equipment, goods and consulting and other services undertaken by the project since project start up.
- (f) **Other Relevant Aspects** - Status on the following aspects of the project will be included in this part of the progress report:
  - (i) **Organization and Staffing:** The progress report will include the latest organization chart of the Project. The Chart will give the names, titles, and sex of all senior staff and any changes in the senior management and project compensation details will be reported.
  - (ii) **Accounts and Audit:** This part will describe the status of the NPCU's books of accounts, preparation of quarterly accounts, readiness for the accounts for annual audit and progress or completion of the audit (during the appropriate quarter). Where audits have been completed, key findings, observations, qualifications, and recommendations of the auditors will be provided in this part of the progress report.
  - (iii) **Compliance with Conditionality/Legal Covenants:** Status of compliance with all stipulated conditions included as covenants in the loan agreement will be given. Problem relating to non-compliance of any legal covenant will also be highlighted with suggested resolution.

## **Internal Progress Reports**

### **Monthly progress reports**

56. Each GPCU shall produce a monthly progress report covering the key issue related to the implementation progress in each governorate (including clusters) and to be submitted to the M&E unit at the NPCU no later than 7 days after the end of each month. The following sections will be included in the monthly progress reports:

- **Introduction and summary of achievements:** this will show the summary of the achievements in relation to what was planned under the AWPB.
- **Physical progress:** the list of indicators under the M&E matrix will be shown in this table including the actuals for each month and the cumulative for the AWPB and the project targets.
- **Financial progress:** financial table to show the actual expenditures by activity in comparison with the targets from the AWPB and the appraisal targets.
- **Key Issues for the month and recommendations:** any issues related to delays in implementation or any obstacles that require management attention will be presented in this section.

### **Quarterly progress reports**

57. Each GPCU will produce a quarterly progress report and submit it to the M&E unit at the NPCU no later than 2 weeks after the end of the respective quarter. The progress reports will include:

- qualitative and quantitative progress made in implementing the project and achieving objectives;
- problems encountered during reporting period;
- steps taken or proposed to be taken to remedy these problems. This section includes proposals on how to resolve the issue, and will serve to inform decision-making in the NPCU and the PSC;
- the proposed programme of activities and progress expected during the following reporting period.

58. While the primary users of the information on quarterly implementation progress are project management and other local stakeholders, there is also a need for M&E systems and reports to satisfy minimum requirements by IFAD.

### **Other key aspects**

#### **Baseline Survey**

59. The baseline survey will provide information that will fit into the M&E system; basically baseline data for the programme M&E indicators. The survey will cover both beneficiary villages as well as control villages with a representative sample size. Data from the baseline for the M&E indicators will be updated on annual basis to track the different project indicators over time, including for the MTR. Under the M&E system the data will be analysed to ensure that STAR activities are on the right directions and assess whether or not the targets for the indicators will be achieved.

60. The goal of the baseline study is to understand the level of poverty, agricultural activities, community development, gender inequality of the population, with special focus on women and youth within the three targeted Governorates.

61. The survey should: (i) focus on key indicators required to measure the outcomes and impact of the planned activities as it was mentioned in the Project's Logical Framework; (ii) not duplicate existing available data; (iii) not require an excessive amount of interviewees time; (iv) generate accurate and reliable results based on sound statistical best practice, and; (v) allow disaggregation by gender, age, and targeting categories.

62. The data collected will be both qualitative and quantitative in nature and will include information gathered on the outcome and impact indicators that will be later used for the programme ongoing monitoring and impact assessment studies. In conducting the baseline, the consultant will have the following uses in mind:

- Baseline data will be used by the project management and M&E staff to compare the changes and effectiveness of the interventions on a regular basis during the life of the programme;
- Baseline data will set the basis for proper measurement of mid-term performance and impact assessment including at completion, as well as for possible ad-hoc studies.

63. The specific tasks of the consultant will be to perform the following:

- Review project design documents, in particular, review the project indicators and project log frame within the relevant context of their use and value;
- Develop a detailed sampling and design methodology of the survey. The sample should be a mixture of beneficiaries and non-beneficiaries and a representative sample of project areas. Decisions on the final sampling strategy should be made

in consultation with IFAD. Power calculations for optimal sample size will have to be performed based on poverty measures.

- The household questionnaires shall use MS Excel or other software which will be incorporated in the final report in English.
- The questionnaire will be tailored to project objectives (using log frame indicators will include socio-economic, livelihoods and nutrition indicators).
- Data analysis and report writing in English language.

64. The data to be captured should include but not limited to the following categories and modules:

#### **Household**

- Demographics
- Nutrition and Food security
- Poverty levels
- Income, expenditure and consumption
- Household enterprises
- Shocks and coping strategies
- Asset ownership

#### **Community**

- Basic information
- Community needs, actions & achievements
- Access to basic services
- Communal resource management
- Economic activities
- Agriculture activities
- Communal organization
- Organizations and institutions in the communities
- Stakeholders' and activities
- Farm and off-farm activities

#### **Farm Level**

- Average plot size
- Land ownership
- Land usage
- Land allocation
- Plot details
- Labour details

- Market details
- Farm inputs
- Details on other farm inputs
- Agricultural activities
- Agricultural production Stats
- Sales and storage
- Livestock and crops
- Machinery
- Details on farmer groups and associations
- Insurance and other services available
- Access to extension services

65. **Control group:** In order to better understand the attribution of the project interventions on beneficiaries, a control group (counterfactual) will also be used. This group will be identified based on similar characteristics of the beneficiaries (nearby locations with similar demographics). However, care would be taken to ensure that this group does not include indirect project beneficiaries.

66. The Consultant will be responsible for collection/analysing data from secondary sources that would allow for the benchmarking of the key indicators in the project targeted area which will be the basis for the comparison during the impact assessment/completion survey.

67. In addition to standard collection of gender and age disaggregated data, the baseline and impact surveys will employ the Programme -level Women Empowerment in Agriculture Index (Pro-WEAI) which measures women's empowerment relative to that of men within their households.

68. The Women's Empowerment in Agriculture Index (WEAI), launched by IFPRI, Oxford Poverty and Human Development Initiative (OPHI), and USAID's Feed the Future in February 2012, is the first comprehensive and standardized measure to directly capture women's empowerment and inclusion levels in the agricultural sector. The RALP baseline survey will include separate questionnaires, which will be administered to inform the project-level Women's Empowerment in Agriculture Index (Pro-WEAI). There is consistent and credible evidence that when the status of women is improved, agricultural productivity increases, poverty is reduced, and nutrition improves. More information is available at [www.ifpri.org/book-9075/ourwork/program/weai-resource-center](http://www.ifpri.org/book-9075/ourwork/program/weai-resource-center).

69. The Programme-level WEAI (pro-WEAI) measures women's empowerment in various types of agricultural development projects. This version uses the A-WEAI as a starting point, and adds specialized project-relevant modules, designed and tested by the WEAI team, as well as an enhanced livestock module and an add-on module specific to nutrition and health projects. Standardized components of the survey will be comparable across all projects using the pro-WEAI, and specialized project-relevant modules will be comparable within clusters of projects addressing similar pathways to empowerment in the agricultural sector. Additionally, pro-WEAI includes qualitative protocols to add nuance to the quantitative results. The pro-WEAI is not directly comparable to the original Feed the Future WEAI baselines.

70. Pro-WEAI is made up of 12 indicators that measure three types of agency: intrinsic agency (power within), instrumental agency (power to), and collective agency (power with).

71. The indicators are grouped by type of agency as follows:

Intrinsic agency

- Autonomy in income
- Self-efficacy
- Attitudes about intimate partner violence
- Respect among household members

Instrumental agency

- Input in productive decisions
- Ownership of land and other assets
- Access to and decisions on financial services
- Control over use of income
- Work balance
- Visiting important locations

Collective agency

- Group membership
- Membership in influential groups

### **Mid-term Review**

72. The MALR, as the lead project agency and IFAD will jointly carry out a review of Project implementation at the end of project year three, (Mid-term Review), based on the following terms of reference:

73. The main thrust of the Mid-term Review (MTR) will be to evaluate the overall progress of project implementation, particularly in achieving its goals and objectives and make recommendations for the remaining project period. In particular, MTR will:

- (a) review the achievements of each project component and sub-component vis-a-vis Project Design Report estimates, including their financial and physical progress;
- (b) assess the validity and relevance of project goals, objectives, and strategies, taking into account the implications of evolving public policies and the country's socio-economic circumstances;
- (c) review the effectiveness of participatory approaches and targeting, focusing on constraints for reaching the poorest and the adequacy and effectiveness of support to women beneficiaries;
- (d) assess the post project sustainability of the assets and other development outcomes created through project support;
- (e) identify the critical factors and constraints that have inhibited timely project implementation, both in global terms and by component and sub-component, including the institutional and socio-economic policy issues, in addition to any other external factors unforeseen at design;
- (f) examine the arrangements for project implementation, co-ordination and management, including the roles and responsibilities of all key players at the national, regional and local levels, in particular assess the adequacy, the overall effectiveness and the institutional;
- (g) the process of formation, financial management and performance of WUAs; their Management Boards and respective service providers.

- (h) review the adequacy of existing policies and procedures governing project's financial management, external audit, liquidity and the use of the special account facility, and staff training needs and make practical recommendations to improve the effectiveness and efficiency of project co-ordination and management;
- (i) examine the efficiency and overall adequacy of the arrangements for annual planning, budgeting, and the flow of funds;
- (j) assess the efficiency of procurement and disbursement procedures, and make recommendations to redress any constraints encountered with a view to ensure the timely delivery of goods and services required for the project;
- (k) examine the effectiveness of the M&E system, in particular its capacity to collect and analyse data and information, and report on the performance of the project in line with the key performance indicators highlighted in the project's results framework;
- (l) examine the need, nature and scope for adjustments or reorientation of project design and implementation strategy, and propose practical recommendations for corrective remedial measures by component and sub-component to be carried out during the remaining or extended period of implementation with a view to achieve the project goals and objectives;
- (m) critically examine project costs and financing plan by component, sub-component and categories, bearing in mind any revisions to the physical and financial targets;
- (n) assess the effectiveness of supervision process in terms of implementation support, its timeliness and ability to identify and deal with problem issues, the adequacy of its expertise mix, and effectiveness in following up on its recommendations; and
- (o) evaluate the important lessons learnt in the course of project implementation and highlight their implications on future project activities

74. The MTR will largely be based on, inter-alia, the Project Design Report; Environmental and Social Impact Assessment Reports, Procurement Plans, the Reports of Supervision and Follow Up Missions; the Project's Annual Work Plans and Budgets as well as Progress Reports; and Financing Agreements; evolving government policies and strategies; and additional data and information collected through commissioned studies. The MTR will include extensive field visits and consultations with key implementation agencies at the national, district and local levels, in addition to interacting and conducting interviews with beneficiary households in the three project governorates.

75. The findings of the MTR will be communicated promptly to the implementing agencies and discussed jointly between the GOE and IFAD. On the basis of conclusions and recommendations of the MTR, necessary adjustments will be made in the Project design and the Financing Agreements to remove constraints and put the Project on track to achieve its objectives. The GOE will ensure that the recommendations resulting from the Mid-term Review are implemented within the specified time and to the satisfaction of IFAD.

### **Project Completion Survey**

76. Programme completion survey (impact evaluation) will use the same questionnaires used for the baseline to allow for comparison against baseline results. Analysis will be done by beneficiary status, region and gender of household head.

77. The impact evaluation will assess the project impact using the same indicators (ORMS and project specific derived from the LF) as the baseline survey. The key elements of the Survey will include: (i) socio-economic characteristics of the Project

primary target group; and (ii) status of social and economic infrastructure. The Survey will be aimed to measure the changes brought about by the Project in the socio-economic development of its beneficiaries. It is anticipated that the Survey will combine a formal household sample survey with a more qualitative and in-depth study. The Survey will also compare the socio-economic situation of beneficiaries and non-beneficiaries in order to better attribute the impact to the project. Detailed analysis will be undertaken of the changes observed between baseline survey and the impact survey. Where possible, panel data will be used i.e. some of the beneficiaries interviewed during the baseline survey will also be included in the sample of the impact survey.

### **Staffing for M&E**

78. The Monitoring and Evaluation unit at the NPCU will be responsible for ensuring that a responsive M&E system is established and regular monitoring and progress reporting is in place for Project activities. The M&E unit at the NPCU will comprise one M&E manager and 3 specialists. At each of the 3 GPCUs one focal M&E persons will be assigned and will have day-to-day responsibility for collecting and analysing data and preparing, as required but at minimum monthly reports, on progress and results achieved and implementation issues arising from monitoring activities. The young professionals will have a key role in collecting the data from the field and reporting to the M&E focal person at the governorate. Consolidation will be done by each M&E focal person and data is to be sent to the M&E unit at the NPCU.

79. An early task of the M&E unit will be to establish a Monitoring and Evaluation Plan including a matrix to identify data sources and periodicity of reporting for the agreed indicators. The reports will be directed at Project management, but may be shared with the Project Steering Committee. Provisions have been made under the Project Management Component for office equipment and supplies that may be required. Implementation support and training for M&E/KM will be provided by IFAD regularly.

80. All Project staff are expected to be active participants in the M&E system where the overall coordination of information collection and flow will be guided by the M&E unit at NPCU. Quantitative and qualitative information will be collected at beneficiary level by the young professionals using M&E indicators that have been developed by the M&E unit based on the M&E plan that includes a matrix to identify for the Project.

81. The gathered information will be shared both with GPCU staff involved with the Project at the district as well as at the governorate levels. Clear reporting lines will be established with NPCU in Cairo. The objective is to develop and operate a systematic Management information system (MIS) that focuses on strategic analysis, rather than on data compilation with limited transformation into information. The task will be to go from outputs, up the monitoring scale, to outcomes by transforming the information into knowledge about Project's impact. The accurate dissemination and reporting of the transformation will be dependent on the M&E staff's capacity to generate narratives on the why and how of the changes documented.

### **Beneficiary Database**

82. A Database of programme beneficiaries will be established by each GPCU for use at governorate level. This database will include detailed information about each beneficiary (socio-economic indicators such as age, gender, targeting category, HH level assets and land size and farming activities). The database will be consolidated at the NPCU by the M&E unit. This database will be utilized for different purposes including sampling for the

different surveys, tracking the beneficiaries outreach as well as selection of beneficiaries to visit during the supervision missions.

### **Geo-referencing**

83. Geo-referencing. The program will adopt the geo-reference methodology developed in NEN to support implementation and M&E processes. The use of the geo-referencing methodology will be embedded in the M&E plan of the program. The young professionals will be responsible for ensuring that the different project sites and interventions are geo-referenced. To a minimum, the secondary and branch canals will be geo-referenced including the catchment area and rehabilitation costs and will be linked to the project MIS along with Agribusinesses, demonstration plots and other relevant interventions in each cluster.

## **D. KM and communications**

### **Learning**

84. KM and Learning is the integrated approach of identifying, capturing, evaluating, retrieving and sharing information. It is the using of knowledge more effectively with 5 interconnected functions:

- **Learning and Adaptation:** Seeking regular feedback, learning lessons to improve performance, regular reviews for collective decision making, documentation of decision that leads to change, flexibility for the use of knowledge and new innovation.
- **Learning oriented M&E:** Setting benchmarks, indicators and learning question; collective qualitative and quantitative data, analyzing data, monitoring process, continuous follow up of progress and performance.
- **Internal and External Communication:** Internal communication to support learning, foster teamwork and joint responsibility, culture of feedback and appreciation, creating visibility and advocacy, sharing lessons across projects and organizations
- **Innovation and Experimentation:** Sourcing new ideas and innovations, seeking and embracing new opportunities, enriching new ideas through Communities of Practice (CoPs/ TWGs) groups of people who focus on particular aspects and trying out new ideas.
- **Information management:** Electronic archives with reports and lessons, capturing and documenting information, systematizing and organizing information, packaging information to suit the targeted audience into websites and blogs as well as keeping data banks.

## The Integrated Knowledge Management and Learning System

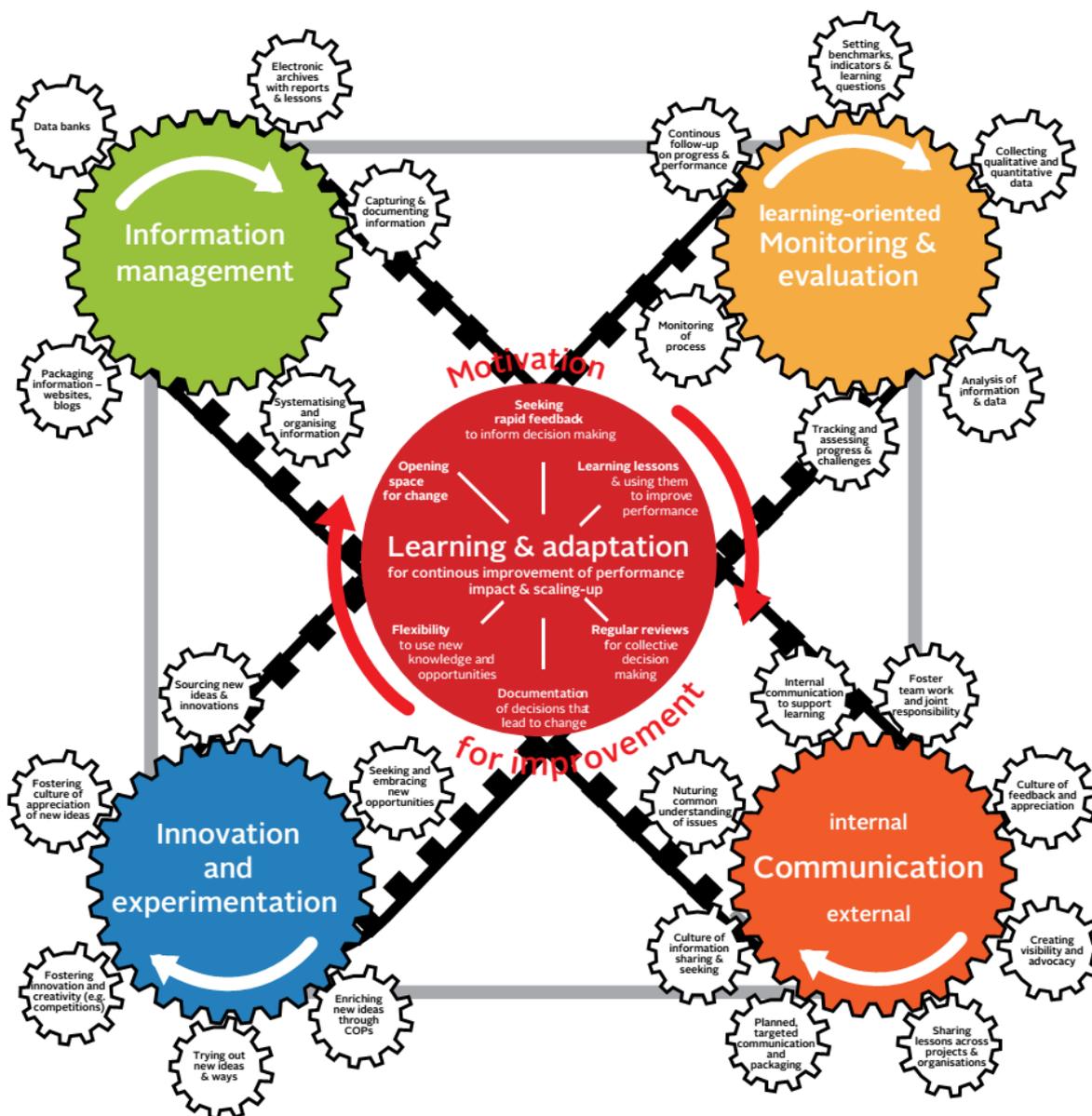


Figure 1 Integrated Knowledge Management and Learning System

85. Building on lessons from IFAD country programme, special attention will be put on making sure: (i) programme launch is effective for visibility (ii) knowledge management indicators are included in the M&E system; (iii) of setting up solid information management systems (e.g. electronic archives); (iv) clarifying roles and responsibilities in knowledge management in the programme management and implementation teams; (v) facilitating internal programme learning and cross-project exchanges; (vi) organising exchanges with other projects and agencies through SSTC, organising targeted workshops, and other activities to disseminate results and attract the interest of government and development partners for improvement of their practices, replication and scaling up of tested and documented innovations.

86. In order to enhance the learning process and the dissemination of results, a knowledge management and communication strategy (KMC strategy) will be developed and integrated into the management of the programme. The strategy will include which thematic areas of learning the programme will be focusing on. The strategy will outline how the knowledge generated will be disseminated and will identify most appropriate channels.

### **Knowledge Management and Communication**

87. The KMC strategy will be formulated based on the IFAD's knowledge management and learning framework which recognizes 5 interconnected functions which include: learning for adaptation, learning oriented monitoring and evaluation, internal and external communication, information management and innovation and experimentation.

88. Based on this, the KMC will focus on 2 areas namely; Knowledge harvesting, storage, and processing and Knowledge sharing and learning partnerships which embodies information management, learning oriented M&E and internal communication and adaptation. The strategy will be reviewed and revised annually by conducting a knowledge audit to identify key needs and opportunities as well as specification of activities to be included in the work plan and budget.

89. STAR KMC strategy will be guided by two strategic pillars; 1. Knowledge harvesting, storage, and processing and, 2. Knowledge sharing and learning partnerships.

90. These two pillars falls under IFAD's KM&L framework pillars of information management, learning oriented monitoring and evaluation and internal and external communication principles. STAR KMC pillar number 1 is aligned to information management, and learning oriented monitoring and evaluation while pillar number 2 is aligned to internal and external communication pillar under the IFAD's KM&L framework.

### **Pillar 1: Knowledge Harvesting, Storage and Processing**

91. In order to ensure that knowledge generated is used and applied, the strategy will promote information harvesting, storage and processing to adapt to its users. Resources will be made available to harvest, store, process and disseminate information to stakeholders that need it, and to ensure best use of knowledge generated by other initiatives in Egypt and the region. Electronic databases, will be made accessible through the programme website. STAR will finance additional hardware and software, so as to better maintain and disseminate data, and library services for document acquisition and storage at various work stations.

### **Pillar 2: Knowledge Sharing and Learning Partnerships**

92. After information is captured, there will be value addition through interpretation and analysis, drawing on information from other sources, and adapting it for use by a range of partners. The knowledge sharing and learning instruments to be deployed are as follows: (i) studies and publications on lessons learned; (ii) case studies documenting successes and failures; (iii) publicity material including newsletters, radio and television programmes; (iv) formation of national and regional learning networks; (v) periodic meetings and workshops to share knowledge and lessons learned; (vi) research-extension liaison/feedback meetings; (v) study tours; (vi) preparation and distribution of technical literature on improved agricultural practices, including crop and farm budgets; and (vii) the routine supervision missions, mid-term review and project completion report. Special efforts will be made to incorporate stakeholders at district and community

level in the learning partnerships to ensure that they contribute to and benefit from the sharing of knowledge.

93. Knowledge management will play a central role in the programme. Both GoE and IFAD perceive STAR as a significant learning and knowledge management investment in addressing economic and social imbalances between urban and rural areas. STAR has the potential to bring immense field experience into the policy discourse on digital agriculture, rural youth and women agribusiness development in Egypt and disseminate that to a wider international audience. Knowledge generated by this programme will contribute significantly to the design and implementation of youth empowerment agricultural interventions within the agriculture sector as a whole with support from the GoE.

94. Therefore, knowledge generation will be the main scaling up pathway. The programme will help GoE to generate knowledge on the impact of cluster investment partnerships and subsidies and inform programme pipeline development and best use of subsidies to benefit rural upland farmers.

95. The success of implementing the KMC strategy rests on active and collective participation of all stakeholders involved. The stakeholders include those from the public sector (, development partners, civil society and the smallholder farmers involved in STAR. Policy guidance and enforcement implementation mechanisms will be provided by MALR at national level. A designated focal person (STAR KM and ICT Specialist) based in NPCU will coordinate the implementation of the strategy. IFAD will provide a technical assistant to assist the designated focal person with coordination and setting up the systems.

## Chapter 5: Guidelines for the implementation of Rural Finance Activities

### Addressing Limited Access to Finance for Rural Beneficiaries

The Project acknowledges the current consensus that accessing finance is one of the main hindrances for rural development and therefore mainly focuses on making available credit lines tailor-made for its target group. Financial instruments will be appropriately structured to support all types of investments, expected to be undertaken by the 160,000 beneficiary households. Through this apparatus, the Project will also dilute information asymmetries relative to offered interest rates, collateral and other terms of credit. The Project will investigate the possibility to alleviate collateral requirement constraints (especially for youth - if they arise) with the use of the credit guarantee or the secured transactions mechanism. The Project will liaise with relevant stakeholders to consider the development of sector-specific insurance products. Finally, the Project will stimulate entrepreneurship and financial responsibility among beneficiaries and will promote the savings culture. It will liaise with banks to develop relevant products and services.

This project does not have a dedicated Rural Finance component. Financing (offered by the project) provides primarily the means for the realization of the investments ensuing from the two main components (Production and Marketing). In that sense, financial products are being designed to support the market opportunities identified by these two main components. These products will be monitored, adapted and improved in consultation with the targeted clientele and the participating financial institutions along the project's lifespan.

#### *Finance for beneficiary investments*

The core endeavor of the financing subcomponent is to provide credit that will allow beneficiaries to accomplish their investment plans for production improvement and marketing development. Given the long history of existing funds with preferential terms, supporting MSME's and agriculture in Egypt, the project will employ existing financing channels to direct appropriate resources to its beneficiaries. It will establish a network including Credit Wholesalers (CW), Commercial Banks (CB), Microfinance Institutions (MFI), Credit Cooperatives (CC), and credit NGOs to make available access points for all types of beneficiaries.

The Project provides for four broad types of investment.

- a) The larger percentage of investments involves irrigation. Production improvement and therefore increase in income for the beneficiary will be the result of a collective investment on common irrigation infrastructure, together with a private investment on modern (drip or sprinkler) irrigation system at the field level, combined with the use of improved inputs. The average cost per fedan for such investments is estimated to reach an amount of EGP 50,000. Most of the targeted beneficiaries are poor and own less than a fedan. The average required investment per beneficiary would, therefore, be around EGP 20,000 with a projected repayment period of 5 years. A financial product structured for such type of beneficiaries should involve a credit line for loans between EGP 10,000 to EGP 60,000, with tenure of 5-6 years and one year grace period.
- b) The second largest type of investments involves smallholders (men, women or youth) engaging in income-generating activities. The project will propose a set of small investments in animal, poultry, crop, etc. value chains that will require an amount of EGP 10,000 initial investment (on average) with quick returns within a

year. The appropriate financial product for this investment type is a credit line for loans between EGP 1,000 to EGP 20,000 , with one-year maturity, payable in quarterly installments and with the possibility to delay the first installment.

- c) The project will support marketing associations (initially informal) promoting activities along the value chain. Groupings of 50 producers (on average) will consolidate efforts under the auspices of a cooperative to promote their produce at higher strata of the value chain. This will require common investments of EGP 150,000 (on average or EGP 3,000 per beneficiary) with an expected payback period of 3 to 5 years. The project will channel financing to the cooperatives in the form of loans ranging in size from EGP 50,000 to EGP 200,000, with a tenure of 3 to 5 years and one-year grace period.
- d) The project will also support youth enterprises or associations investing in value-addition of agricultural production for an amount of EGP 300,000 on average (per investment). The payback period for such type of ventures would be longer-term (3-5 years). Youth groupings of 20 (on average) will work together using a cooperative as a shell until they graduate to become fully-fledged private enterprises. The seed capital for such investments will come in the form of a credit line addressed to credit cooperatives that can demonstrate financial healthiness and produce appropriate guarantees (rather than to individuals that would not be able). The offered principal will range between EGP 50,000 and 300,000 with 2 to 5 years term and one-year grace period.

Type of community institutions or type of investment	Investment Size EGP	Tenure (years)	Grace period (months)	% of targeted beneficiaries	% of total investments
Income Generating Activity	1,000 – 20,000	1	3	50%	35%
Irrigation and production improvement	10,000 – 60,000	5-6	12	40%	55%
Marketing Association	50,000-200,000	3-5	12	30	5%
Collective Processing Facility (Youth)	100,000-400,000	3-5	12	10	5%

Youth and women will be targeted horizontally through all four credit lines and their participation will be monitored closely. Overall women’s participation in MFI financing is close to 50% (EMFF data), indicating that most likely the introduction of women-specific credit lines will not be necessary. Youth, on the other hand, has been reported to be unable to meet collateral requirements. To overcome this impediment the project is channeling larger investments (requiring collateral) through cooperatives (or CDAs), thus bypassing the need for collateral. Most MFIs (NGOs etc.) along with the ABE do not require collateral for micro-investments. Still, if collateral requirements prove to be a threat to the project’s smooth implementation, there is an envelope of USD 1 million, to be used for setting up a credit guarantee with the CGC to promote unsecured loans at a higher premium.

As mentioned already, the project will utilize existing channels for disbursing the necessary financial resources to its beneficiaries. In this respect, it does not need to be inventive. Its innovative aspect will be seated on the way it engages with the several stakeholders, with the aim to instill among them an element of healthy competition and beneficial cooperation. It will do so by exploiting synergies among partners and promoting each other’s comparative advantage. The ultimate goal being, enhanced efficiency from synergetic effects, improved capacity of rural financing institutions and an expanded financing spectrum for IFAD’s target group.

Like previous IFAD's projects, STAR will use credit wholesalers (CWs – MSMEDA and ADP) for the implementation of this subcomponent. It will also engage with ABE (and any other commercial bank or eligible financial institution) to use its extensive branch network to reach some segments of the beneficiary group. Credit lines will be distributed on performance-based criteria to a selected group of financial institutions chosen through a competitive process. These institutions will receive credit lines for on-lending to MFIs, Credit Cooperatives (CCs) and NGOs, which in turn will offer the specified loan products to STAR beneficiaries.

The competitive process will involve a call for proposals where participants will demonstrate their commitment to and understanding of the project's objectives and will be selected on the basis of the following performance indicators:

- speed of processing loans,
- effectiveness and width of outreach network,
- quality of outreach (awareness activities to promote project value propositions to beneficiary groups),
- project portfolio size,
- project portfolio quality,
- competitiveness of offered interest rates,
- reduced collateral and own participation requirements,
- simplicity and user-friendliness of the loan application process,
- Monitoring of the performance of Financial Intermediaries (banks, MFIs, NGOs, CCs)
- Monitoring of the performance of investments (micro-level),
- Monitoring of repayment rates and support mechanism to instill a culture of responsible financing among the beneficiaries.
- Institutional Capacity Building (ICB) plan (for the institution and its partners/financial intermediaries)

Once the Cooperating Financial Institutions (CFIs) have been selected, they will receive consecutive tranches of credit lines for on lending. The tranches will be released on a first-come-first-served basis, i.e. CFIs with higher disbursement rates and better overall performance will be entrusted with larger tranches. The project will maintain permanent staff to monitor the process and intervene correctively whenever appropriate. Performance of CFIs will be monitored and re-evaluated at regular intervals (twice a year) and corrective actions will be negotiated with the project's staff and the implementation support missions.

CFIs will be encouraged to undertake capacity-building activities across the board (in fact this is one of their performance assessment criteria). The project may assist CFIs to identify capacity-building needs and design relevant plans. It may additionally offer financial resources in the form of a loan. CFIs may borrow from the credit line proceeds to finance capacity-building activities, which they will have to repay at an agreed interval.

CFIs will then start on lending to their established network of partners (or directly to beneficiaries as in the case of MSMEDA and banks) who in turn will be lending to project's beneficiaries at market terms. The project will not interfere on credit risk assessment procedures, or impose ceilings on interest rates and/or collateral and own participation requirements. The competitive process will clearly favor however, the avenues that will offer milder and more effective credit terms. The dedicated project staff will monitor the effectiveness of the system, and will assist in the resolution of eventual problems, or will come up with proposals for improvements. The project staff will have the option to revert to international expertise for support, whenever needed.

The contribution and engagement of the dedicated project staff responsible to promote the financing part of the project is crucial. They will have to act as brokers between beneficiaries, financial institutions and CFIs. They will be responsible for identifying beneficiary financing needs and map them against the several offerings of the financial sector. They will dilute information asymmetries by regularly updating this map and making it available to both demand and supply for credit stakeholders. Project staff will identify capacity development needs on both the beneficiary side and the financial service provider's side and will package relevant training propositions accordingly. They will identify potential synergies among stakeholders in the sector and will leverage partnerships to capitalize on synergetic effects. They will be proactive in their work and act as leaders of this subcomponent's priorities.

CBE has recently adopted (and promotes) an agricultural development strategy very relevant and compatible to STAR's priorities and objectives. The project staff will liaise with CBE to investigate mutually beneficial additionality. For instance, CBE's aspiration to introduce targeted incentivized funding to enhance banks and ABE to extend coverage at micro-level can directly benefit from STAR's value proposition. Similarly, STAR can benefit from CBE's SuSME project under which EBI is tasked to enhance the capacity of bankers, CGC, and NGOs through training. Both CBE and STAR are developing initiatives in digital agriculture. Co-ordination between them will leverage synergetic effects.

Under the principle of brokering beneficiary interests to the financial sector, the project will also monitor the beneficiaries' ability to meet collateral and own participation requirements. For any eventual involvement, the project will consistently maintain a neutral position, trying not to introduce unnecessary distortions to the credit market. Doing so, it will allow the financial sector to respond positively and crowd-in additional financing resources to support the beneficiary investment needs; it will secure the credit-lines' sustainability and will leave a positive footprint on the sector itself. With this in mind, banks, MFIs, credit cooperatives, and NGOs will adjust collateral and own participation requirements as per their risk assessment procedures. In case this poses a problem to a segment of the target group, the project will encourage CFIs to reduce own participation and/or collateral requirements by increasing the entailed interest rate or recur to a system of credit guarantees. The project will cooperate with CGC to structure a relevant product and will promote more extensive use of moveable assets as collateral.

Previous IFAD credit lines in Egypt have been absorbed in the pool of funds of ADP and MSMEDA and reached the beneficiaries as their own funding. The beneficiaries never became aware of IFAD's participation and contribution. The project will make sure that on-lending partners disseminate information on IFAD's commitment and financial support to rural development.

#### *Other financial services for the target group*

A critical factor for the success of the project is the engagement of the target group on income-generating activities (and other types of investments that the project proposes). To make sure of that targeted beneficiaries are both interested and able to undertake such ventures, the project provides for a relevant training process. Together with capacity building activities on irrigation, production improvement, and marketing, the project will provide entrepreneurship and financial responsibility skills. Relevant exercises must be practical, realistic and hands-on, instead of theoretical, class-based.

An indicative curriculum must include the following elements: a) why is investing good for me (risks and rewards of entrepreneurship); b) what is a business opportunity and how to identify it; c) how to evaluate an idea and assess if the market is ready for it; d) trial-runs to validate concepts and refine business plans; e) financial decisions a smallholder must make as early as possible; f) how to approach the financial sector; g) what are the pros and cons of getting registered and licensed; h) small business

management and bookkeeping; h) how to make sure I can repay a loan and why this is important; i) the benefits of savings (you always have some money to save).

The project will be responsible for preparing and consolidating the curriculum (as it will do for other capacity-building activities at cluster level), yet it will entrust its delivery to two channels: a) the regular delivery mechanism that the project will adopt for all types of training and dissemination (including with digital means e.g. pico-projectors etc.), and b) CFIs will be encouraged to incorporate the curriculum as part of their outreach strategy.

Project staff will investigate and identify existing micro-insurance options pertinent to the beneficiaries. Since 2016, after the resolution No. 902 that set the terms of operation for micro-insurance, the industry has become active. Apart from the existing micro-insurance products, there is active analytical work on crop-insurance (MSMEDA) and rural micro-insurance (JICA). The project will tap on the findings of existing analysis and will promote further efforts in developing products for the target group, in partnership with the existing active players. Similarly, the project staff will investigate the possibility to develop leasing products for the beneficiaries.

Finally, the project will promote savings culture within the target group. Project staff will first investigate the possibility to structure savings products with collaborating financial institutions (free savings accounts – digital or not). It will then promote the benefits of using such products to the beneficiaries and the target group in general.

To finance these activities, the project provides for a capacity development pool. Project staff will revert to this pool for ad-hoc expert support, on any of the above topics. The pool will be used for training design and delivery, implementation support, brief technical contributions, and studies.

### **Institutional Aspects and Implementation Arrangements**

STAR, on its financing subcomponent, mainly facilitates beneficiaries to access necessary resources to invest on improving production, extend their reach to higher levels of the value chain through marketing and other income generating activities. **Error! Reference source not found.** depicts the flow of planned activities and project logic. A crucial factor for the success of this subcomponent is the facilitation process and brokering between the financial sector and the beneficiaries. This will be the responsibility of the project staff. The functions, responsibilities and reporting lines of the relevant project staff are described below.

The component will be managed by the technical specialist in the CPCU and the Financial services Specialists in the GPCUs

#### [Revolving credit lines for beneficiaries \(timeline and operation details\)](#)

Following the appointment of the Technical specialist, the project will start the process for tendering the implementation of the revolving credit lines.

#### [Call for Tenders and selection of CWss](#)

The FC will liaise with ADP, MSMEDA, ABE and other banks that are suitable for extending micro-loans to rural beneficiaries in the three project governorates, with the aim to explain the project's logic, priorities and novel approach. The FC will then prepare the tendering documents and will launch the call. The FC will make efforts to secure extended participation.

Once proposals are received they will be evaluated by a committee including the Project Director and the FC. Proposals will be evaluated under the following criteria:

- Short approval times. The loan approval process described by the applicant will have to prove the short intervals between application and approval of a beneficiary loan.
- Extended outreach network. The applicant must describe the existing and intended network that will permit easy access for the beneficiaries.
- Quality of outreach. The applicant must describe the awareness activity plan through which the applicant will proactively solicit value propositions to the beneficiaries promoting responsible financing and savings principles.
- Competitiveness of offered interest rates. The applicant must provide the structure of the terms of credit for the different products. To do so the applicant must already have an understanding with the network of PFIs they will be using.
- Reduced collateral and own participation requirements. Same as above.
- Simplicity and user-friendliness of the loan application process.
- Monitoring of the performance of PFIs (banks, MFIs, NGOs, CCs). The applicant must demonstrate the monitoring system that will provide information updates on the quality and size of the portfolio of each PFI.
- Institutional Capacity Building (ICB) plan (for the institution and its partners/financial intermediaries). The applicant must identify the institutional problems that may possibly hinder its performance and propose relevant solutions.

#### Disbursement of funds

Once the CWs have been selected, they will sign a contract specifying the terms of cooperation with the project and will receive an initial tranche of USD 5million to start preparatory work and initial on lending activities to their network of PFIs (if they are not direct lenders). CWs will be allowed to use proceeds of their loans for capacity building and promotional activities to be returned to the revolving fund at an agreed time. The Technical specialist (with the approval of the Project Director) will be negotiating the term of their loan, and their agreement will require IFAD's non-objection. CWs will be authorized to request additional USD 5million tranches, as soon as they already have disbursed the original amount (or amounts) to beneficiaries. They will have to demonstrate relevant project portfolio size, and acceptable project portfolio quality (NPLs not exceeding 2%). The decision for each new disbursement will be ratified by IFAD with a non-objection.

#### Eligibility criteria

CFIs, will be offering loans to beneficiaries, as per the project's financing needs – for investments on small irrigation and production improvement; production improvement only; income generating activities; and investments of youth and marketing associations. All investments will have to be part of the project's activities and loans will be approved if they fall within the following typology:

(refer to PDR for updated table)

<b>Investment type</b>	<b>Loan Size EGP</b>	<b>Tenure (years)</b>	<b>Grace period (months)</b>	<b>Eligible Investments</b>
<i>Marketing Association</i>	50,000-200,000	3-5	12	<ul style="list-style-type: none"> <li>• Inputs (planting materials, fertilizer, etc.)</li> <li>• Mechanized services (e.g. tractor hire)</li> <li>• Technology adoption (drip, solar, greenhouse, digital)</li> <li>• Post-production (packaging, branding, labelling)</li> <li>• Certification</li> </ul>

<i>Income Generating Activity</i>	1,000 – 20,000	1	3	<ul style="list-style-type: none"> <li>• Poultry, small ruminants, honey production, etc.</li> <li>• Small trading activities</li> </ul>
<i>Irrigation and production improvement</i>	10,000 – 60,000	5-6	12	<ul style="list-style-type: none"> <li>• - on-farm irrigation equipment – pumps, pipes, lining etc.</li> </ul>
<i>Youth enterprise</i>	100,000-400,000	3-5	12	<ul style="list-style-type: none"> <li>• handicrafts, articles from agricultural residue</li> <li>• dairy, fishery,</li> <li>• provision of agro-inputs and machinery services,</li> <li>• processing: jam, jelly, tomato paste making</li> <li>• - commercial operation of marketing infrastructure: cold storage, storage, etc.</li> </ul>

### Monitoring the on-lending process

CWs have updated records on the disbursement rate, the portfolio size and portfolio quality (PAR, NPL). The technical specialist will have to monitor the overall performance of credit lines and FSS will be monitoring performance at governorate level. The distribution of the portfolio per investment type should be balanced, as follows: Marketing associations should cover 30% of the total number of beneficiaries and absorb 5% of total credit portfolio; Youth enterprises should cover 10% of the total number of beneficiaries and 5% of the total credit line; Income Generating Activities should cover 50% of the total beneficiaries and account for 35% of the total investment; and loans for irrigation projects should cover 40% of beneficiaries and 55% of the total credit portfolio.

Any irregularities on the disbursement rate or portfolio quality will be identified immediately and corrective actions will be taken. Project staff will prepare bi-annual reports and action plans.

### Other Services

As soon as the credit lines are operational and credit reaches the intended beneficiaries the technical specialist will start exploring the possibility to facilitate the introduction of new financial products for the beneficiaries.

**Micro-insurance:** the technical specialist will liaise with MSMEDA, JICA and all other stakeholders who are researching the feasibility of the introduction of micro, indexed and other types of insurance, with the aim to overview and better understand the sector. The FC will engage with micro-insurance providers to investigate if such products can be structured to cover the needs of project beneficiaries.

**Savings:** the technical specialist and the FSS will liaise with banks (at central and local level respectively) with the aim to structure savings propositions for the project's beneficiaries. Savings products will be linked to relevant training modules addressed to the target group that will convey the benefits of savings to the beneficiaries' longer-term financial well-being.

**Collateral:** Six months after the beginning of the operation of the credit lines, the technical specialist will take stock of impediments hindering the target group from accessing finance e.g. collateral and/or own participation requirements. If such obstacles

are present, the technical specialist will negotiate solutions with the financial institutions to ease them off (e.g. lower the requirements against higher interest rate, introduction of a credit guarantee etc.). The technical specialist will negotiate with the partner financial institutions the introduction of moveable assets as accepted collateral in their operation and will give them relevant incentives.

**Capacitating the beneficiaries:** As soon as clusters are formed and operating the FSS will be participating in cluster meetings to assess the capacity (or lack thereof) of the different strata of beneficiaries on financial and entrepreneurship matters. Once FSS develop a solid understanding of the capacity-building needs (2-3 months later), they will put together a relevant curriculum (including topics, content, method of delivery, hours involved), with the help of external expertise if necessary. To solicit external expertise FSS will come with the proposition to the FC and the Project Director on how to acquire it. The Project Director may choose to require further assistance from IFAD on how to identify appropriate expertise.

FSS will also liaise with financial institutions and CFIs to explore the extent to which they can (and are willing) to deliver the said curricula. FSS will try to identify any other public or private sector institution, with interest to assume the responsibility (both delivery and cost) for capacitating some segments of the target group. The project will make every effort to incorporate capacity-building activities on entrepreneurship and responsible financing as an integral part of PFIs lending operations, thus etching the ideal into their core with the aim to secure sustainability of this intervention. As a last resort, FSS will recur to the Capacity Building Pool (CBP). Capacity-building offered by the project should be unified and EFREs will be coordinating entrepreneurship and financial responsibility development with other training modules offered by the project

**Diluting information asymmetries:** FSS will constantly keep track of the existing financial offerings (commercial, preferential, public or private) and the relevant terms (including interest rates, tenure, collateral requirements etc.). Whenever necessary, EFREs will communicate this knowledge (and the method to acquire it) to the target group, which will gradually become proficient.

**Brokering better loan terms:** In their interaction with CFIs, FSS will be regularly reviewing the possibility to improve the lending terms to the benefit of the target group.

#### Credit Guarantees (CGs)

The project has set aside a USD 1million amount for the eventual establishment of a Credit Guarantee Fund (CGF), should collateral be an important issue impeding beneficiaries from accessing credit lines. The technical specialist will negotiate with the CGC to establish CGF under its wing. CGC has been operating guarantee funds for years and lately (with the help of the CBE) is streamlining and improving operation. The CGC will admit similar conditions and operating procedures to CGC's standard operating procedures to avoid disruption and relevant cost increase. The CGF will operate therefore with a maximum leverage of 15 times the value of guarantees; with 80% individual loan coverage and a 10% cap on portfolio. If the Project Director together with the te decide that there is no need for the establishment of such a funchnical specialist d, the relevant resources will be redirected into the credit lines.

#### The Capacity-Building Pool (CBP)

The project has also set aside an amount of USD 500.000 for capacity building needs, and product development ad hoc expertise. The technical specialist and FSS will include in their bi-annual action plan the required expertise (type, amount, sourcing) for the

period to be reviewed and approved by the Project Director. The CBP may be used to hire external expertise for:

- drafting capacity-building curricula for the beneficiaries;
- delivering capacity-building events (when other sources cannot be made available);
- assisting CFIs to identify capacity-building needs and design relevant plans;
- structuring insurance products for the beneficiaries;
- setting up the CGF;
- using moveable assets as collaterals;
- other topics or studies.

## Chapter 6: Guidelines for the implementation of Digital Solutions

The world is witnessing a revolution in information and communications technology (ICT), the scope of which stretches far beyond the realm of the sector itself. No country seeking real, sustainable development and progress can hope to achieve these aims without a strong ICT sector in place to drive the necessary change ([http://www.mcit.gov.eg/ICT\\_Strategy](http://www.mcit.gov.eg/ICT_Strategy)).

Digital technologies such as internet and mobile phone technology have a profound effect on production processes, knowledge exchange and social relations worldwide. Their perceived capacity to support far-reaching socio-economic change has brought digital technologies to the centre of the development discourse (Brown & Grant, 2010). To “significantly increase access to digital tools and strive to provide universal and affordable access to internet in LDCs by 2020” is one of the proposed sustainable development goals. Though some donor agencies’ treatment of digital strategies as a panacea for poverty reduction, socio-economic development and sustainability might be exaggerated, appropriate choice of digital strategies may create profound and often rapid changes in agrarian societies. There is an excellent opportunity to rationalize the use of digital tools in development endeavors.

Egyptian agriculture, particularly Upper Egypt, apparently requires a paradigm shift. Especially, in applying digital agriculture to all fields related to agriculture, including modernizing extension services, value chains, financial inclusion, market linkages, capacity development etc., with the state of art, yet low cost digital solutions.

IFAD/ STAR is uniquely positioned to provide a leadership in Digital Agriculture with ability to engage through partnerships, bringing agricultural technology, digital technology and services together and thereby ushering new digital agricultural systems. In this context, STAR project offers an excellent opportunity to leverage the strengths of digital technologies in the overall design of the project. Some of the digital approaches piloted in this project will have far reaching positive consequences in redefining the way agricultural development is dealt with in recent times. Though there have been few digital agriculture projects initiated in Egypt (particularly in delta region / lower Egypt), there are no evidences of comprehensively harnessing the digital agriculture strategies in Upper Egypt.

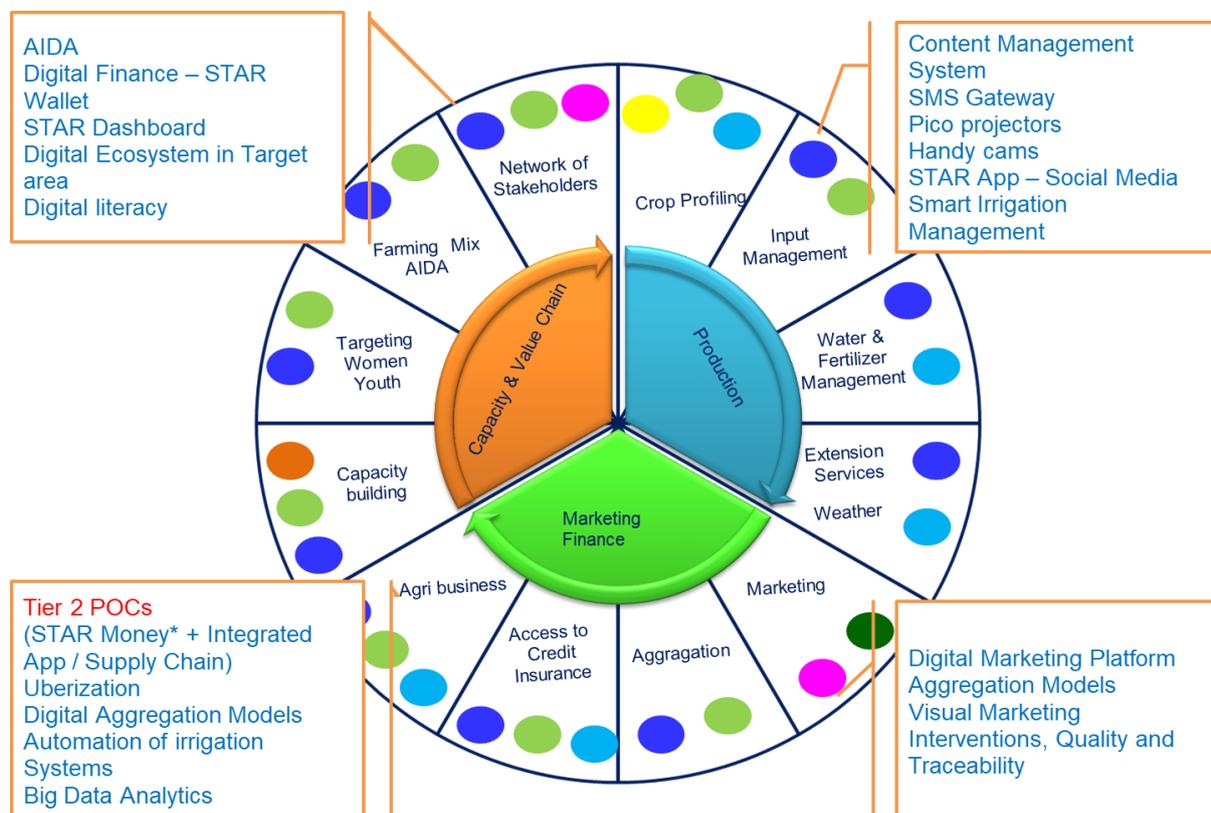
### 6.1. Overview

Unlike many development projects, the STAR is unique in terms of integration of digital strategies in every project component. The purpose of digital strategies in the STAR project is to enhance the efficiency and effectiveness of project management, sustainable production systems, improved irrigation management, enhanced opportunities for marketing and agri business, redefining the extension processes, bringing climate resilience, providing new opportunities of financial access, encouraging entrepreneurship and finally empowering the rural communities with increased access to information and services on near real time basis.

Absence of adequately funded public extension services and slow adoption of effective and sustainable production practices is evident in the Upper Egypt. Public extension

services are not adequately funded and have limited capacities and outreach in particular to smallholders that hinder smallholders in the uptake of more resources-use efficient and sustainable technologies and practices. Agribusinesses with backward linkages organize technical support for producers but this is accessible only to a handful of contract farmers. However, there is a high penetration of telecommunication network and mobile phones and there are some reports of farmers turning to social media for agronomic and market related support. Growing familiarity with digital technologies and social media in the villages provides the basic platform for strengthening a range of digital services including digital extension, aggregation, market identification, price transparency, financial inclusion and agronomic support services tailored to smallholders.

Recent developments in web-based and mobile technologies hold considerable promise to overcome the problems of inadequacy of extension advisory services. Timely information and services provided through digital strategies (enabling more efficient production, irrigation, marketing, agri-business and climate resilience) are expected to bolster the technology interventions of the project. Digital strategies complement extension agents / group of farmers for collective action.



### 6.3. Outcomes of STAR Digital Agriculture Strategies

- STAR platform , Dashboard, Mobile App, SMS Gateway, Video Extension Platform set up –and working with 160000 smallholder farmers in Upper Egypt
- Increased access to knowledge, extension services for enhanced productivity through digital and non-digital means. Each target small holder household receiving and getting benefitted from atleast three digital services over a period of five years. Increased access to extension services among 40000

small holder farmers' access agriculture extension services via mobile phones and other digital services.

- The Video extension model will directly benefit 160 villages by involving 80 video facilitators. For 48 months, 96 video shows will be organized in each village directly reaching 40 farmers / farm women. For a total of 160 villages, a total of 15,360 video shows showcasing a minimum of 30,720 videos (few may repeat every season) with a direct reach of 6400 farmers/ farm women. This may trickle down to 12800 farmers / farm women through peer to peer sharing.
- Outreach of the STAR videos to a minimum of 80000 farmers / farmer women in the target villages over a period of 5 years using mobile app, social media and youtube.
- Increased market access among the 10% of target beneficiaries with digital market interventions contributing to 20% increase in their income with the benchmark market prices existing in 2019. Product worth 20 Million USD sold through the digital market interventions
- Increased access to financial services among 40000 target farmers through the effective use of STAR Money / Wallet.
- Enhanced capacity of entire value chain players, extension functionaries (public and private), women, youth and farmers on digital tools. Empowering the communities in accessing and applying the digital agriculture services for transforming their production and marketing practices. By the end of the project at least 50% of the target farmers using digital tools for their information and services needs.
- At least half of the target WUAs sensitized in using the digital water meters and 100% compliance of irrigation efficiency using digital applications.
- At least three advanced digital POCs identified and piloted (ex: sensor networks, uber model, aggregation model etc.,) for creating evidence based policy advocacy. Capacity of 600 officials from government departments, representatives from NGOs, CDAs, Field Schools trained on use of digital platforms for improving the efficiency of extension
- 100 Young professionals and SMEs trained on digital opportunities and business skills and a MOOCs platform in place with 5 toolkits and 5 courses.
- The digital driven extension services with a minimum of 50000 installations of STAR App by the stakeholders by the end of the project
- Increased public awareness and knowledge on the success of STAR digital strategies.

#### **6.4. MARKETING & FINANCE**

Increased use of digital technologies will open up new markets and opportunities. STAR digital strategies will help introduce the data driven marketing applications by including the production data and farm profiling of target farmers. For this, an integrated marketing platform will be developed or piggybacking will be done either with Knowledge Economy Foundation's Bashaier Network or with eFinance Platform. The platform will be available both in web app form and mobile app format. From the inventory of available market players and emerging traders, agribusiness and exporters, linkages will be built with the MAs. STAR Mobile App will have a component that allows sellers to submit a

request for selling a specific produce/commodity. A mechanism will be built to pilot STAR Digital Marketing by demand aggregation.

Central to the Digital market Intervention is building a STAR market platform that will drive different activities.

#### **6.4.1. STAR Market Platform:**

The platform will be both on web based and mobile based. The platform will be anchored by department of agriculture and is facilitated by e-finance or by Bashaier. The content development and data upload will be facilitated by the project staff. If the platform has to be built afresh, the budget provision will be made for outsourcing the development and maintenance work. This will have cross links to the STAR Portal. The platform will have the following functionalities.

- **Market Players Inventory:** A database of market players and potential players will be maintained along with their contact details. The demand and supply data commodity- wise and quality wise will be maintained.
- **E Market Place:** Digitally connects farmers to the online market place, compares the prevalent market prices for the crop, determines farmer revenues & profitability and suggests the most optimal market price. The market prices of different commodities are displayed for the benefit of the farmers. This feature is linked to the aggregation feature. Farmers can choose an option for willingness to sell, upload their produce pictures, minimum sale price, willingness to aggregate etc., The buyers, entrepreneurs, agri-business players can view the details of the produce available for sale (at farmer, village, cluster, governorate level) on dynamic basis. The preconditions for getting the credit in kind (inputs are provided instead of cash) , such as group formation, registration, willingness to aggregate for the markets, type of produce, using collective decision etc., could be digitized. The data related to individual farmers, groups, credit profiling, crops grown, likely harvest dates, quality and visual marketing could be best harnessed. This can be linked with the production dimensions.
- **STAR Input Dealer Connect:** Digital display and access to inventory data of some of the most reliable agro input providers such as the seeds, fertilizers and pesticide dealers, agro equipment dealers and manufacturers, logistics and storage service providers etc.,
- **STAR Payment:** In the later stages of the project, the market platform will be linked to the payment gateways, subject to feasibility.

**Implementation Plan:** With intense campaigns and media support, the STAR Digital marketing will be piloted in three clusters covering the three governorates. This Proof of Concept will be put forth during the business meetings between newly formed agri-business entities (of STAR), major players (traders and exporters) for forging the further partnerships to roll out across the three governorates. The success indicators include better market price realization and revenues of target farmers increase by at least 20%, among many others.

#### **6.4.2. Visual agriculture marketing**

In recent years, the visual agricultural platforms have upgraded traditional agriculture, deployed e-commerce to rural areas, upgraded store service, produced new orders and other forms in the market.

The community development agencies or the youth entrepreneurs can handle this work with low cost digital camera or a smart phone. At critical growth stages of the crop, photographs will be captured and placed on the digital marketing platform. This will give an assurance to the quality production of the agriculture produce that might interest exporters or the merchants.

This will also generate huge data about the producers who register for the visual agricultural marketing scheme. The project may take help of WFP mechanism to convince farmers or a group of farmers. The platform can be integrated with the existing online market platforms.

“Visual agriculture” mainly refers to the use of the Internet, the Internet of Things, cloud computing, radar technology and modern video technology to present models, means and methods of cultivation or livestock. “Visual agriculture” also has a primary function, which is a reliable future order effect. Many agri-business / Merchants may use “visual agriculture” to observe and order remotely. We can observe the entire production and management process of products such as vegetables, fruits, poultry, cattle and sheep.

**6.4.3. Digital Finance:** The programme will pursue a longer term investment in digital finance. The programme will offer granular farmer level data (STAR Platform) for financial service providers such as banks and insurance companies for credit profiling. Based on the profiling and the production interventions undertaken during the programme, STAR finance cards will be made available in collaboration with leading financial institutions, such as CIB. The cards will provide the users with access to a minimum amount of credit. Cards will be made available for individual farmers as well as collective cards (for CDAs, NGOs and other associations), Using this card, the individual or groups can access credit for buying inputs at outlets that accept the cards / digital money. A cap will be worked out for each type of card. Digital transactions will be encouraged through these wallets for providing the time critical inputs from the dealers. In due course, STAR wallets will be promoted for digital market interventions (linking them with the market transactions). A rigorous campaign will be undertaken involving stakeholders. STAR Money (STAR Money which encompasses Mobile Wallet and Integrated App/Supply Chain) will be introduced during the 2nd tier of digital strategies (from 2023).

As the financial needs of every farmer are different, STAR activities may help financial agencies leverage technology to create and get the data metrics which would add value to their services while at the same time advise them on curating new schemes and plans to engage with farmers in a better way.

The e-finance platform can be customized to pilot financial inclusion component. At CPMU level, e-finance would be integrated with the STAR Digital Platform/ Dashboard. The dashboard will give complete data related to credit profiling of the farmers, current loan requirement, linking them with the crop/ enterprise, finally to efficient management adoption. Performance indicators do include the ability of the farmers to adopt innovative technologies in his field (contributing to any component - resilience, water saving, productivity enhancement, participation in e-market and aggregation).

The implementation steps for Digital Finance;

- The STAR digital finance strategy provides beneficiaries with the savings and insurance products. A comprehensive farmers data available with STAR Platform will be synergized with the financial data (credit requirements, profiles, insurance and savings etc.,).
- For this, a tender will be called for inviting financial institutions who may be interested in offering savings product for the poor farmers, digitally. And probably insurance will be introduced for both for crops and animal husbandry based on the need
- The winner gets the opportunity to partner with the STAR project.
- Star project will provide the capacity to the farmers and to the institutions as how to backstop the farmers. And the institutions will be responsible for providing a platform and the product.
- The institutions will get an opportunity to work with a scale of 180000 beneficiaries.
- This will be a pilot and based on the success the project will scale up to other regions as well.
- This may cost the project 1 million USD.

#### **6.4.4. Micro enterprise development**

The sub-component will complement business development and financial services with the promotion of digital technology services. These digital services and applications are aimed at improving both the marketing and production of farming communities, while providing employment and business opportunities for the rural youth. For example, entrepreneurs can develop mobile based and on-line ordering system for delivery of fresh local produce to the consumers. Similarly an "uber" model can be used as ride sharing technology to aggregate village level produce to the urban markets, or sharing farm technology such as tractors. Rural youth will also be involved in e-commerce activities particularly in door (field) delivery of the inputs, animal husbandry products, which at a scale this will prove to be an income generation activity.

For small and medium scale enterprise will get digital support through project report, business risk, bank loan feasibility and relevant government schemes, subsidies and other options in the market to support such business and support their growth.

### **6.5. PRODUCTION**

#### **6.5.1. STAR Platform**

For driving the digital innovations, most critical output is building a repository / platform with digital content and services. The project will build a robust knowledge repository that includes production know how, videos, prices, weather information, crop selection criteria, general package of practices, diagnostic information, input management, irrigation management, avenues for entrepreneurship development etc.,

The knowledge repository which is web based, will be accessed through various digital (video, smart phones, social media, WhatsApp, Television) and other non digital means (field schools, CDAs, Cooperatives, Field Staff).

The digital platform development will be led by the NPCU (Digital Agriculture Coordinator) with the digital core team, comprising of representatives from Ministry for

Agriculture and Land Reclamation (MALR) with close collaboration with the Ministry of Water Resources and Irrigation (MWRI) and with the Egyptian Financial Regulatory Agency. The core digital team may also comprise the project collaborators such as WFP, IFPRI, KEF, eFinance, DigitalGreen, civil society organizations etc.,

The knowledge and service needs of target farmers will be assessed through a series of group discussions and a survey. This can be led by the department of agriculture. The CPMU will be responsible for the developing Information Architecture, design features, outsourcing the software development component. The content development, validation and contextualization can be led by ARC. The service components of the platform such as credit, input supply, inventory of dealers etc., will be anchored by eFinance or KEF (Bashaier) or both. Digital pull and digital push services Automation of irrigation with digital water meters and IOT/ Sensor networks will be initiated by CPMU in collaboration with the concerned irrigation staff of STAR project. The essential factor is MWRI staff to facilitate the whole process of digital water management system. Other collaborating partners such as WFP, CDAs, Civil society organizations, Digital Green, private players, CDAs, farmers groups etc., will be involved in digital extension activities that cuts across the project components (production, market, irrigation, climate resilience, agri-business etc.,). These digital extension activities will be led by extension wing of department of agriculture.

The knowledge repository platform will be build using a Content Management System by outsourcing. A series of content development workshops will be organized to develop and upload the content. This activity will be anchored by department of agriculture and will have all the stakeholders on board. The capacity of the stakeholder organizations will be built simultaneously. This will eventually develop into a Mobile App (STAR App) that will be hosted on Google play store.

At district level, uptake strategies will be deployed such as awareness generation to install and use the mobile app (Digital Pull).

The videos available in knowledge repository will reach to farmers through video extension model involving community organizations, farmers field schools, NGOs and project staff. The project expects that 10% of the total target households will directly receive time critical knowledge and advises on production, marketing, finance, post harvest, marketing, nutrition and income generation activities.

Fortnightly video shows, sequenced based on local needs will be undertaken by Field Schools/CDA/NGOs. Adoption metrics will be updated on STAR Dashboard. Necessary capacities will be built with video extension workshops. The project staff decides the videos to ne projected on fortnightly basis, in a participatory way. A trickle down plan will be developed as how to adopt the practices shown in CDA/NGO/ Field Schools.

The SMS gate way developed by WFP can be used for pushing SMS alerts to registered farmers.

Stakeholders can upload the photograph of the crop / animal husbandry/ Poultry etc., at critical growth stages onto the STAR Platform. Images will get categorized based on location, type, of quality of produce etc., This will also help in creating visual agriculture marketing strategies.

IFPRI's AIDA will be customized to help farmers, entrepreneurs, agri-business and policy makers to make decisions on crop mix. During tier 2(2023), the project will identify the potential digital agri-start ups through Digital Hackathon. At least three best ideas pitched will be nurtured and piloted in target area.

Digital water meters will be installed in the new irrigation system to measure the quantity, frequency and quality of irrigation water. The data received from the digital water meters will get transmitted to the STAR platform (server) which will be of immense utility for improving the efficiency of irrigation systems. Digital water meters will be set up to measure the efficiency of modern irrigation systems at tertiary canal level and below. Empirical evidences of irrigation efficiency, impacts will lead to data driven irrigation management and crop planning. The data driven irrigation management system is a proof of concept (POC) that could be tried from tier 2 (2023).

**The STAR Platform will have the following components;**

As far as possible the STAR platform will have comprehensive information and service details pertaining to the three governorates/ While the content is useful to all the farmers of the three governorates, specific activities are undertaken by the project to "PUSH" the content and services to target farmers.

The critical component of STAR Platform is a comprehensive farmers database. Farmers Database ensures a complete and comprehensive data of farmers and farms, weather conditions, soil fertility, land use pattern, type of crop and yield data of the upcoming cycle and the previous crop cycle. This baseline information will help both the project functionaries and the potential value chain players (entrepreneurs and agri-business players).

The indicative components include;

Dashboard Services

Good Agricultural Practices (GAPs)

Soil Health

Farm Machinery

Government Schemes

Fertilizers and Seeds details

Pesticides and other inputs

Water Management techniques

Training Resources

Digital Market Platform

Agro- met advisories

A moderated Message Board

Digital Water Meters – dashboard

MOOCs Platform

Video gallery

Agri-business Resources

Step by Step Guide for technology Interventions

Extension Toolkits

Entrepreneurs Corner

Aggregation Corner

STAR Mobile App\*

STAR Wallet / Money details

Links to other platforms

RSS Feeds / News / Discussion For a

SMS Gateway

AIDA Tool

\*The idea behind STAR Mobile App is to provide the farmers with personalized advisory without much external interventions. Meaningful, actionable good agricultural practices will be developed in response to the market demands. The good agricultural practices for five most important crops / animal husbandry / Poultry/ Allied activities will be developed by Agricultural Research Centre, in collaboration with other stakeholders. These are automatically calendarized based on the individual farmers data, integrated with feeds like weather, market price, transport, warehouses and other parameters.

To host the STAR platform the third party cloud services (like AWS) can be utilized. Or STAR can procure (which may not be cost effective) hardware servers (Content Management), Application Servers, Database Servers, LDAP directory services, SMS server with adequate back up facilities and disaster recovery mechanism for 24 X 7 availability.

The project management can decide on this - based on the availability of cloud services of Government of Egypt.

### **6.5.2. Video Extension**

There are evidences from the world that the open-air video presentations facilitated unsupervised learning; unleashed local creativity and experimentation; and built confidence, trust and group coherence among youth, women and farmers. To trigger the growth in production, post harvest and skill oriented off farm activities, a cost effective Video Extension approach will be deployed by the project.

Digital Green (DG) model in India has created evidences of empowering smallholder farmers to lift themselves out of poverty by harnessing the power of technology and grassroots level partnerships. Its 'video-enabled extension approach', amplifies the reach and increases the effectiveness of existing private and public extension systems.

Globally, Digital Green has also supported our grassroots partners to integrate our video-enabled approach in non-farm activities, institution building and financial inclusion amongst others. STAR project introduces the video extension model to the Upper Egypt with contextual innovations that eventually empowers the farmers, farm women and other key players equally.

This approach combines low-cost technology (pico/neat projectors with low cost handycams) with social organizations (civil society/ farmers groups) in resource poor settings to disseminate information for adoption and behaviour change. The community – based participatory approach empowers rural communities to develop and share knowledge through peer-to-peer social networks. Short videos are produced by local community members trained by the extension functionaries supported by the project staff. These video shows are planned sequentially based on the need of the farmers in each village. Few expert videos available with the stakeholders particularly from ARC and Agriculture channel will be curated to suit to the video extension approach. The video extension approach will be anchored by the extension wing of department of agriculture, technically supported by the Agriculture Research Centre. At village level, the video shows are organized by a STAR Volunteer/ facilitator from CDA/Field School Representative, Cooperative member, private dealer or local youth.

For the first two years, the video extension approach will be implemented in collaboration with Digital Green team. The existing platforms and resources of Digital Green (COCO, Analytics, Dashboard etc.,) will be utilized. To this effect an MOU or Letter of Agreement may be signed for two years between the STAR project and Digital Green.

The model will directly benefit 160 villages by involving 80 video facilitators (one volunteer / CDA /Field School / Cooperative/ field staff – responsible for two villages each). It is expected that for 48 months, 96 video shows will be organized in each village directly reaching 40 farmers / farm women. For a total of 160 villages, the total number of videos shows will be 15,360 showcasing a minimum of 30,720 videos (few may repeat every season) with a direct reach of 6400 farmers/ farm women. This may trickle down to 12800 farmers / farm women through peer to peer sharing. The video will also be hosted on STAR platforms and Digital Green website simultaneously. It is proposed to reach out to a minimum of 80000 farmers / farmer women in the target villages over a period of 5 years using mobile app, social media and youtube.

The Extension wing of Department of Agriculture will be the lead organization in this strategy, but with equal partnership with the ARC. The core team from these two organizations may chalk out the technical program and capacity building activities in collaboration with Digital Green.

- Identify technology and information / skill needs in the target villages,
- Training in video-enabled approach (a. Video production: b. Video facilitation: c. Data Management: technology platform – Connect Online Connect Offline, for collecting, recording and analysing data
- Supportive Supervision and Follow-up and quality assurance

### **6.5.3. Social Media & WhatsApp**

A well moderated digital forum for problem Solving using WhatsApp groups and Facebook will be initiated. Farmers can get their problems addressed on a real time

basis by way of experience sharing, expert counseling, agri-business connect, nutrition education, domestic and finance advises. Particularly, this will revolve around the contingency alerts to be sent based on climate weather changes like heat waves.

The knowledge available on STAR Platform (production, market and irrigation components) will be calendarised and posted on weekly basis on social media (Facebook /STAR Page) and WhatsApp groups (Each Governorate having hierarchical groups numbering around 16 reaching 1600). From each stakeholder organization one member will be selected to moderate the group discussion. Specific interest groups for youth, women, entrepreneurs, agri-business will be encouraged. The videos available from STAR platforms and Digital Green will also be shared for deliberations and decision making among the group members.

Relevant experiences, content and success stories identified from the social media and WhatsApp groups will be appropriately uploaded onto STAR Platform for future use.

#### **6.5.4. MOOCs**

A MOOCs platform for supporting the e-learning will be developed to help young professionals and other prospective entrepreneurs. The courses will be developed in consultation with the industry players. The MOOCs will be hosted on STAR platform. The courses can be accessed through smart phones as well.

The courses will be broadly classified into two components viz., production and marketing. The MOOCs platform development will be undertaken by NPCU. The production related courses will be anchored by the Extension Division of Department of Agriculture and the market related courses will be anchored by the Bashaier (KEF). The collaborating organizations under each of these components will be associated for course content and development of the courses.

#### **6.6. Digitalization of water management**

The WUAs details and the individual pump details will be digitized and uploaded onto the STAR Platform. Digital water meters will be installed at strategic points in the selected branch canal areas to measure the quantity, frequency and quality of irrigation water. The data received from the digital water meters will be of immense utility for improving the efficiency of the irrigation systems. Empirical evidences of irrigation efficiency impacts will lead to data driven irrigation management and crop planning. The data driven irrigation management system is a proof of concept (POC) that could subsequently be moved upstream to second order and primary canals as a second phase in the digitalization at midterm of the STAR implementation.

In this second phase the automation of water supply, using wireless sensor networks, will help to solve problems of inconvenient irrigation schedules and enhancing the preparedness of future irrigation systems that will need to be more efficient. Wireless sensor networks can potentially pave the way for precision farming in Egypt. While this technology may not be scaled across the target geographies, each governorate could have one pilot covering the command area of 1-3 branch canals served by the same second order canal.

Implementation Plan: About 50 Water User Associations will be involved in this initiative. All the new installations of irrigation systems (electric and pipe delivery) will be equipped

with the digital water meters (Electromagnetic Flow meter Model ex: FM600 / 6"), IoT Master Control RTU, Communication Booster, Servo Stabilizer and an online UPS. The digital water meters will be virtually connected through tab / Smart Phones / Data Logging Systems with the project staff. The data will be synced with the Digital Water Module/ dashboard of STAR Platform (based on the need – ideally on weekly basis). The quantity, quality and time of operation and many other parameters of importance will be collected and analyzed to improve the efficiency of irrigation system in 400 installations. This may require around 1.4 Million USD one time investment and 0.8 Million USD operational expenses.

The digital water management will be clubbed with the introduction of GSM/ Smart Phone based automated pump starters (in tier 2 – 2023). About 100 project intervention sites (where project is installing electric pumps and pipe delivery systems) will be selected for this and automated pump starters will be installed along with a SIM card. GSM/ Smart Phone based controller enables the farmer to operate the motor pump set from anywhere anytime using his mobile or landline. This activity will bring changes in the way the farmers operate the irrigation motors. This system will bring efficiency in planning irrigation scheduling, remote access, motor running status, warning alerts in built real time clock for accurate timing of irrigation etc., will transform the irrigation management in long run. For this activity, an amount of 100000 USD will be allocated.

### 6.7. Climate Resilience with Digital Solutions

The projects can only focus on adaptation strategies may be short term, medium term and long term. The STAR Platform will have an inventory of climate resilient crops or varieties available. The forewarning alerts, contingency advisories, calendarized advisory based on sowing dates, irrigation scheduling etc., will be digitally made available on STAR Platform. The same will also be personalized / customized to a specific area and pushed through SMS Gateway.

-----End of PDR -----

### 6.8. Digital Agriculture Framework of STAR (for PIM)

Level	Timeline Tier 1 (2020-26) Tier 2 (2023-26)	Strategies	Tools	Activities & Responsible
Project Management	Tier 1	<ul style="list-style-type: none"> <li>• STAR Dashboard</li> <li>• Realtime Governance</li> <li>• Dynamic Collaborations</li> <li>• STAR App</li> </ul>	ERP Solution	Outsourced work Defining the workflows Information Architecture Design & development Operationalizing dashboard Development of STAR App Capacity building
	Tier 2	<ul style="list-style-type: none"> <li>• Digital Hackathon</li> <li>• The e-Granery model for marketing.</li> </ul>	LBM Cloud	Identifying the potential digital agri-start ups Piloting few digital POCs in project location

		<ul style="list-style-type: none"> <li>• STAR Money (Mobile Wallet – and Integrated App)</li> <li>• Mezzanine model with Mobile Service Provider for unique ID based Ecosystem – end to end solutions</li> <li>• (STAR Money* + Integrated App / Supply Chain).</li> </ul>		With CIB – Mobile vouchers / cards / wallets – Building an ecosystem around
<b>Governorate</b>	Tier 1	<ul style="list-style-type: none"> <li>• Data management</li> <li>• Knowledge repository that includes video, prices, knowledge</li> <li>• Digital Push - Contingency alerts</li> <li>• Digital Awareness campaigns on issues of relevance</li> <li>• Participatory Video production and video curation.</li> </ul>	Content Management System SMS Gateway Pico projectors Handy cams	CMS development by a private agency Content development and uploading by stakeholders Capacity development Campaigns through Smart Phones, SMS, Tele Vision, Social Media, Stakeholder organizations.
	Tier 2			Capacity development workshops Capacity building of Agriculture, Irrigation, Social Solidarity departments and Community Organizations for effective digital process flows. Making them future ready
<b>Cluster / District</b>	Tier 1	<ul style="list-style-type: none"> <li>• Digital Pull from Direct (Apps, Touch)</li> <li>• Digital Pull from Non-Digital (like pico projectors)</li> <li>• Digital Fora for problem Solving</li> <li>• Credit with eFinance – Link it to performance indicators</li> <li>• Advanced Decision Making Tools like AIDA</li> </ul>	STAR App  Pico projectors  Social Media	10% of the total target households will receive time critical knowledge and advises on production, marketing, finance, post harvest, marketing, nutrition and income generation activities. Fortnightly video shows – sequenced based on local needs – by Field Schools/CDA/NGOs. Adoption metrics will be updated on STAR Dashboard. Moderated problem Solving For a, where farmers can get their problems addressed – by way of experience sharing, expert counseling, agri-business connect, nutrition

			AIDA	<p>education, domestic and finance advises.</p> <p>IFPRI's AIDA will be customized to help farmers, entrepreneurs, agri-business and policy makers to make decisions on crop mix.</p>
	Tier 2	<ul style="list-style-type: none"> <li>• Digital Pilots – POCs Digital Water Monitoring Strategies, Sensor based networks</li> <li>• Adaptation – New varieties – New crops – Adjusting the sowing dates – linking them to the irrigation scheduling – Automation</li> <li>• Crowd Sourcing of data and experiences on production, marketing, value chain, credit, capacity building</li> <li>• Digital Aggregation Models</li> <li>• Uberization –inputs / services</li> <li>• Smart Phone based Automation of irrigation Systems</li> </ul>	<p>Sensor networks Digital water meters Mobile App for Irrigation Management</p> <p>Automated Irrigation System</p>	<p>Digital water meters will be set up to measure the efficiency of modern irrigation systems at tertiary canal level and below. Empirical evidences of irrigation efficiency, impacts The data driven irrigation management and crop planning</p> <p>Digital Aggregation models will be implemented to support emerging entrepreneurs to facilitate the virtual pooling, shared transportation and a business model.</p>
<b>Individual</b>	Tier 1	<ul style="list-style-type: none"> <li>• Digital Pull from Direct (Apps, Touch)</li> <li>• Digital Pull from Non-Digital (like pico projectors)</li> <li>• SMS Gateway</li> <li>• Adoption Metrics – Production, Market, Financial Inclusion</li> <li>• STAR Finance Connect – Linking farmers with the Finance Agencies</li> <li>• Farm women / Youth as Entrepreneurs – of Digital Infomediaries</li> <li>• Visual Marketing Interventions, Quality and Traceability</li> </ul>	Pocket size projectors / Pico / Neat projectors	<p>The project staff decides the videos to be projected on fortnightly basis, in a participatory way. A trickle down plan will be developed as how to adopt the practices shown in CDA/NGO/ Field Schools SMS alerts will be pushed through the SMS gateway. Farmers can register for STAR Finance Connect – (Mobile Wallet – Virtual Pooling – e vouchers – payments) Stakeholders can upload the photograph of the crop / animal husbandry/ Poultry etc., at critical growth stages onto the STAR Platform. Images will get categorized based on</p>

				location, type, of quality of produce etc.,
	Tier 2	<ul style="list-style-type: none"> <li>• Big Data Analytics for Agricultural Transformation</li> <li>• Pull services – Integrating with data analytics</li> </ul>	Hadoop	A system would be developed to provide personalized knowledge and services at one go. Data will flow from individual farmers.

**Two tier Approach**

**Tier 1 (2020 – 2026): What is existing – possible – low hanging fruits and quick & dirty – will have specific digital approach for each component**

**Tier 2 (2023 -2026): Advanced Technologies – POCs – Moving into Data driven Ecosystem- Future ready – the boundaries of components blur**

## Chapter 7: Programme Cost and Financing

### Main assumptions

- 1. Introduction.** This annex describes the assumptions underlying the derivation of costs, estimated costs and financing plan for the programme. Total programme costs are based on June 2019 prices.
- 2. Programme Period.** The programme will be financed over a seven-year period starting from beginning 2020.
- 3. Inflation.** The base rate of domestic inflation has been set at around 8 per cent throughout programme duration while international inflation is estimated at 1.7 per cent during the first year of implementation and reaches 1.8 percent at programme end.

**Table 1: International Inflation (%)**

	2020	2021	2022	2023	2024	2025	2026
Domestic Inflation Rate	1.7	1.7	1.8	1.8	1.8	1.8	1.8

- 4. Exchange Rate.** The exchange rate was fixed at 1USD = 16.5 EGP as per average market fluctuation in 2018/2019. Programme costs are presented in both EGP and USD currency.
- 5. Physical and price contingencies.** Both types of contingencies have been taken into account and included in the costing of programme. In particular, in the category "works" a 5 per cent physical contingency is considered.
- 6. Taxes and Duties.** There is VAT of 14% levied on all imported and locally procured goods and services. The Government would finance the cost of all taxes on goods and services procured under the programme. Most items procured under the programme would be purchased locally.
- 7. Expenditure Accounts.** Programme 's expenditure accounts will be the following:
  - Technical Assistance and Consultancies
  - Goods, Services and inputs
  - Trainings, Workshops and Meetings
  - Civil Works
  - Grants and Subsidies
  - Salaries and Allowances
  - Operating costs
- 8. Total cost and Financing.** Total programme cost (investment cost and incremental recurrent cost, including physical and price contingencies) is estimated at USD 270 million, 64.7 million (24% of the total cost) of which will be financed by IFAD through a loan and a grant. Ifad contribution will finance all programme components as follows: USD 23.4 million (9% of total cost) to finance Component 1, USD 37.8 million (14% of total cost) for Component 2, and USD 3.5 million for component 3 (1% of total cost).

9. The Arab Republic of Egypt (GoE) would provide USD 14.6 million (5.4% of total cost) to the entire programme. Resources amounting to around USD 2 million (0.8% of total costs) will be used to finance component 1. About USD 10 million (almost 4% of total cost) will be financing component 2, while USD 2.2 million (0.8% of total cost) will be dedicated to Component 3. Contribution from GoE will mainly finance salaries of programme staff as well as taxes of any related expense.

10. In conformity with the principle that no taxes or duties would be financed out of the proceeds of the IFAD Loan/Grant, any future changes in the rates and/or structures of taxes and duties would have to be met by the Government. The estimate of taxes and duties was based on the rates prevailing at the time of the design.

11. The African Development Bank (AfDB) will co-finance STAR with USD 90 million (33% of total cost) that will be allocated mainly to the financing of infrastructures entailed in component 2 for a total cost of USD 87 million (32% of total cost). Another USD 2.5 million (1% of total cost) will support the financing of micro-enterprises under component 1.

12. The Opec Fund for International Development (OFID) will contribute to financing of infrastructure development under component 1 and 2. Contribution from OFID will amount to about 20 million (7.4% of total cost).

13. The World Food Programme (WFP) will co-finance STAR programme with about USD 10 million (3.7% of total cost) supporting the strengthening of rural institution and the development of micro-enterprises.

14. Grant resources of the Adaptation Fund (AF) for about USD 2.8 million (1.1% of total cost) will be allocated across all three components with a financing of about USD 0.8 million to component 1, USD 1.5 million to component 2 and 0.5 million to component 3 (10% of total programme costs) while the remainder USD 0.5 million will be absorbed in component 3.

15. The STAR programme would also be supported by private financial institutions contributing about USD 55 million (20% of total cost), allocated mainly to the co-financing of component 2. Contribution from beneficiaries, both in-kind and in-cash, are expected to amount to USD 12 million (4.7% of total cost).

16. The foreign exchange component is estimated at USD 43 million. Taxes and duties are estimated at USD 11.3 million. Funds allocated to the Programme Management Unit are of USD 6.2 million, equal to 2.3% of the total cost. Tables below summarizes Programme costs and financing. Detailed cost estimates are provided in annex A and B to this appendix.

**Table 2: Programme cost by components (EGP '000 / USD '000)**

	(EGP '000)			(USD '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign	Base
							Exchange	Costs
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	254 742	47 453	302 194	12 737	2 373	15 110	16	6
2. Micro enterprises development	673 202	34 750	707 952	33 660	1 738	35 398	5	14
<b>Subtotal</b>	<b>927 944</b>	<b>82 203</b>	<b>1 010 146</b>	<b>46 397</b>	<b>4 110</b>	<b>50 507</b>	<b>8</b>	<b>20</b>
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	2 410 802	158 020	2 568 822	120 540	7 901	128 441	6	51
2. Production related investments under business plans	775 743	552 165	1 327 907	38 787	27 608	66 395	42	26
<b>Subtotal</b>	<b>3 186 545</b>	<b>710 185</b>	<b>3 896 729</b>	<b>159 327</b>	<b>35 509</b>	<b>194 836</b>	<b>18</b>	<b>77</b>
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	96 253	7 140	103 393	4 813	357	5 170	7	2
2. M&E and Knowledge Management	13 705	6 610	20 315	685	331	1 016	33	-
<b>Subtotal</b>	<b>109 958</b>	<b>13 750</b>	<b>123 708</b>	<b>5 498</b>	<b>688</b>	<b>6 185</b>	<b>11</b>	<b>2</b>
<b>Total BASELINE COSTS</b>	<b>4 224 446</b>	<b>806 137</b>	<b>5 030 583</b>	<b>211 222</b>	<b>40 307</b>	<b>251 529</b>	<b>16</b>	<b>100</b>
Physical Contingencies	115 170	-	115 170	5 759	-	5 759	-	2
Price Contingencies	1 623 462	337 350	1 960 813	10 240	2 113	12 353	17	5
<b>Total PROJECT COSTS</b>	<b>5 963 078</b>	<b>1 143 488</b>	<b>7 106 566</b>	<b>227 221</b>	<b>42 420</b>	<b>269 641</b>	<b>16</b>	<b>107</b>

**Table 3: Programme expenditure accounts by components (USD '000)**

	Improvement of smallholders productivity and resilience							Total
	Strengthening Rural Institutions, Enterprises and Markets			Production related investments		Project Management, M&E and KM		
	Strengthening marketing institutions	Micro enterprises development	Investments in irrigation infrastructure and management	investments under business plans	Project Management Unit	M&E and Knowledge Management		
<b>I. Investment Costs</b>								
A. Technical assistance and consultancies /a	3 681	483	15 111	3 016	174	802	23 267	
B. Goods, Services and Inputs	440	3 724	1 770	64 291	552	-	70 777	
C. Trainings, Workshops and Meetings /b	5 456	29	4	1 574	99	277	7 439	
D. Civil Works	3 964	-	124 167	-	-	-	128 131	
E. Grants and subsidies	2 411	31 332	-	1 058	-	-	34 801	
<b>Total Investment Costs</b>	<b>15 953</b>	<b>35 568</b>	<b>141 053</b>	<b>69 938</b>	<b>825</b>	<b>1 079</b>	<b>264 416</b>	
<b>II. Recurrent Costs</b>								
A. Salaries and Allowances	-	-	-	-	3 436	-	3 436	
B. Operating costs /c	-	-	869	-	920	-	1 789	
<b>Total Recurrent Costs</b>	<b>-</b>	<b>-</b>	<b>869</b>	<b>-</b>	<b>4 356</b>	<b>-</b>	<b>5 225</b>	
<b>Total PROJECT COSTS</b>	<b>15 953</b>	<b>35 568</b>	<b>141 922</b>	<b>69 938</b>	<b>5 181</b>	<b>1 079</b>	<b>269 641</b>	
Taxes	1 612	520	329	8 459	212	133	11 265	
Foreign Exchange	2 448	1 798	8 330	29 132	361	352	42 420	

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 4: Financing Plan by Components (USD '000)**

	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		ORF		WFP		Adaptation Fund		Private FI		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
	Technical assistance and Consultancies	7 474	32.1	350	1.5	-	-	1 620	7.0	13 404	57.6	-	-	37	0.2	383	1.6	-	-	23 267			
Goods, Services and inputs DA	24 845	33.5	417	0.6	3 722	5.0	9 793	13.2	3 004	4.0	2 411	3.2	3 287	4.4	1 442	1.9	25 326	34.1	74 246	27.5	32 242	33 363	8 641
Grants and subsidies	16 258	51.9	-	-	689	2.2	0	-	2 508	8.0	-	-	5 910	18.9	527	1.7	5 440	17.4	31 332	11.6	-	31 332	-
Training, workshops and meetings	5 144	69.1	539	7.2	-	-	1 116	15.0	-	-	-	-	641	8.6	-	-	-	-	7 439	2.8	-	6 648	792
Civil Works, DA	7 100	5.5	-	-	8 353	6.5	633	0.5	71 125	55.5	17 589	13.7	-	-	-	-	23 331	18.2	128 131	47.5	-	127 499	633
Salaries and Allowances, DA	2 406	70.0	-	-	-	-	731	21.3	-	-	-	-	-	-	300	8.7	-	-	3 436	1.3	-	3 436	-
Operating costs, DA /a	5	0.3	-	-	-	-	1 565	87.5	-	-	-	-	-	-	219	12.3	-	-	1 789	0.7	-	1 571	217
<b>Total PROJECT COSTS</b>	<b>63 230</b>	<b>23.4</b>	<b>1 306</b>	<b>0.5</b>	<b>12 764</b>	<b>4.7</b>	<b>15 457</b>	<b>5.7</b>	<b>90 041</b>	<b>33.4</b>	<b>20 000</b>	<b>7.4</b>	<b>9 874</b>	<b>3.7</b>	<b>2 871</b>	<b>1.1</b>	<b>54 097</b>	<b>20.1</b>	<b>269 641</b>	<b>100.0</b>	<b>42 420</b>	<b>215 956</b>	<b>11 265</b>

/a including maintenance

**Table 5: Financing Plan by Expenditure Accounts (USD '000)**

	IFAD loan		IFAD grant		Beneficiaries		The Government		AIDB		OFID		WFP		Adaptation Fund		Private FI		Total		Local		
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	For. Exch.	(Excl. Taxes)	Duties & Taxes
<b>I. Investment Costs</b>																							
A. Technical assistance and consultancies /a	7 474	32.1	350	1.5	-	-	1 620	7.0	13 404	57.6	-	-	37	0.2	383	1.6	-	-	23 267	8.6	10 178	12 108	982
B. Goods, Services and Inputs	23 787	33.6	417	0.6	3 722	5.3	9 793	13.8	3 004	4.2	-	-	3 287	4.6	1 442	2.0	25 326	35.8	70 777	26.2	31 111	31 026	8 641
C. Trainings, Workshops and Meetings /b	5 144	69.1	539	7.2	-	-	1 116	15.0	-	-	-	-	641	8.6	-	-	-	-	7 439	2.8	-	6 648	792
D. Civil Works	7 100	5.5	-	-	8 353	6.5	633	0.5	71 125	55.5	17 589	13.7	-	-	-	-	23 331	18.2	128 131	47.5	-	127 489	633
E. Grants and subsidies	17 316	49.8	-	-	689	2.0	0	-	2 508	7.2	2 411	6.9	5 910	17.0	527	1.5	5 440	15.6	34 801	12.9	1 132	33 669	-
<b>Total Investment Costs</b>	<b>60 820</b>	<b>23.0</b>	<b>1 306</b>	<b>0.5</b>	<b>12 764</b>	<b>4.8</b>	<b>13 161</b>	<b>5.0</b>	<b>90 041</b>	<b>34.1</b>	<b>20 000</b>	<b>7.6</b>	<b>9 874</b>	<b>3.7</b>	<b>2 352</b>	<b>0.9</b>	<b>54 097</b>	<b>20.5</b>	<b>264 416</b>	<b>98.1</b>	<b>42 420</b>	<b>210 949</b>	<b>11 047</b>
<b>II. Recurrent Costs</b>																							
A. Salaries and Allowances	2 405	70.0	-	-	-	-	731	21.3	-	-	-	-	-	-	300	8.7	-	-	3 436	1.3	-	3 436	-
B. Operating costs /c	5	0.3	-	-	-	-	1 565	87.5	-	-	-	-	-	-	219	12.3	-	-	1 789	0.7	-	1 571	217
<b>Total Recurrent Costs</b>	<b>2 410</b>	<b>46.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2 295</b>	<b>43.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>519</b>	<b>9.9</b>	<b>-</b>	<b>-</b>	<b>5 225</b>	<b>1.9</b>	<b>-</b>	<b>5 007</b>	<b>217</b>
<b>Total PROJECT COSTS</b>	<b>63 230</b>	<b>23.4</b>	<b>1 306</b>	<b>0.5</b>	<b>12 764</b>	<b>4.7</b>	<b>15 457</b>	<b>5.7</b>	<b>90 041</b>	<b>33.4</b>	<b>20 000</b>	<b>7.4</b>	<b>9 874</b>	<b>3.7</b>	<b>2 871</b>	<b>1.1</b>	<b>54 097</b>	<b>20.1</b>	<b>269 641</b>	<b>100.0</b>	<b>42 420</b>	<b>215 956</b>	<b>11 265</b>

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

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**Table 1A: Components Programme Cost Summary (EGP '000 / USD '000)**

	(EGP '000)			(USD '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	254 742	47 453	302 194	12 737	2 373	15 110	16	6
2. Micro enterprises development	673 202	34 750	707 952	33 660	1 738	35 398	5	14
<b>Subtotal</b>	927 944	82 203	1 010 146	46 397	4 110	50 507	8	20
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	2 410 802	158 020	2 568 822	120 540	7 901	128 441	6	51
2. Production related investments under business plans	775 743	552 165	1 327 907	38 787	27 608	66 395	42	26
<b>Subtotal</b>	3 186 545	710 185	3 896 729	159 327	35 509	194 836	18	77
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	96 253	7 140	103 393	4 813	357	5 170	7	2
2. M&E and Knowledge Management	13 705	6 610	20 315	685	331	1 016	33	-
<b>Subtotal</b>	109 958	13 750	123 708	5 498	688	6 185	11	2
<b>Total BASELINE COSTS</b>	4 224 446	806 137	5 030 583	211 222	40 307	251 529	16	100
Physical Contingencies	115 170	-	115 170	5 759	-	5 759	-	2
Price Contingencies	1 623 462	337 350	1 960 813	10 240	2 113	12 353	17	5
<b>Total PROJECT COSTS</b>	5 963 078	1 143 488	7 106 566	227 221	42 420	269 641	16	107

**Table 2A: Expenditure Accounts by Components – Total Including Contingencies (USD '000)**

	Improvement of smallholders productivity and resilience							Total		
	Strengthening Rural Institutions, Enterprises and Markets		Investments in irrigation infrastructure and management			Production related investments under business plans			Project Management, M&E and KM	
	Strengthening marketing institutions	Micro enterprises development				Project Management Unit	M&E and Knowledge Management			
<b>I. Investment Costs</b>										
A. Technical assistance and consultancies /a	3 681	483	15 111	3 016	174	802	23 267			
B. Goods, Services and Inputs	440	3 724	1 770	64 291	552	-	70 777			
C. Trainings, Workshops and Meetings /b	5 456	29	4	1 574	99	277	7 439			
D. Civil Works	3 964	-	124 167	-	-	-	128 131			
E. Grants and subsidies	2 411	31 332	-	1 058	-	-	34 801			
<b>Total Investment Costs</b>	<b>15 953</b>	<b>35 568</b>	<b>141 053</b>	<b>69 938</b>	<b>825</b>	<b>1 079</b>	<b>264 416</b>			
<b>II. Recurrent Costs</b>										
A. Salaries and Allowances	-	-	-	-	3 436	-	3 436			
B. Operating costs /c	-	-	869	-	920	-	1 789			
<b>Total Recurrent Costs</b>	<b>-</b>	<b>-</b>	<b>869</b>	<b>-</b>	<b>4 356</b>	<b>-</b>	<b>5 225</b>			
<b>Total PROJECT COSTS</b>	<b>15 953</b>	<b>35 568</b>	<b>141 922</b>	<b>69 938</b>	<b>5 181</b>	<b>1 079</b>	<b>269 641</b>			
Taxes	1 612	520	329	8 459	212	133	11 265			
Foreign Exchange	2 448	1 798	8 330	29 132	361	352	42 420			

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 2AA: Expenditure Accounts by Components – Total Including Contingencies (EGP '000)**

**Improvement of smallholders  
productivity and resilience**

	<b>Strengthening Rural Institutions, Enterprises and Markets</b>		<b>Production related investments under Project Management, M&amp;E and KM</b>				<b>Total</b>
	<b>Strengthening marketing institutions</b>	<b>Micro enterprises development</b>	<b>Investments in irrigation infrastructure and management</b>	<b>business plans</b>	<b>Project Management Unit</b>	<b>M&amp;E and Knowledge Management</b>	
<b>I. Investment Costs</b>							
A. Technical assistance and consultancies /a	87 157	11 178	414 461	63 735	3 976	19 707	600 214
B. Goods, Services and Inputs	11 360	94 522	44 771	1 757 212	11 874	-	1 919 738
C. Trainings, Workshops and Meetings /b	142 276	618	117	42 220	2 496	5 938	193 665
D. Civil Works	109 227	-	3 448 896	-	-	-	3 558 123
E. Grants and subsidies	64 129	630 356	-	29 202	-	-	723 688
<b>Total Investment Costs</b>	<b>414 149</b>	<b>736 675</b>	<b>3 908 245</b>	<b>1 892 369</b>	<b>18 346</b>	<b>25 644</b>	<b>6 995 428</b>
<b>II. Recurrent Costs</b>							
A. Salaries and Allowances	-	-	-	-	68 712	-	68 712
B. Operating costs /c	-	-	24 025	-	18 402	-	42 426
<b>Total Recurrent Costs</b>	<b>-</b>	<b>-</b>	<b>24 025</b>	<b>-</b>	<b>87 114</b>	<b>-</b>	<b>111 138</b>
<b>Total PROJECT COSTS</b>	<b>414 149</b>	<b>736 675</b>	<b>3 932 269</b>	<b>1 892 369</b>	<b>105 460</b>	<b>25 644</b>	<b>7 106 566</b>
Taxes	42 095	13 057	8 554	228 810	4 469	3 149	300 134
Foreign Exchange	60 174	45 078	226 821	794 908	7 863	8 643	1 143 488

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 3A: Programme Components by Year – Totals Including Contingencies (EGP '000)**

	Totals Including Contingencies (EGP '000)							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	41 954	74 226	123 868	115 286	54 474	4 341	-	414 149
2. Micro enterprises development	25 521	152 075	167 686	144 589	126 998	64 356	55 449	736 675
<b>Subtotal</b>	67 476	226 301	291 555	259 875	181 473	68 696	55 449	1 150 824
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	16 435	116 482	1 326 406	1 515 282	770 819	186 845	-	3 932 269
2. Production related investments under business plans	39 851	82 455	192 147	507 154	518 527	398 103	154 131	1 892 369
<b>Subtotal</b>	56 287	198 937	1 518 553	2 022 436	1 289 346	584 948	154 131	5 824 638
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	32 478	15 365	13 270	12 695	12 720	12 748	6 183	105 460
2. M&E and Knowledge Management	3 558	2 457	2 933	2 658	2 764	3 299	7 975	25 644
<b>Subtotal</b>	36 036	17 822	16 203	15 353	15 485	16 047	14 158	131 104
<b>Total PROJECT COSTS</b>	159 798	443 060	1 826 311	2 297 663	1 486 303	669 692	223 739	7 106 566

**Table 3AA: Programme Components by Year – Totals Including Contingencies (USD '000)**

	Totals Including Contingencies (USD '000)							Total
	2020	2021	2022	2023	2024	2025	2026	
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>								
1. Strengthening marketing institutions	1 969	3 176	4 731	4 115	1 826	137	-	15 953
2. Micro enterprises development	1 208	7 354	7 855	6 924	6 288	3 167	2 772	35 568
<b>Subtotal</b>	<b>3 177</b>	<b>10 530</b>	<b>12 586</b>	<b>11 038</b>	<b>8 113</b>	<b>3 304</b>	<b>2 772</b>	<b>51 521</b>
<b>B. Improvement of smallholders productivity and resilience</b>								
1. Investments in irrigation infrastructure and management	764	4 817	50 543	54 081	25 836	5 881	-	141 922
2. Production related investments under business plans	1 872	3 733	7 905	19 357	18 588	13 468	5 016	69 938
<b>Subtotal</b>	<b>2 636</b>	<b>8 549</b>	<b>58 447</b>	<b>73 438</b>	<b>44 424</b>	<b>19 350</b>	<b>5 016</b>	<b>211 860</b>
<b>C. Project Management, M&amp;E and KM</b>								
1. Project Management Unit	1 572	748	660	630	631	631	309	5 181
2. M&E and Knowledge Management	176	119	139	123	125	146	251	1 079
<b>Subtotal</b>	<b>1 748</b>	<b>866</b>	<b>799</b>	<b>753</b>	<b>756</b>	<b>777</b>	<b>560</b>	<b>6 260</b>
<b>Total PROJECT COSTS</b>	<b>7 561</b>	<b>19 945</b>	<b>71 833</b>	<b>85 230</b>	<b>53 293</b>	<b>23 430</b>	<b>8 348</b>	<b>269 641</b>

**Table 4A: Expenditure Accounts by Year – Totals Including Contingencies (EGP '000)**

	Totals Including Contingencies (EGP '000)							
	2020	2021	2022	2023	2024	2025	2026	Total
<b>I. Investment Costs</b>								
A. Technical assistance and consultancies /a	55 308	50 680	194 159	187 993	87 184	10 937	13 953	600 214
B. Goods, Services and Inputs	38 220	116 146	233 670	505 178	494 918	383 452	148 153	1 919 738
C. Trainings, Worskshops and Meetings /b	27 732	34 676	43 858	39 366	35 299	12 734	-	193 665
D. Civil Works	10 253	94 624	1 169 599	1 383 902	716 113	183 631	-	3 558 123
E. Grants and subsidies	10 501	129 421	167 040	163 405	134 513	63 359	55 449	723 688
<b>Total Investment Costs</b>	<b>142 015</b>	<b>425 546</b>	<b>1 808 326</b>	<b>2 279 844</b>	<b>1 468 028</b>	<b>654 113</b>	<b>217 555</b>	<b>6 995 428</b>
<b>II. Recurrent Costs</b>								
A. Salaries and Allow ances	11 676	10 752	10 752	10 152	10 152	10 152	5 076	68 712
B. Operating costs /c	6 107	6 762	7 233	7 667	8 123	5 427	1 107	42 426
<b>Total Recurrent Costs</b>	<b>17 783</b>	<b>17 514</b>	<b>17 985</b>	<b>17 819</b>	<b>18 275</b>	<b>15 579</b>	<b>6 183</b>	<b>111 138</b>
<b>Total PROJECT COSTS</b>	<b>159 798</b>	<b>443 060</b>	<b>1 826 311</b>	<b>2 297 663</b>	<b>1 486 303</b>	<b>669 692</b>	<b>223 739</b>	<b>7 106 566</b>

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 4AA: Expenditure Accounts by Year – Totals Including Contingencies (USD '000)**

	Totals Including Contingencies (USD '000)							
	2020	2021	2022	2023	2024	2025	2026	Total
<b>I. Investment Costs</b>								
A. Technical assistance and consultancies /a	2 619	2 264	7 498	6 812	3 041	483	550	23 267
B. Goods, Services and Inputs	1 776	5 074	9 416	19 201	17 698	12 896	4 717	70 777
C. Trainings, Woskshops and Meetings /b	1 291	1 441	1 680	1 416	1 196	415	-	7 439
D. Civil Works	477	3 913	44 568	49 392	24 002	5 780	-	128 131
E. Grants and subsidies	510	6 417	7 831	7 595	6 540	3 136	2 772	34 801
<b>Total Investment Costs</b>	<b>6 672</b>	<b>19 109</b>	<b>70 993</b>	<b>84 416</b>	<b>52 476</b>	<b>22 710</b>	<b>8 039</b>	<b>264 416</b>
<b>II. Recurrent Costs</b>								
A. Salaries and Allow ances	584	538	538	508	508	508	254	3 436
B. Operating costs /c	305	299	302	306	309	212	55	1 789
<b>Total Recurrent Costs</b>	<b>889</b>	<b>837</b>	<b>840</b>	<b>813</b>	<b>817</b>	<b>720</b>	<b>309</b>	<b>5 225</b>
<b>Total PROJECT COSTS</b>	<b>7 561</b>	<b>19 945</b>	<b>71 833</b>	<b>85 230</b>	<b>53 293</b>	<b>23 430</b>	<b>8 348</b>	<b>269 641</b>

/a It includes Technical assistance and studies

/b It includes meetings

/c including maintenance

**Table 5A: Programme Components by Financiers USD '000)**

	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>																							
1. Strengthening marketing institutions	5 508	34.5	1 276	8.0	-	-	2 483	15.6	-	-	5 742	36.0	661	4.1	282	1.8	-	-	15 953	5.9	2 448	11 893	1 612
2. Micro enterprises development	16 671	46.9	-	-	689	1.9	520	1.5	2 508	7.1	-	-	9 213	25.9	527	1.5	5 440	15.3	35 568	13.2	1 798	33 250	520
<b>Subtotal</b>	22 178	43.0	1 276	2.5	689	1.3	3 004	5.8	2 508	4.9	5 742	11.1	9 874	19.2	809	1.6	5 440	10.6	51 521	19.1	4 246	45 143	2 132
<b>B. Improvement of smallholders productivity and resilience</b>																							
1. Investments in irrigation infrastructure and management	9 662	6.8	30	-	8 353	5.9	1 759	1.2	84 529	59.6	14 258	10.0	-	-	-	-	23 331	16.4	141 922	52.6	8 330	133 263	329
2. Production related investments under business plans	27 885	39.9	-	-	3 722	5.3	8 459	12.1	3 004	4.3	-	-	-	-	1 543	2.2	25 326	36.2	69 938	25.9	29 132	32 348	8 459
<b>Subtotal</b>	37 546	17.7	30	-	12 075	5.7	10 218	4.8	87 532	41.3	14 258	6.7	-	-	1 543	0.7	48 658	23.0	211 860	78.6	37 461	165 611	8 788
<b>C. Project Management, M&amp;E and KM</b>																							
1. Project Management Unit	2 577	49.8	-	-	-	-	2 084	40.2	-	-	-	-	-	-	519	10.0	-	-	5 181	1.9	361	4 608	212
2. M&E and Knowledge Management	928	86.0	-	-	-	-	151	14.0	-	-	-	-	-	-	-	-	-	-	1 079	0.4	352	595	133
<b>Subtotal</b>	3 505	56.0	-	-	-	-	2 236	35.7	-	-	-	-	-	-	519	8.3	-	-	6 260	2.3	713	5 203	345
<b>Total PROJECT COSTS</b>	63 230	23.4	1 306	0.5	12 764	4.7	15 457	5.7	90 041	33.4	20 000	7.4	9 874	3.7	2 871	1.1	54 097	20.1	269 641	100.0	42 420	215 956	11 265

**Table 5AA: Programme Components by Financiers (EGP '000)**

	(EGP '000)																						
	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total		Local (Excl. Duties & Taxes)		
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	For. Exch.	Taxes)	Taxes
<b>A. Strengthening Rural Institutions, Enterprises and Markets</b>																							
1. Strengthening marketing institutions	138 276	33.4	31 935	7.7	-	-	65 668	15.9	-	-	155 917	37.6	16 276	3.9	6 076	1.5	-	-	414 149	5.8	60 174	311 880	42 095
2. Micro enterprises development	334 561	45.4	-	-	13 778	1.9	13 057	1.8	50 168	6.8	-	-	202 058	27.4	14 256	1.9	108 797	14.8	736 675	10.4	45 078	678 540	13 057
<b>Subtotal</b>	<b>472 837</b>	<b>41.1</b>	<b>31 935</b>	<b>2.8</b>	<b>13 778</b>	<b>1.2</b>	<b>78 725</b>	<b>6.8</b>	<b>50 168</b>	<b>4.4</b>	<b>155 917</b>	<b>13.5</b>	<b>218 334</b>	<b>19.0</b>	<b>20 332</b>	<b>1.8</b>	<b>108 797</b>	<b>9.5</b>	<b>1 150 824</b>	<b>16.2</b>	<b>105 252</b>	<b>990 420</b>	<b>55 152</b>
<b>B. Improvement of smallholders productivity and resilience</b>																							
1. Investments in irrigation infrastructure and management	264 240	6.7	651	-	232 886	5.9	46 515	1.2	2 339 990	59.5	397 513	10.1	-	-	-	-	650 474	16.5	3 932 269	55.3	226 821	3 696 894	8 554
2. Production related investments under business plans	743 569	39.3	-	-	102 691	5.4	228 810	12.1	80 815	4.3	-	-	-	-	37 385	2.0	699 099	36.9	1 892 369	26.6	794 908	868 651	228 810
<b>Subtotal</b>	<b>1 007 808</b>	<b>17.3</b>	<b>651</b>	<b>-</b>	<b>335 577</b>	<b>5.8</b>	<b>275 325</b>	<b>4.7</b>	<b>2 420 805</b>	<b>41.6</b>	<b>397 513</b>	<b>6.8</b>	<b>-</b>	<b>-</b>	<b>37 385</b>	<b>0.6</b>	<b>1 349 573</b>	<b>23.2</b>	<b>5 824 638</b>	<b>82.0</b>	<b>1 021 729</b>	<b>4 565 545</b>	<b>237 364</b>
<b>C. Project Management, M&amp;E and KM</b>																							
1. Project Management Unit	52 009	49.3	-	-	-	-	43 064	40.8	-	-	-	-	-	-	10 386	9.8	-	-	105 460	1.5	7 863	93 128	4 469
2. M&E and Knowledge Management	22 089	86.1	-	-	-	-	3 555	13.9	-	-	-	-	-	-	-	-	-	-	25 644	0.4	8 643	13 852	3 149
<b>Subtotal</b>	<b>74 098</b>	<b>56.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46 620</b>	<b>35.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10 386</b>	<b>7.9</b>	<b>-</b>	<b>-</b>	<b>131 104</b>	<b>1.8</b>	<b>16 507</b>	<b>106 979</b>	<b>7 618</b>
<b>Total PROJECT COSTS</b>	<b>1 554 744</b>	<b>21.9</b>	<b>32 586</b>	<b>0.5</b>	<b>349 355</b>	<b>4.9</b>	<b>400 670</b>	<b>5.6</b>	<b>2 470 973</b>	<b>34.8</b>	<b>553 430</b>	<b>7.8</b>	<b>218 334</b>	<b>3.1</b>	<b>68 104</b>	<b>1.0</b>	<b>1 458 370</b>	<b>20.5</b>	<b>7 106 566</b>	<b>100.0</b>	<b>1 143 488</b>	<b>5 662 944</b>	<b>300 134</b>

**Table 6A: Disbursement Accounts by Financiers (EGP '000)**

	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total		Local (Excl. Taxes)	Duties & Taxes	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			For. Exch.
Technical assistance and Consultancies	173 423	28.9	8 182	1.4	-	-	39 493	6.6	369 920	61.6	-	-	949	0.2	8 246	1.4	-	-	600 214	8.4	269 287	308 559	22 368
Goods, Services and inputs DA	675 181	33.5	10 830	0.5	102 691	5.1	261 731	13.0	80 815	4.0	64 129	3.2	83 379	4.1	35 215	1.7	699 099	34.7	2 013 070	28.3	874 200	904 442	234 427
Grants and subsidies	325 162	51.6	-	-	13 778	2.2	-	-	50 168	8.0	-	-	118 195	18.8	14 256	2.3	108 797	17.3	630 356	8.9	-	630 356	-
Training, workshops and meetings	134 829	69.6	13 574	7.0	-	-	29 450	15.2	-	-	-	-	15 811	8.2	-	-	-	-	193 665	2.7	-	172 931	20 733
Civil Works_DA	197 953	5.6	-	-	232 886	6.5	17 440	0.5	1 970 070	55.4	489 300	13.8	-	-	-	-	650 474	18.3	3 558 123	50.1	-	3 540 683	17 440
Salaries and Allowances_DA	48 096	70.0	-	-	-	-	14 616	21.3	-	-	-	-	-	-	6 000	8.7	-	-	68 712	1.0	-	68 712	-
Operating costs_DA /a	100	0.2	-	-	-	-	37 940	89.4	-	-	-	-	-	-	4 386	10.3	-	-	42 426	0.6	-	37 260	5 166
<b>Total PROJECT COSTS</b>	<b>1 554 744</b>	<b>21.9</b>	<b>32 586</b>	<b>0.5</b>	<b>349 355</b>	<b>4.9</b>	<b>400 670</b>	<b>5.6</b>	<b>2 470 973</b>	<b>34.8</b>	<b>553 430</b>	<b>7.8</b>	<b>218 334</b>	<b>3.1</b>	<b>68 104</b>	<b>1.0</b>	<b>1 458 370</b>	<b>20.5</b>	<b>7 106 566</b>	<b>100.0</b>	<b>1 143 488</b>	<b>5 662 944</b>	<b>300 134</b>

/a including maintenance

**Table 6AA: Disbursement Accounts by Financiers (USD '000)**

	IFAD loan		IFAD grant		Beneficiaries		The Government		AfDB		OFID		WFP		Adaptation Fund		Private FI		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
Technical assistance and Consultancies	7 474	32.1	350	1.5	-	-	1 620	7.0	13 404	57.6	-	-	37	0.2	383	1.6	-	-	23 267	8.6	10 178	12 108	982
Goods, Services and inputs DA	24 845	33.5	417	0.6	3 722	5.0	9 793	13.2	3 004	4.0	2 411	3.2	3 287	4.4	1 442	1.9	25 326	34.1	74 246	27.5	32 242	33 363	8 641
Grants and subsidies	16 258	51.9	-	-	689	2.2	0	-	2 508	8.0	-	-	5 910	18.9	527	1.7	5 440	17.4	31 332	11.6	-	31 332	-
Training, workshops and meetings	5 144	69.1	539	7.2	-	-	1 116	15.0	-	-	-	-	641	8.6	-	-	-	-	7 439	2.8	-	6 648	792
Civil Works_DA	7 100	5.5	-	-	8 353	6.5	633	0.5	71 125	55.5	17 589	13.7	-	-	-	-	23 331	18.2	128 131	47.5	-	127 499	633
Salaries and Allow ances_DA	2 405	70.0	-	-	-	-	731	21.3	-	-	-	-	-	-	300	8.7	-	-	3 436	1.3	-	3 436	-
Operating costs_DA /a	5	0.3	-	-	-	-	1 565	87.5	-	-	-	-	-	-	219	12.3	-	-	1 789	0.7	-	1 571	217
<b>Total PROJECT COSTS</b>	<b>63 230</b>	<b>23.4</b>	<b>1 306</b>	<b>0.5</b>	<b>12 764</b>	<b>4.7</b>	<b>15 457</b>	<b>5.7</b>	<b>90 041</b>	<b>33.4</b>	<b>20 000</b>	<b>7.4</b>	<b>9 874</b>	<b>3.7</b>	<b>2 871</b>	<b>1.1</b>	<b>54 097</b>	<b>20.1</b>	<b>269 641</b>	<b>100.0</b>	<b>42 420</b>	<b>215 956</b>	<b>11 265</b>

/a including maintenance

## **Annex B: Detailed Cost Tables**

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### Table 1B: Strengthening marketing institutions (USD '000)

Egypt  
Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)  
Table 1.1. Strengthening marketing institutions  
Detailed Costs

	Unit	Quantities							Total	Unit Cost (USD)	Totals Including Contingencies (USD '000)							Total
		2020	2021	2022	2023	2024	2025	2026			2020	2021	2022	2023	2024	2025	2026	
<b>I. Investment Costs</b>																		
<b>A. Studies and training material developed by service providers</b>																		
Service provider for preparation of training material /a	lumpsum								30	-	-	-	-	-	-	30		
Community mobilization, awareness package, training material preparation and guidelines /b	lumpsum								76	-	39	-	-	-	-	115		
Institutional need assessment /c	no. of studies	3	-	-	-	-	-	-	3	5,000	15	-	-	-	-	15		
Market studies /d	no. of studies	3	-	3	-	-	-	-	6	5,000	15	-	16	-	-	31		
Agribusiness landscape and opportunities /e	no. of studies	3	-	3	-	-	-	-	6	5,000	15	-	16	-	-	31		
Quantitative assessment on access to finance, demand and supply	no. of studies	1	-	-	-	-	-	-	1	8,000	8	-	-	-	-	8		
Analysis of climate risks	local VC	40	-	-	-	-	-	-	40	2,000	81	-	-	-	-	81		
<b>Subtotal</b>											240	-	70	-	-	310		
<b>B. Sensitization and mobilisation for CDAs, cooperatives, women groups and MAs</b>																		
Training of trainers /f	training sessions	3	4	4	4	-	-	-	15	5,000	15	21	21	21	-	78		
Communication and mobilisation campaign /g	lumpsum										15	15	8	8	-	46		
Community mobilisation meetings and training roll-out /h	no. of meetings/trainings	18	24	70	48	-	-	-	160	500	9	12	37	25	-	83		
Community mobilisation meetings for women	no. of meetings/trainings	25	-	-	-	-	-	-	25	1,000	25	-	-	-	-	25		
Sensitisation events and exposure meetings /i	no. of visits	2	3	6	8	8	-	-	27	3,000	6	9	19	25	26	86		
Targeting and gender Training of Gender and Social Inclusion experts / Social Focal Points at CDAs	people	100	-	100	-	-	-	-	200	30	3	-	3	-	-	6		
Development of training material for TOT trainings on targeting and gender /j	lumpsum										3	-	-	-	-	3		
Exchange for Women's groups /k	no. of people	-	60	-	60	-	60	-	180	60	-	4	-	4	-	11		
Women's leader participate to exhibition (agri-food product)	no. of people	-	25	-	25	-	25	-	75	60	-	2	-	2	-	5		
Gender / targeting / Nutrition mainstreaming training for Gender and Social Development expert at Governorate level	no. of people	3	-	3	-	-	-	-	6	40	0	-	0	-	-	0		
Leadership training for Women in VSC&L Groups	no. of people	500	-	500	-	-	-	-	1,000	40	20	-	21	-	-	41		
Finance Literacy Training /l	no. of people	2,000	-	2,000	-	-	-	-	4,000	40	81	-	83	-	-	164		
Women enterprise development trainings ( 10 per villages) /m	no. of people	1,000	1,000	-	-	-	-	-	2,000	40	40	41	-	-	-	81		
Institutional support to partner CDAs and Ag coops (office refurbishment, and equipment)	no.	18	24	70	48	-	-	-	160	2,500	45	62	183	127	-	417		
Support registration costs for new businesses	lumpsum	0.05	0.05	0.4	0.4	0.05	0.05	-	1	100,000	5	5	42	42	5	105		
Other specialized training	lumpsum										13	26	52	53	-	144		
<b>Subtotal</b>											281	196	468	309	31	1,296		
<b>C. Market related investments under the business plans</b>																		
Certification costs /n	lumpsum		2	10	10	2	-	-	24	12,000	-	28	143	145	30	346		
Participation to Expos, trade fairs and other fora	lumpsum										-	70	71	73	74	288		
Post-harvest specialized technical assistance	lumpsum										29	29	119	121	62	360		
Financing of post-harvest equipment /o	no. of business plan	150	150	1,000	1,000	-	-	-	2,300	1,000	151	154	1,044	1,062	-	2,411		
Market structures and outlets	no. of structures	-	2	2	2	-	-	-	6	20,000	-	51	52	53	-	157		
Collection centres /p	no. of centres	-	2	12	8	2	-	-	24	20,000	-	51	313	212	54	631		
(Cold) storage facilities /q	no. of facilities	-	2	6	10	6	-	-	24	100,000	-	256	782	1,327	811	3,177		
<b>Subtotal</b>											180	640	2,524	2,994	1,030	7,369		
<b>D. Demonstration plots</b>																		
Nutrition Demo Plot ( Roof-Garden) established at cluster level	no. of demos	10	10	-	-	-	-	-	20	1,000	11	12	-	-	-	23		
Homes ( roof top) garden demonstrations	no. of demos	10	10	-	-	-	-	-	20	500	6	6	-	-	-	12		
<b>Subtotal</b>											17	18	-	-	-	35		
<b>E. Capacity development of rural institution</b>																		
Capacity building on climate change issues	lumpsum										230	-	-	-	-	230		
<b>F. Digital agriculture setup</b>																		
Development of Digital market Platform and Customization of Bashaier of KEF	lumpsum										137	483	70	-	-	690		
Digital Finance STAR Wallet and Mobile Money - Platform Integration	lumpsum										137	483	70	-	-	690		
Visual agriculture marketing Module, Uber Model and Aggregation	lumpsum										23	444	469	-	-	936		
Mobile Interface of Digital Market Platform	lumpsum										-	-	119	-	-	119		
Content development and inventory on digital agriculture /r	no. of trainings/meetings	30	30	30	30	30	10	-	160	10,000	345	351	357	363	370	1,911		
Business Meetings, Hackathon for Digital market Solutions, Handholding /s	meetings	-	1	2	-	-	-	-	3	10,000	-	12	24	-	-	35		
Implementation of Digital Solutions at village level	no.	10	40	40	40	40	-	-	170	8,000	92	374	381	388	395	1,629		
MOOCs platform	lumpsum										115	-	-	-	-	115		
Certified courses for operationalising capacity building on digital technology	no	30	30	30	10	-	-	-	100	5,000	172	175	178	61	-	587		
<b>Subtotal</b>											1,021	2,322	1,668	811	764	126	6,712	
<b>Total</b>											1,969	3,176	4,731	4,115	1,526	137	15,953	

<sup>a</sup> Responsible also for the training of trainer

<sup>b</sup> Done by the service provider; related to community mobilisation, development of rural institutions, business plan development; including farming as a business and crop budget module, marketing modules, business modules, financial management modules; revisi

<sup>c</sup> One per governorate

<sup>d</sup> One per governorate

<sup>e</sup> One per governorate

<sup>f</sup> Training workshop 30 members per w./s, SP trains Yps. and CDTs.

<sup>g</sup> Per cluster; carried out by the mobilisers in CDTs, CDT and Yps based on awareness package developed by the service provider

<sup>h</sup> Per village; roll out carried out by the CDAs and Yps and CDTs

<sup>i</sup> 20 women per village; this will also include buyers orientation workshops

<sup>j</sup> this includes guidance on Wealth ranking Exercise

<sup>k</sup> Learning village to village on different topics: agriculture/off-farm enterprise

<sup>l</sup> 20 women per village

<sup>m</sup> 10 people per village

<sup>n</sup> per cluster

<sup>o</sup> Machinery and equipment

<sup>p</sup> Estimated one collection centre per cluster

<sup>q</sup> One per cluster

<sup>r</sup> Including campaigns, publicity, group discussions

<sup>s</sup> Mentoring 3 pilot projects

**Table 2B: Microenterprises development (USD '000)**

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt [STAR]

Table 1.2. Micro enterprises development

Detailed Costs

Unit	Quantities								Unit Cost (USD)	Totals Including Contingencies (USD '000)								
	2020	2021	2022	2023	2024	2025	2026	Total		2020	2021	2022	2023	2024	2025	2026	Total	
<b>I. Investment Costs</b>																		
<b>A. Studies</b>																		
Gender / nutrition sensitive Value Chain analysis as part of VC / Market analysis	no. of studies	1	-	-	-	-	-	-	1	5.000	6	-	-	-	-	-	6	
Gender Impact Assessment /a	no. of studies	1	-	1	-	-	1	-	3	5.000	6	-	6	-	-	6	18	
Poverty Impact Assessment /b	no. of studies	1	-	1	-	-	1	-	3	5.000	6	-	6	-	-	6	18	
<b>Subtotal</b>											17	-	12	-	-	13	42	
<b>B. Demonstrations</b>																		
Small income generation activity by w omen (innovative businesses) /c	no.	45	105	150	60	-	-	-	360	600	31	74	107	44	-	-	255	
Collective youth enterprises (processing and agro-residue based enterprises) /d	no.	6	14	20	8	-	-	-	48	25.000	172	409	595	242	-	-	1419	
Individual youth loans through youth groups (innovative technology adoption) /e	no.	15	35	50	20	-	-	-	120	1.250	22	51	74	30	-	-	177	
Collective VC enterprises through MAs, CDAs Etc (energy saving technology etc) /f	no.	3	7	10	4	-	-	-	24	50.000	172	409	595	242	-	-	1419	
Support to individual farmers in the MAs (innovative production technologies, climate resistant varieties etc) /g	no.	80	185	265	110	-	-	-	640	600	55	130	189	80	-	-	454	
<b>Subtotal</b>											453	1 073	1 560	638	-	-	3 724	
<b>C. Financial support for MSME</b>																		
Credit line for small income generation by w omen	lumpsum										156	3 110	3 110	3 110	3 110	1 555	1 400	15 552
Credit line for collective youth enterprises	lumpsum										26	521	521	521	521	261	235	2 607
Credit line for individual youth loans through youth groups	lumpsum										113	2 267	2 267	2 267	2 267	1 133	1 020	11 333
Credit line for collective VC enterprises through MAs, CDAs Etc	lumpsum										13	263	263	263	263	131	118	1 313
Entrepreneurship and financing specialist	pers.year	3	3	3	3	3	3	-	18	5.000	17	18	18	18	18	19	-	108
Training in business management to beneficiaries	lumpsum										29	-	-	-	-	-	-	29
Study on opportunities for microinsurance	lumpsum										80	-	-	-	-	-	-	80
Assessment and mapping of the demand for credit	lumpsum										80	-	-	-	-	-	-	80
International technical assistance on rural finance issues /h	lumpsum										172	-	-	-	-	-	-	172
<b>Subtotal</b>											687	6 179	6 179	6 179	6 179	3 099	2 772	31 275
<b>D. Support to innovations for climate adaptation</b>																		
Development of innovative climate-resilient micro-enterprises	no. of grants	10	20	20	20	20	10	-	100	5.000	50	103	104	106	108	55	-	527
<b>Total</b>											1 208	7 354	7 855	6 924	6 288	3 167	2 772	35 568

la At start, mid-term and completion

lb At start, mid-term and completion

lc 15 demos per cluster identified

ld 2 demos per cluster identified

le 5 demos per cluster identified

lf 1 demo per cluster identified

lg 15 demos per cluster identified

lh expertise on insurance, credit guarantee, secured transactions

**Table 3B: Investments in irrigations infrastructure and management (USD '000)**

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)

Table 2.1. Investments in irrigation infrastructure and management

**Detailed Costs**

Unit	Quantities							Total	Unit Cost (USD)	Totals Including Contingencies (USD '000)							Total	
	2020	2021	2022	2023	2024	2025	2026			2020	2021	2022	2023	2024	2025	2026		
<b>I. Investment Costs</b>																		
<b>A. Technology demonstration</b>																		
Irrigation rehabilitation (use of modern technology) /a	no	30	70	100	40	-	-	-	240	2,500	79	188	274	112	-	-	-	653
<b>B. Irrigation related investments under the business plans</b>																		
Irrigation rehabilitation	no of HH	150	1 250	9 750	11 100	5 750	2 000	-	30 000	2,500	397	3 365	26 710	30 955	16 324	5 780	-	83 531
Development of Water User Associations /b	no.	50	50	90	90	40	-	-	320	5,000	252	256	470	478	216	-	-	1 673
Rehabilitation of branch canals	no. of branches	-	-	10	10	4	-	-	24	1,500,000	-	-	16 437	16 733	6 813	-	-	39 983
Branch canal design	no of branches	-	-	10	10	4	-	-	24	264,000	-	-	2 755	2 805	1 142	-	-	6 702
Branch canal construction and supervision	no of branches	-	-	10	10	4	-	-	24	264,000	-	-	2 755	2 805	1 142	-	-	6 702
<b>Subtotal</b>											649	3 622	49 126	53 775	25 638	5 780	-	138 590
<b>C. Digital solutions to water management</b>																		
Digital water DashBoard, server and software	lumpsum										34	-	-	-	-	-	-	34
Digital water meters /c	no. of units	-	200	200	-	-	-	-	400	3,500	-	818	833	-	-	-	-	1 651
Irrigation automation with Smart Phone based automated Pump Starters /d	no. of units	-	-	100	-	-	-	-	100	1,000	-	-	119	-	-	-	-	119
Workshops, meetings, group discussions /e	no. of meetings	6	6	6	6	6	6	-	36	100	1	1	1	1	1	1	-	4
<b>Subtotal</b>											35	819	952	1	1	1	-	1 809
<b>Total Investment Costs</b>											764	4 629	50 362	53 887	25 639	5 781	-	141 053
<b>II. Recurrent Costs</b>																		
<b>A. Operational expenses</b>																		
Implementing digital strategies for water management	lumpsum	-	40	40	40	40	20	-	180	4,000	-	187	190	194	197	100	-	869
<b>Total Recurrent Costs</b>											-	187	190	194	197	100	-	869
<b>Total</b>											764	4 817	50 543	54 081	25 836	5 881	-	141 922

/a 10 demos per cluster identified

/b This involves, mobilisation, training, capacity building and institutional development support to WUAs

/c Electromagnetic flow meter model ex: FM600 / 6"), IoT master control RTU, communication booster, servo Stabilizer and an online UPS

/d Electromagnetic flow meter model ex: FM600 / 6"), IoT master control RTU, communication booster, servo Stabilizer and an online UPS

/e Two for each governorate

**Table 4B: Production related investments under business plans (USD '000)**

Egypt  
Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)  
Table 2.2. Production related investments under business plans

**Detailed Costs**

Unit	Quantities									Unit Cost (USD)	Totals Including Contingencies (USD '000)							
	2020	2021	2022	2023	2024	2025	2026	Total	2020		2021	2022	2023	2024	2025	2026	Total	
<b>I. Investment Costs</b>																		
<b>A. Demonstrations</b>																		
Establishment of demonstration plot for climate resilience businesses	no. of demo plots	25	25	-	-	-	-	-	50	12,000	345	351	-	-	-	-	696	
<b>B. Production related investments</b>																		
Credit line for collective youth enterprises ( direct agricultural production and marketing related)	no.	-	10	15	20	20	10	6	81	50,000	-	575	877	1 190	1 211	616	377	4 846
Credit line for individual youth loans through youth groups ( direct agricultural production and marketing related)	no.	-	500	1 500	4 500	4 000	3 000	500	14 000	1,250	-	719	2 192	6 692	6 056	4 623	784	21 066
Credit line for collective VC enterprises through MAs, CDAs Etc( direct agricultural production and marketing related)	no.	-	2	4	6	6	6	3	27	75,000	-	172	351	535	545	555	282	2 441
Credit line for support to individual farmers in the MAs	no.	-	2 000	6 000	20 000	20 000	14 000	6 127	68 127	400	-	920	2 806	9 518	9 689	6 904	3 076	32 913
Production related training and capacity building	lumpsum										14	15	59	61	31	16	-	196
Establishment of w ater efficient irrigation at plot level	no. of feddan	150	150	250	250	-	-	-	800	1,000	172	175	297	303	-	-	-	948
Contribution to credit guarantee funds	lumpsum	-	-	0.5	0.25	0.25	-	-	1	1,000,000	-	-	522	266	270	-	-	1 058
<b>Subtotal</b>											187	2 576	7 105	18 564	17 802	12 715	4 519	63 467
<b>C. Digital solutions to support production</b>																		
Digital Platform development ( STAR Platform), Dashboard, Databases, Design, Development, Hosting	lumpsum										196	197	197	197	197	197	197	1 381
Data logging systems for Project Staff and the Collaborators (Tabs)	lumpsum										0	-	-	-	-	-	-	0
Video extension strategy, digital green model	lumpsum										299	299	299	299	299	299	299	2 092
STAR integrated app development design development and content development	lumpsum										345	-	-	-	-	-	-	345
SMS Gateway - Customising the Existing gateway of WFP or development afresh	lumpsum										34	-	-	-	-	-	-	34
Overall implementation of digital strategies in production component	no. of meetings	16	16	16	16	16	16	-	96	10,000	184	187	190	194	197	201	-	1 153
MOCs platform development and course development execution. Input dealer certified training	lumpsum										57	58	-	-	-	-	-	116
Social media and w hatsapp components - Content development and netw ork graph theory implementation	lumpsum										52	53	54	55	55	56	-	324
AIDA tool customization and implementation	lumpsum										57	-	-	-	-	-	-	57
Digital hackathon for pitching 3 ideas - POC to pilot and handholding	lumpsum										-	12	24	12	-	-	-	48
Input dealer certified courses - private extension model - linking it to input supply - extension performance /a	lumpsum	-	-	15	15	15	-	-	45	2,000	-	-	36	36	37	-	-	109
Development of digital tools for early w arning outreach	lumpsum										115	-	-	-	-	-	-	115
<b>Subtotal</b>											1 341	806	800	793	786	754	496	5 776
<b>Total</b>											1 872	3 733	7 905	19 357	18 588	13 468	5 016	69 938

<sup>a</sup> Piloted in 5 locations in each governorate every year

**Table 5B: Project management (USD '000)**

Egypt  
Sustainable Transformation for Agricultural Resilience in Upper Egypt [S]

Table 3.1. Project Management  
Detailed Costs

Unit	Quantities							Total	Unit Cost (USD)	Totals Including Contingencies (USD '000)							Sum Total
	2020	2021	2022	2023	2024	2025	2026			2020	2021	2022	2023	2024	2025	2026	
<b>I. Investment Costs</b>																	
<b>A. Office supplies</b>																	
MIS System & Installation	no.	1	-	-	-	-	-	1	40,000	46	-	-	-	-	-	46	
STAR specific accounting software /a	no.	1	-	-	-	-	-	1	10,000	11	-	-	-	-	-	11	
Vehicles	vehicle	10	-	-	-	-	-	10	20,000	230	-	-	-	-	-	230	
Laptops	no.	30	-	-	-	-	-	30	400	14	-	-	-	-	-	14	
Printers	no.	5	-	-	-	-	-	5	500	3	-	-	-	-	-	3	
Photocopier	No	2	-	-	-	-	-	2	1,000	2	-	-	-	-	-	2	
Fax / telephone	No	10	-	-	-	-	-	10	100	1	-	-	-	-	-	1	
Tablets with open data kits	no.	400	-	-	-	-	-	400	300	138	-	-	-	-	-	138	
Handicam and video production equipments	no.	160	-	-	-	-	-	160	400	74	-	-	-	-	-	74	
Rico projectors / neat projectors	no.	80	-	-	-	-	-	80	300	28	-	-	-	-	-	28	
Other office equipment	sets	30	-	-	-	-	-	30	150	5	-	-	-	-	-	5	
<b>Subtotal</b>										552	-	-	-	-	-	552	
<b>B. Meetings and workshops</b>																	
Project startup	lumpsum	1	-	-	-	-	-	1	15,000	17	-	-	-	-	-	17	
Financial management training workshops /b	lumpsum	1	1	1	1	1	1	6	9,000	10	11	11	11	11	11	65	
<b>Subtotal</b>										28	11	11	11	11	11	82	
<b>C. Advisory services</b>																	
Digital technology advisor /c	Lumpsum	1	1	-	-	-	-	2	75,000	86	88	-	-	-	-	174	
<b>D. Policy dialogue</b>																	
Policy dialogue platforms	lumpsum	1	-	-	-	-	-	1	15,000	17	-	-	-	-	-	17	
<b>Total Investment Costs</b>										683	98	11	11	11	11	825	
<b>II. Recurrent Costs</b>																	
<b>A. National Programme Coordination Unit - NPCU</b>																	
National programme manager	person.month	6	12	12	12	12	12	6	72	1,000	6	12	12	12	12	6	72
STAR programme technical specialist	person.month	6	12	12	12	12	12	6	72	2,500	15	30	30	30	30	15	180
Adaptation Fund Programme management	lumpsum									300	-	-	-	-	-	-	300
M&E and KM manager	person.month	6	12	12	12	12	12	6	72	1,800	11	22	22	22	22	11	130
M&E and KM specialist	person.month	12	24	24	24	24	24	12	144	1,400	17	34	34	34	34	17	202
M&E and ICT specialist	person.month	6	12	12	12	12	12	6	72	1,400	8	17	17	17	17	8	101
Gender and social development manager	person.month	6	12	12	12	12	12	6	72	1,600	10	19	19	19	19	10	115
Digital agriculture specialist	person.month	12	12	12	-	-	-	12	36	2,500	30	30	30	-	-	-	90
Financial manager	person.month	6	12	12	12	12	12	6	72	2,200	13	26	26	26	26	13	158
Financial coordinator	person.month	6	12	12	12	12	12	6	72	1,600	10	19	19	19	19	10	115
Procurement manager	person.month	6	12	12	12	12	12	6	72	2,000	12	24	24	24	24	12	144
Procurement coordinator	person.month	6	12	12	12	12	12	6	72	1,500	9	18	18	18	18	9	108
Accountant	person.month	6	12	12	12	12	12	6	72	2,000	12	24	24	24	24	12	144
Accountant assistant	person.month	6	12	12	12	12	12	6	72	1,200	7	14	14	14	14	7	86
Human resources and administrative manager	person.month	6	12	12	12	12	12	6	72	1,800	11	22	22	22	22	11	130
Human resources and administrative assistant	person.month	6	12	12	12	12	12	6	72	1,000	6	12	12	12	12	6	72
Office assistant	person.month	6	12	12	12	12	12	6	72	800	5	10	10	10	10	5	58
Office clerk	person.month	6	12	12	12	12	12	6	72	200	1	2	2	2	2	1	14
Driver	person.month	6	12	12	12	12	12	6	72	400	2	5	5	5	5	2	29
<b>Subtotal</b>										485	340	340	310	310	310	155	2,248
<b>B. Governorate Programme Coordination Unit - GPCU</b>																	
Governorate Programme Coordinator	person.month	18	36	36	36	36	36	18	216	500	9	18	18	18	18	9	108
Deputy manager	person.month	18	36	36	36	36	36	18	216	1,000	18	36	36	36	36	18	216
Agronomist	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Gender and social development experts	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Business development, marketing and M&E	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Digital agriculture specialist	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Digital agriculture facilitators / volunteers	person.month	36	72	72	72	72	72	36	432	100	4	7	7	7	7	4	43
Infrastructure Engineer specialist	person.month	18	36	36	36	36	36	18	216	450	8	16	16	16	16	8	97
Accountant	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Social and community mobilization specialist	person.month	18	36	36	36	36	36	18	216	350	6	13	13	13	13	6	76
Young professionals	person.month	90	180	180	180	180	180	90	1,080	250	23	45	45	45	45	23	270
<b>Subtotal</b>										99	198	198	198	198	198	99	1,188
<b>C. Operating costs</b>																	
Car fuel and maintenance	lumpsum	5	10	10	10	10	10	5	60	5,000	29	57	57	57	57	29	342
Office supplies	lumpsum	0.5	1	1	1	1	1	0.5	6	2,500	1	3	3	3	3	1	17
Office operating costs	lumpsum	0.5	1	1	1	1	1	0.5	6	42,000	24	48	48	48	48	24	287
Travel allowances	lumpsum	0.5	1	1	1	1	1	0.5	6	3,000	2	3	3	3	3	2	18
Annual maintenance of software	lumpsum	-	1	1	1	1	1	-	5	1,000	-	1	1	1	1	-	6
Adaptation Fund agency fees	lumpsum									250	-	-	-	-	-	-	250
<b>Subtotal</b>										305	112	112	112	112	112	55	920
<b>Total Recurrent Costs</b>										889	649	649	619	619	619	309	4,356
<b>Total</b>										1,572	748	660	630	631	631	309	5,181

la Access to 5 users

lb Attended by 6 project staff and 1 IFAD employee /consultant - in Cairo

lc International consultant

**Table 6B: M&E and knowledge management (USD '000)**

Egypt

Sustainable Transformation for Agricultural Resilience in Upper Egypt [S1]

Table 3.2. M&E and Knowledge Management

Detailed Costs

Unit	Quantities								Unit Cost (USD)	Totals Including Contingencies (USD '000)								Sum
	2020	2021	2022	2023	2024	2025	2026	Total		2020	2021	2022	2023	2024	2025	2026	Total	
<b>I. Investment Costs</b>																		
<b>A. M&amp;E studies and activities</b>																		
Baseline survey	lumpsum	1	-	-	-	-	-	-	1	100.000	115	-	-	-	-	-	-	115
Completion survey	lumpsum	-	-	-	-	-	-	1	1	100.000	-	-	-	-	-	-	126	126
Annual Outcome surveys	lumpsum	-	1	1	1	1	1	-	5	25.000	-	29	30	30	31	31	-	151
Annual M&E and planning workshop	lumpsum	-	1	1	1	1	1	-	5	10.000	-	12	12	12	12	13	-	61
Knowledge management activities	lumpsum	-	1	1	1	1	1	-	5	20.000	-	23	24	24	25	25	-	121
M&E data collection activities	lumpsum	1	1	1	1	1	1	-	6	5.000	6	6	6	6	6	6	-	36
Technical assistance	lumpsum	1	-	1	-	-	1	-	3	15.000	17	-	18	-	-	19	-	54
Website and social media	lumpsum	1	1	1	1	1	1	-	6	3.000	3	4	4	4	4	4	-	22
Impact assessment	study	-	-	-	-	-	-	1	1	100.000	-	-	-	-	-	-	126	126
Communication and KM products on success stories	lumpsum	3	3	3	3	3	3	-	18	10.000	34	35	36	36	37	38	-	216
Audit	audit	-	1	1	1	1	1	-	5	8.600	-	10	10	10	11	11	-	52
<b>Total</b>											176	119	139	123	125	146	251	1 079

## Chapter 8: Financial Management

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## Glossary of terms

Term	Description
AdB	African Development Bank
AF	Adaptation Fund
AfDB	African Development Bank
Borrower	Government of the Arab Republic of Egypt (via MoIIC as signatory on financing agreement)
NPCU	National Programme Coordinating Unit
DSA	Daily Subsistence Allowance
EGP	Egyptian Pound
FM	Financial Management
GoE	Government of Arab Republic of Egypt
GCF	Green Climate Fund
IAs	Implementing Agencies
ICP	IFAD Client Portal
IFAD	International Fund for Agricultural Development
Intermediaries	Not-for-profit organisations, Micro-finance institutions, Participating Banks, Cooperatives
IPSAS Cash	International Public Sector Accounting Standards - Financial Reporting Under the Cash Basis of Accounting
GPCU	Governorate Programme Coordinating Unit
MALR	Ministry of Agriculture and Land Reclamation
MoIIC	Ministry of Investment and International Cooperation
MoF	Ministry of Finance
MoP	Ministry of Planning
MWRI	Ministry of Water and Irrigation
TSA	Treasury Single Account
Participating bank	Commercial banks in partnership with CIB
PIM	Project Implementation Manual
Project	Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
SOE	Statement of Expenditure
TOR	Terms of reference
WA	Withdrawal Application
WFP	World Food Programme

### 1. Introduction

The Project is jointly implemented by the NPCU and implementing partners in line with the terms and conditions of the financing agreement signed between the GoE (MoIIC as Borrower) and IFAD. The NPCU and implementing partners have the responsibility to implement sound financial management practices. This financial manual outlines the financial management processes and procedures to be implemented by the Project.

This document should be read together with the:

- ✓ Project financing agreements entered into between the Borrower and financiers (including Letter to the Borrower etc.)
- ✓ Subsidiary agreements with implementing partners
- ✓ IFAD General Conditions for Agricultural Development Financing
- ✓ IFAD Loan Disbursement Handbook

- ✓ IFAD Handbook on Financial Reporting and Auditing of IFAD-funded Projects
- ✓ List other financiers' documents as applicable

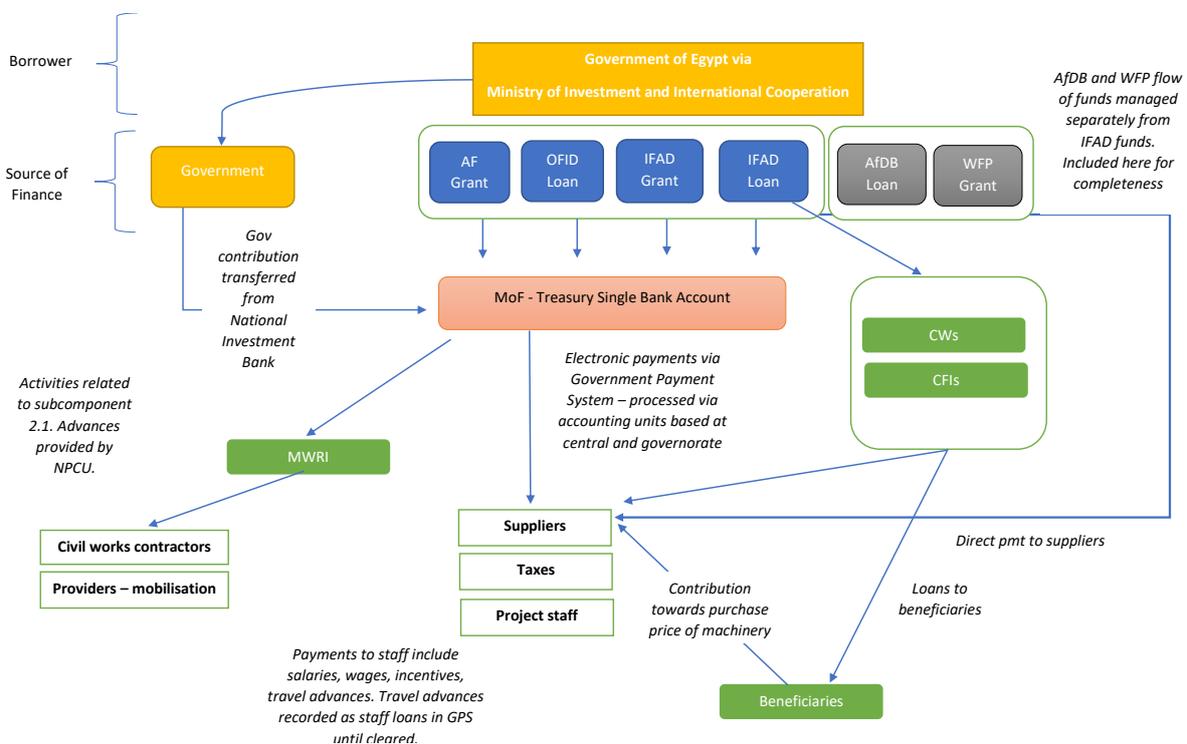
### Updates and changes to financial management arrangements

STAR is an IFAD-funded Project, therefore, in line with IFAD's efforts to capacitate and support Projects, this section was developed during the Project design process. It is envisaged that ongoing improvements and updates to financial management arrangements be updated in this section of the PIM under supervision of the Finance Manager and subject to IFAD no objection.

## 2. Flow of funds

### 2.1 NPCU

The flow of funds for NPCU is depicted below:



- Funds (including IFAD Loan, IFAD Grant, AF Grant, OFID Loan) will be transferred from IFAD to the Ministry of Finance Treasury Single Account (TSA). Funds disbursed to the TSA is managed on a ring-fenced basis using unique codes for each source of finance. Payments from the TSA on behalf of the Project is made by a dedicated MoF accounting unit, based within MALR, using the Government Payment System. Payments are made electronically to suppliers of goods and services. Payments via the Government Payment System are subject to approval by authorised signatories from the MALR and MoF.
- Government contributions will be disbursed from the National Investment Bank on behalf of the Government into the Ministry of Finance Treasury Single Account and ring-fenced for the project using a unique TSA code. Disbursement is subject to written request from the MALR to the Ministry of Planning and in line with pre-approved expense categories.
- Payments for Project expenses from the MoF Special Accounting Unit is made via the Government Payment System (GPS) which allows for electronic payments.
  - The approved Project budget is registered in the GPS

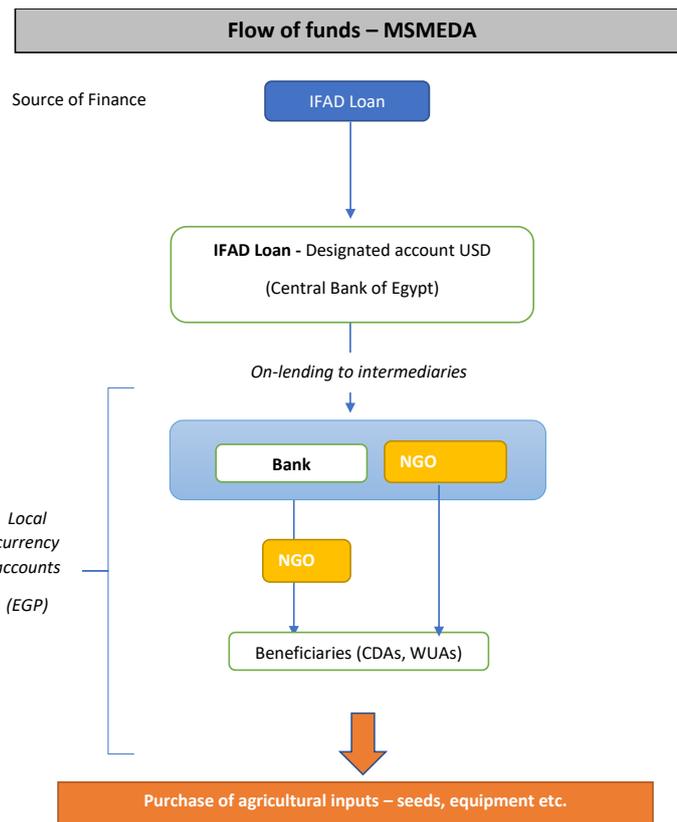
- Payments are allowed subject to available funds in the special accounting unit – ring-fenced for the Project
- Payments are created using the Project unique identified code, indicating the applicable budget category
- Payments are approved by MALR authorised signatory and MoF authorised signatory (using tokens to log into the GPS)
- Payments are made to suppliers of goods and services
- MWRI receive advances from NPCU (via TSA) for implementation of subcomponent 2.1 activities.
- Beneficiary contributions for purchase of equipment paid directly to approved suppliers and matched with rural finance facilities as applicable.

### Overview of the Treasury Single Account system (TSA)

*The MoF has a unified structure of government bank accounts via a treasury single account system. All government expenditure is managed via the TSA with oversight from the Ministry of Finance (MoF).*

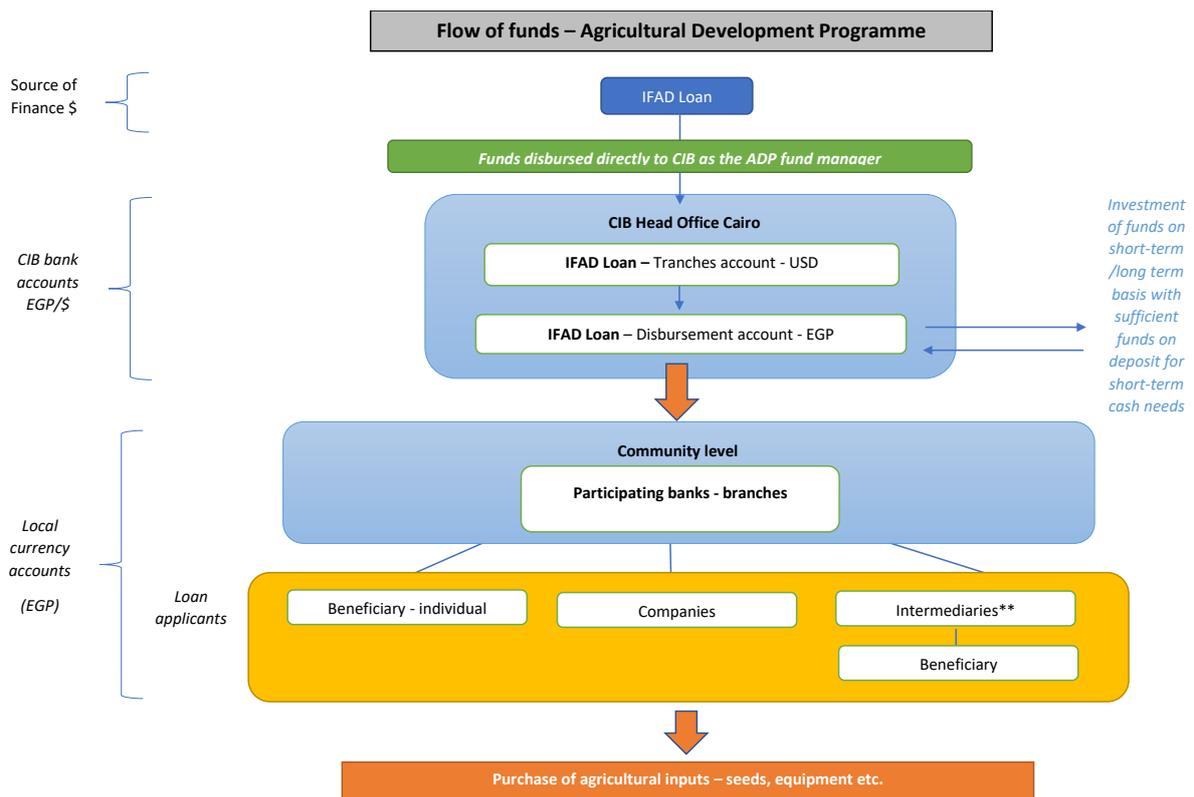
- *The MoF has accounting units in all ministries and at all levels of government which use the Government Payment System to make electronic payments to suppliers of goods and services.*
- *The TSA ledger chart of accounts for the Project is aligned with the cost categories and sources of finance as outlined in the Financing Agreement.*
- *Payments are allowed for processing subject to 1) available unutilised budget in the relevant category budget code, 2) available cash resources within the TSA bank account.*
- *Processed payments are recorded against the unique Project code / cost category and source of finance which allows for reconciliation with the Project accounting records.*

2.2 MSMEDA (if selected as CW otherwise delete)



- A portion of the IFAD Loan will be utilised for the provision of credit lines via implementing partners MSMEDA and ADP. For this purpose, funds will be disbursed to USD designated accounts, opened at bank(s) suitable to the Borrower. From the respective designated accounts, MSMEDA and ADP will disburse to participating banks / intermediaries for the purposes of providing loan to beneficiaries. All transfers from the designated account are subject to 2 authorised signatories as outlined in the subsidiary agreements. IFAD loan disbursement to the designated account is subject to submission of withdrawal applications from MSMEDA
- MSMEDA approves wholesale lending facilities to intermediaries such as commercial banks, NGOs (depending on the type of loan, commercial banks can on-lend to NGOs)
- Approved loans to intermediaries are disbursed directly from the IFAD Designated account (USD)
- The Designated account (USD) has 4 authorised signatories (including Head of the Financial Sector, Assistant General Managers)
- Loans to intermediaries are disbursed in tranches
  - First tranche is disbursed subject to list of prospective beneficiaries for agricultural loans being submitted to MSMEDA
  - Thereafter each consecutive tranche is disbursed when at least 50% of the most recent tranche is disbursed and 100% of all other tranches (supported by evidence of loans provided)
- Intermediaries use internal credit policies and procedures to approve and disburse loans to beneficiaries

### 2.3 ADP (if selected as CW, otherwise delete)



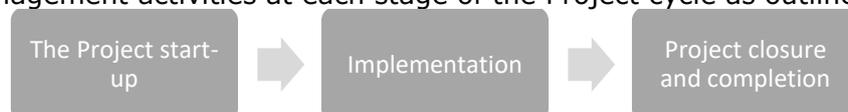
\*\* Intermediaries include NGOs, MFIs, CDAs, WUAs who obtain loans from the participating bank on behalf of a group of beneficiaries.

- Funds allocated to ADP in terms of the IFAD financing agreement is disbursed directly to CIB as fund manager
- ADP is responsible for preparation of withdrawal applications with input from CIB
- The ADP Executive Director and National Programme Manager are responsible for releasing the withdrawal application on ICP
- IFAD disburses funds to a USD designated account opened with CIB - "Tranches account"
- MALR gives instructions to CIB to transfer from Tranches account to Disbursement account
- CIB transfers funds from the USD account to various investment accounts as part of fund investment activities
- Once the ADP Board of Trustees approve beneficiary loans (see ADP loan approval process), funds are disbursed to the participating bank.
- The participating bank has up to 15 days to disburse funds to end-users which are either individuals, companies or intermediaries
- Funds disbursed to intermediaries are disbursed from this central point to end beneficiaries.

Refer to [22.20](#) for overview of ADP beneficiary loan approval process.

### 3. Project cycle and financial management activities

The Finance Manager of the NPCU will have final responsibility for the execution of the financial management activities at each stage of the Project cycle as outlined below:



Start-up	Implementation	Project closure and completion
<ul style="list-style-type: none"> <li>▪ Staff NPCU and GPCUs</li> <li>▪ Implement accounting software module in NPCU accounting software</li> <li>▪ Prepare first annual work plan and budget</li> <li>▪ Open bank accounts (as applicable) / ensure integration of Project with TSA in collaboration with MoF</li> <li>▪ Project start-up training</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing improvements to the PIM</li> <li>▪ Budgeting</li> <li>▪ Accounting</li> <li>▪ Disbursements and withdrawals</li> <li>▪ Record keeping</li> <li>▪ Internal controls</li> <li>▪ Cashflow forecasting</li> <li>▪ Auditing</li> <li>▪ On-going training</li> <li>▪ Implement performance evaluation<sup>5</sup></li> <li>▪ Financial reporting</li> </ul>	<ul style="list-style-type: none"> <li>▪ IFAD Specific completion and closure procedures</li> <li>▪ Final audit</li> <li>▪ Asset and inventory handover</li> <li>▪ Budget wrap up</li> </ul>



NB: The NPCU Finance Manager will have the final responsibility to prepare consolidated financial reports for submission to IFAD. Refer to [13.](#) for more detail.

#### 4.Pre-implementation activities

During the start-up of the Project it is recommended that Project, MSMEDA and ADP undertake the following activities. These activities are recommended to ensure that Project staff are well informed and knowledgeable with regards to the financial management aspects of the Project once implementation commences:

Activity	Overview
<i>Financial management staff appointment</i>	<ul style="list-style-type: none"> <li>• Appoint Project staff to NPCU and GPCUs. Refer to 5. for the proposed organogram.</li> </ul>
<i>Accounting software</i>	<ul style="list-style-type: none"> <li>▪ NPCU/GPCUs implement integrated accounting software with dedicated module for the Project (other IFAD Projects managed by NPCU to have dedicated modules for ring-fenced accounting of each Project). ToR for procurement of accounting software is outlined in <a href="#">22.19.</a></li> <li>▪ NPCU incorporate correct chart of accounts in accounting software (categories and components) in line with the detail in Annexure 2 of the Financing agreement with IFAD.</li> </ul>

- <sup>5</sup> **Develop (in consultation with the National Programme Manager) a performance evaluation process for FM staff within 1 year of Project commencement and document process in the PIM. This process should identify skills gaps and assist with identifying appropriate training interventions.**

	<ul style="list-style-type: none"> <li>▪ NPCU upload the Cost Table (Annexure 2 of the Financing Agreement) to the accounting software for the purposes of budgeting / monitoring.</li> <li>▪</li> </ul>
<i>Inclusion of Project in TSA</i>	<ul style="list-style-type: none"> <li>▪ The NPCU Finance Manager and MoF will be responsible to ensure that the Project is included in the TSA ledger in line with IFAD requirements.</li> </ul>
<i>Preparation of first annual work plan and budget</i>	<ul style="list-style-type: none"> <li>▪ The NPCU Finance Manager will be responsible for the compilation of the first Annual Workplan and Budget, as directed by the National Programme Manager, subject to IFAD no-objection. This budget will be a consolidation of the budgets obtained from implementing partners following the process as outlined in <a href="#">7</a>.</li> </ul>
<i>Staff training and capacity building</i>	<ul style="list-style-type: none"> <li>▪ Newly appointed NPCU financial management staff will be required to complete the IFAD FM e-learning (available in Arabic) and submit completion certificates to IFAD within 1 month of date of appointment. Refer <a href="#">21</a> for link to training.</li> <li>▪ All staff are required to study the Project related documents at Project Start-up</li> <li>▪ PROJECT Financial management training workshop for all implementing agencies. This training to be presented by the NPCU Finance Manager with the assistance of IFAD staff. Training to focus on Project requirements (monthly reporting, document retention etc.) and cover practical issues).</li> <li>▪ Start-up training to be repeated on an annual basis if required.</li> </ul>

## 5. IFAD Anticorruption policy

The management of Project funds shall be sufficiently rigorous to safeguard against Fraud and Corruption. Fraud and corruption include, but are not limited to (as defined in the IFAD anticorruption policy):

- Corrupt practice - offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party.
- Fraudulent practice - any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation.
- Collusive practice - an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.
- Coercive practice - impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.

IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in Projects financed through its loans and grants. 'Zero tolerance' means that IFAD will pursue all allegations falling under the scope of this policy and that appropriate sanctions will be applied to parties or entities involved where the allegations are substantiated. IFAD takes all possible actions to protect individuals who submit allegations of fraudulent or corrupt practices in its activities from reprisal. The primary responsibility for enforcing the Anticorruption Policy lies with the Project, and the first defence for controls shall be exercised by Project staff and counterparts Pursuant to this, the Project shall have the responsibility to incorporate pertinent provisions of the Anticorruption Policy in its contracts with Project staff, cooperating/implementing partners, and suppliers/consultants.

It is the National Programme Manager and the NPCU Finance Manager’s responsibility to make sure that all Project staff (including implementing agency staff) are aware of IFAD's and the National’s anticorruption policies and whistle blowing procedures.

How to contact the IFAD Office of Audit and Oversight

All communications are treated with the utmost CONFIDENTIALITY.

By phone: +39 06 54592888

By fax: +39 06 54597888

By e-mail: anticorruption@ifad.org

Through the online complaint form:

[www.ifad.org/governance/anticorruption/how.htm](http://www.ifad.org/governance/anticorruption/how.htm)

In person or by mail to:

IFAD Office of Audit and Oversight, Investigation Section

Via Paolo di Dono, 44

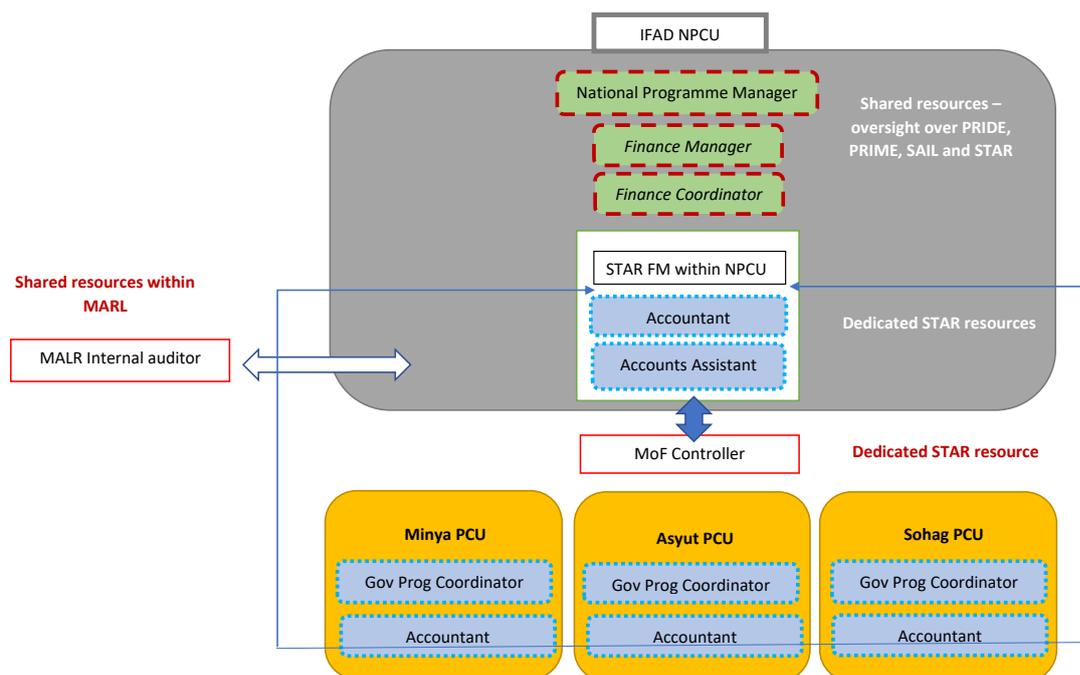
00142 Rome, Italy

(Mark all mail “Personal and confidential”)

Refer to [21. Useful links](#).

## 6.FM organisational structure, roles and responsibilities

### 6.1 Overview of FM organisational structure (excluding procurement)



- The NPCU Finance Manager has overall responsibility for all financial management aspects of all IFAD-funded Projects managed within the NPCU, including STAR.
- STAR has a dedicated accountant and accounts assistant based at the NPCU.
- The MoF controller allocated to the NPCU is responsible for review of payment request documentation and forms part of the payment cycle.
- The MALR internal auditor reviews payment request documentation and forms part of the payment cycle.
- Each GPCU has a coordinator and accountant involved in Financial Management.

Detailed job descriptions for the NPCU Finance Manager and Accountant is outlined in [22.3](#), [22.4](#) and [22.5](#).

## 7. Planning and budgeting

Refer to Chapter 4 for AWPB process.

Once the AWPB has been developed and approved, it must be inserted in the budget module of the accounting system of each of the agencies for the purposes of monitoring actual implementation in line with the budget. Each agency should monitor budget to actual expenditure for their individual components/subcomponents at least once a month. The Project should monitor the consolidated budget to actual performance on a quarterly basis with input from all parties.

The Finance Manager/ Finance Coordinator needs to ensure that consolidated expenditure per category is in line with the approved totals in the Financing Agreement. If the budget monitoring process indicates and expected over-expenditure on one or more of the cost categories, the Project will have to obtain a no objection from IFAD, allowing a reallocation amongst categories.

Once IFAD provides its no-objection to the AWPB, the NPCU National Programme Manager must ensure collaboration between MALR and MoP for the purposes of including the Project in the Government budget which is subject to approval from Parliament.

***Inclusion of the Project in the Government budget is crucial to ensure that Government allocates its committed contribution (as outlined in the Project Financing Agreement) to the Project and can disburse funds to the MALR TSA-subaccount upon request from the Project.***

## 8. Internal controls

### 8.1 Overview of internal controls

It is recommended that the implementing partners consider *COSO Integrated Framework – Internal Control* when developing/improving the respective systems of internal control. At Project start-up it is recommended that the NPCU Finance Manager use the general framework for considering the internal control environment with the intention of establishing a sound internal control environment. In terms of the general framework:

- ✓ Perform a risk assessment
- ✓ Develop control activities which address identified risks (or improve existing control activities)
- ✓ Implement control activities (by documenting controls, updating the information systems, communicating to relevant parties)
- ✓ Develop a system for monitoring the effectiveness of controls implemented

Control activities should be developed with consideration of the following categories:

Control activities	Description
<i>Authorisation and approval procedures</i>	Authorisation controls require certification that a transaction or event is acceptable for further processing. The delegated authority of staff should ensure efficient implementation while mitigating related risks. Authorisation levels of Project staff should be in line with their underlying roles. For example, only the National Programme Manager may be authorised to approve payments.
<i>Segregation of duties</i>	An important element in any control system is the separation of those duties which would, if combined, enable one individual to record and process a complete transaction. For

<b>Control activities</b>	<b>Description</b>
	example, an Accountant might prepare a document, but it would then be reviewed and cleared by the Finance Manager, and then approved by the National Programme Manager. It is the Finance Manager's responsibility to ensure that certain duties are segregated, including authorising, processing, recording and reviewing.
<i>Access to resources and records</i>	All data, records and assets should be kept in a physically secure environment. Petty cash should be kept secure. Financial data and other records should also be protected by back up procedures and copy records should be stored securely off site.
<i>Verifications</i>	Transactions and significant events are verified before and after processing, e.g. when goods are delivered, the number of goods supplied is verified with the number of goods ordered. Afterwards, the number of goods invoiced is verified with the number of goods received.
<i>Reconciliations</i>	Reconciliations between independent, corresponding sources of data are a key control for identifying errors and discrepancies in balances. The reconciliations should be done on a monthly basis. Any reconciling or balancing amounts should be promptly cleared. Unusually long outstanding reconciling items should be investigated. Physical checks should also be performed on assets and petty cash.
<i>Reviews of operating performance</i>	Operating performance is reviewed against a set of standards on a regular basis, assessing effectiveness and efficiency. If performance reviews determine that actual accomplishments do not meet established objectives or standards, the processes and activities established to achieve the objectives should be reviewed to determine if improvements are needed.
<i>Reviews of operations, processes and activities;</i>	Operations, processes and activities should be periodically reviewed to ensure that they are in compliance with current regulations, policies, procedures, or other requirements.
<i>Supervision</i>	Competent supervision helps to ensure that internal control objectives are achieved. This includes assigning, reviewing, and approving an employee's work.
<i>Information and technology related controls</i>	Information and technology controls can be both general and related to applications. The major categories of general controls are (1) entity-wide security program planning and management, (2) access controls, (3) controls on the development, maintenance and change of the application software, (4) system software controls, (5) segregation of duties, and (6) service continuity. Application controls are the structure, policies, and procedures that apply to separate, individual application systems, and are directly related to individual computerized applications. These controls are generally designed to prevent, detect, and correct errors and irregularities as information flows through information systems.

Entities should reach an adequate balance between detective and preventive control activities. Corrective actions are a necessary complement to control activities in order to achieve the objectives.

This Chapter incorporates practical guidance on recommended control activities in the sections that follow which can be considered by the NPCU Finance Manager when

developing/improving internal controls. **New/improved controls should be documented in detail in the PIM.**

#### 8.2 Authorisation and approval of payments

- ✓ Payment requests approved by National Programme Manager, MALR internal auditor and MoF controller
- ✓ MoF accounting unit uploads payments to Government Payment System
- ✓ Payment released by 1<sup>st</sup> (MALR) and 2<sup>nd</sup> (MoF) authorised signatory

#### 8.3 Segregation of duties

- ✓ Payment requests prepared by accounts assistant
- ✓ Payments reviewed/approved by Finance Manager / National Programme Manager
- ✓ Payments recorded in accounting software by Accountant / Accountant
- ✓ Payments released on Government Payment System by authorised signatories (MALR/MOF representatives)

#### 8.4 Access to resources and assets

- ✓ Financial Management Offices to be locked after hours and key retained by the Finance Manager and/or Project Coordinator
- ✓ Other Project offices locked after hours are when not in use

#### 8.5 Verifications

- ✓ Semi-annual fixed asset verifications (register to floor and floor to register)
- ✓ Fixed assets are tagged with unique number or barcode

#### 8.6 Reconciliations, reviews, supervision

The following reconciliations, checks, monitoring and review activities should be prepared on a monthly basis as applicable:

Type	NPCU	GPCU	Description
<i>USD Designated account bank reconciliation</i>	n/a	n/a	Reconciliation of the bank balance of the designated accounts to the cash book balance. (IFAD format outlined in <a href="#">Appendix 22.11</a> )
<i>Local bank account reconciliations</i>	n/a	n/a	Reconciliation of the bank balance to the cash book balance.
<i>Petty cash reconciliation</i>	✓	✓	Reconciliation of petty cash to relevant cash book. Refer <a href="#">22.13</a> for reconciliation form.
<i>Petty cash spot checks</i>	✓	✓	NPCU Finance Manager /GPCU Coordinators to undertake random sport checks of petty cash (compare cash balance to petty cash book)
<i>Advance justifications</i>	Applicable to advances made to MWRI	n/a	NPCU to receive monthly report from MWRI in format outlined in <a href="#">22.16</a> for purposes of clearing advances. Other advances include

Type	NPCU	GPCU	Description
			staff travel advances (recorded as staff loans in TSA).
<i>Review of monthly reports from Implementing agencies (as per <a href="#">22.16</a>)</i>	✓	n/a	Obtain monthly reports from MWRI and confirm: <ul style="list-style-type: none"> <li>✓ Report was approved by MWRI authorised representative</li> <li>✓ Bank balances agree to bank statement / bank reconciliation</li> <li>✓ Petty cash balances agree to petty cash reconciliation</li> <li>✓ Listed expenses are supported by valid invoices and other supporting documentation (review original documentation)</li> <li>✓ All advances from Project are recorded in line with advances recorded in accounting software</li> <li>✓ Expenses have been incurred in line with the approved AWPB</li> </ul>
<i>Quarterly and Monthly internal report</i>	✓	n/a	Prepare internal reports for the purposes of monitoring Project progress and identifying issues. Refer section <a href="#">13.7.</a>

In all instances, issues identified during the review/reconciliation process should be followed up and resolved in a timely manner.

#### 8.6 General Information and technology related controls

- ✓ Password is required to log into accounting software
- ✓ accounting software to require password change on a regular basis
- ✓ User rights are defined and documented and linked to log-in credentials
- ✓ Daily back-up of accounting software data on server
- ✓ Sensitive information (e.g. payroll files) are password protected
- ✓ Regular software updates are undertaken to ensure that accounting software version is supported by technical team at accounting software
- ✓ Offsite backup of data on a weekly basis
- ✓ Financial Management staff are not allowed to share accounting software passwords or use login credentials of another
- ✓ Desktop access requires login with a password
- ✓ Operating system software updates are performed regularly

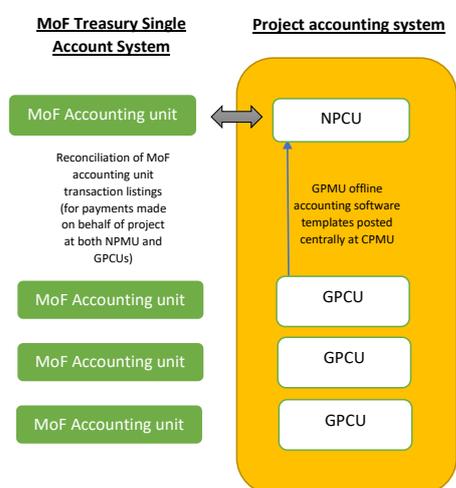
- ✓ Use authorised signatory to have log-in credentials for on-line banking

## 8.7 Internal control environment – implementing partners

The Finance Manager or PROJECT will be responsible for the assessment of the internal control environment of implementing agencies which report to it. In terms of the subsidiary agreements it will be required that implementing agencies perform an annual self-assessment of their financial management arrangements are outlined in [22.15](#). It is recommended that the Finance Managers use the information contained in this section to consider the soundness of the internal control environments and provide guidance on improving controls if weaknesses are identified.

## 9. Accounting

### 9.1 Overview of Project accounting



- The Project accounting system will be managed via accounting software
  - The accounting function will be centralised in the NPCU.
  - The transactions of the GPCUs will be recorded on offline templates at GPCU level and posted centrally at the NPCU
  - The accounting function should consider the transaction data from the treasury single account system and be reconciled thereto on a regular basis (at a central and governorate level).
- MWRI (and possibly selected rural finance implementing partners) will be responsible for maintaining their own accounting software which is not integrated with the NPCU.
  - MWRI to provide monthly report in the format outlined in [22.16](#). The NPCU will record the transactions in the accounting software accounting software and clear related advances.
  - *Advances to MWRI are recorded in accounting software. Only once advances are cleared, expenses are recorded at the historical exchange rate / within the correct component and expenses category.*

#### GPCUs:

- ✓ The GPCU accountant will be required to record transactions in an offline template of the accounting software and retain related supporting documentation.
- ✓ The GPCU to ensure that the transaction listing is reconciled with the transaction data from the Governorate TSA accounting unit before submission to the NPCU.

- ✓ The GPCU coordinator to review and approve the transaction listing in the off-line template on a monthly basis with reference to supporting documentation and the TSA reconciliation.
- ✓ The GPCU accountant to provide the off-line transaction listing to the NPCU for review and posting.

## 9.2 Chart of accounts

The accounting software should include the appropriate Chart of Accounts. The Chart of Accounts should be developed to cater for:

- All components and sub-components are incorporated in the AWPB (outlined in the financing in agreement)
- All categories as outlined in the financing agreements
- Sources of finance
- Sub categorisation to cater for activities at the various states

The Chart of Accounts should mirror the cost tables (as presented in the Project design report and section 1 of this manual) to enable comparison of actual Project costs during implementation with those estimated during the Project preparation.

NB: The Project should liaise with MoF to ensure that the Treasury Single Account General ledger includes the same chart of accounts.

## 9.3 Recording and processing of transactions

Transactions are recorded on the cash basis of accounting which requires the recognition of cash flows when they occur (inflows and outflows).

Each transaction should be recorded in the accounting software based on the following:

- Use double entry accounting (debit and credit, with cash always being one of the entries)
- Capture the transaction using the correct account code (as determined by the chart of accounts) – for all transaction, to be confirmed the Finance Manager
- Capture transactions which has the required supporting documentation
- Capture information accurately and completely.

**For detailed instructions on how to record the expenditures in the accounting software, please refer to the accounting user manual (to be developed by accounting software developer).**

## 9.4 Accounting for in-kind contributions

In terms of the *IFAD Handbook for Financial Reporting and Auditing for IFAD-financed Projects*, the Project is required to account for and disclose in-kind contributions received from Government, beneficiaries and other Project parties (as applicable). This requirement extends to contributions as outlined in the Financing Agreement or other additional contributions received.

- The NPCU will obtain inputs from Government departments regarding in-kind contributions made by Government at both a central and Governorate level and record in the accounting software (at least quarterly recording is required). Such contributions may include staff salaries, payment of rent and utilities for dedicated Project offices, tax payments.
- The NPCU will obtain inputs from MWRI regarding their in-kind contributions (if applicable) to the Project and record on a monthly basis in the NPCU accounting software.

The guideline for estimating / calculating in-kind contributions are outlined below. In all instances, related supporting documentation should be retained for inspection.

**(Table below should be further developed by the NPCU Finance Manager once all types of in-kind contributions have been determined)**

Type	Measurement calculation	Supporting documentation to be retained
<i>Beneficiary Labour hours</i>	Value = total hours worked X applicable wage rate (in most cases the applicable minimum wage rate for uneducated labour in the country)	Time sheet by the Community Group outlining the persons, and the hours they contributed during a specified time period. The time sheet should be duly signed by the Community Group representative and Project technical/M&E staff
<i>Construction material provided by beneficiaries</i>	Value = cubic meters of gravel	Bill of lading prepared by the consulting engineer which indicated the estimation of gravel volume. The sheet should be duly signed by the community representative and Project technical/M&E staff
<i>Construction material – other provided by beneficiaries</i>	Value = actual cost of materials purchased	Copies of invoices. Duly signed by the community representative and Project technical/M&E staff
<i>Government seconded staff salaries and incentives</i>	Cash salaries and incentives paid.	Transaction report from central TSA unit – certified by MoF controller.
<i>Rent and utilities for Project offices (paid by Government)</i>	Apportionment of expense based on square meterage of Project office space in the Government building.	Excel-based apportionment calculation accompanied by transaction report from central TSA unit – certified by MoF controller. ( <i>the transaction report from TSA to show overall expenses which is subject to apportionment</i> ).

When recording the in-kind contributions, it is important that the in-kind contributions are classified according to the same principles as regular Project expenditures; that is, every contribution must be by linked to an activity/component, by category and by financing source (government and/or beneficiaries) to ensure that consolidated financial reports can be produced without any extra effort.

In-kind contributions should be disclosed separately in the financial statements. The notes of the financial statements should also briefly explain the methodology of how it was calculated. On the other hand, when in-kind contributions cannot be reliably measured, this fact should be disclosed in the notes to the financial statements.

*NB: Government will pay for Project related taxes. This is not considered in-kind unless Government provides an exemption instead of transferring the tax portion to the Project.*

#### 9.5 Accounting for exchange rate matters

When claiming expenditures in local currency in Withdrawal Applications (forms 101, 102 and 104) or preparing a financial report, it is important to use the prevailing rate (historical exchange rate) at the time of transfer of funds from the Designated Account (denominated in USD) to the local currency account. Subsequent expenditures should be recorded on the First in First Out basis.

For example:

Conversion of local currency expenditures funded from the designated account.

- IFAD transfers funds to the Designated Account (in USD) as per the approved WA
- A portion of the funds in the Designated Account (in USD) is transferred to the local currency account with Central Bank of Egypt.
- Local currency expenditures are then funded from the local currency account via the TSA.
- When justifying the local currency expenditures to IFAD, these expenditures are converted into the denomination of the designated account, using the prevailing rate (historical exchange rate) at the time of transfer of funds from the Designated Account to the local currency account.

#### 9.6 Accounting for advances

The Project may make advances (petty cash, travel related, advances to implementing agencies etc.) either in the form of cash or by bank transfer.

In terms of accounting for advances:

- Advances are recorded in the accounting system at the date that the advance is made, subject to the required approval process.
- The transaction is not recorded as an expenditure (in terms of categories, components) on this date.
- All advances should be cleared in a timely manner by the submission of original invoices.
- All outstanding advances should be cleared by no later than 10 days after the end of the fiscal year-end.
- In terms of the cash basis of accounting advances at the end of the period should be expensed and disclosed in the financial report.

### 10. Cash flow forecasting

The preference should be to limit withdrawal from the IFAD facilities to the amounts needed. This is avoid exchange rate exposure in the local currency accounts. For this purpose, the NPCU Finance Manager should take overall responsibility for cashflow forecasting to determine the amount of funds to be transferred to the TSA. The cash flow forecast should consider the needs of the NPCU, GPCUs and implementing partners.

Cash flow forecast should be finalised 15 days before commencement of the relevant quarter. The forecast is prepared by the NPCU Finance Manager and approved by the Program director.

The Finance Manager is required to prepare a cash flow forecast per source of finance to avoid the risk of pre-financing amongst financier. On a per financier basis, the following cash flow forecast can be prepared:

IFAD
Forecast expenses for the quarter per the AWPB
<u>Plus</u> contingency/buffer
= Cash required for the forecast quarter
<u>Less</u> opening IFAD cash balance per the ledger
= Additional transfer from IFAD designated account

The Finance Manager to liaise with the GPCUs and MWRI to confirm their cash flow forecast requirements for incorporation. Reference should be made to the cash flow forecast of MWRI as outlined in the monthly reporting template ([22.16](#)).

### 11. Disbursements

**The IFAD disbursement procedures as outlined in this section are governed by the Letter to the Borrower (LTB) and the IFAD Loan Disbursement Handbook. The handbook is also available on the IFAD website and Project should ensure that they refer to the most recent version as published at <http://www.ifad.org/pub/basic/index.htm>.**

### 11.1 Eligibility of expenditures

In accordance with the IFAD disbursement procedures, between the date of entry into force of the Financing Agreement and the Financing Closing Date, Project may request withdrawals from the IFAD facilities for eligible expenditures.

Eligible expenditures are defined in the IFAD General Conditions Section 4.08 as follows:

*The Financing shall be used exclusively to finance expenditures meeting each of the following eligibility requirements:*

- *The expenditure shall meet the reasonable cost of goods, works and services required for the Project and covered by the relevant AWPB and procured in conformity with the Fund's Procurement Guidelines.*
- *The expenditure shall be incurred during the Project Implementation Period, except that expenditures to meet the costs of winding up the Project may be incurred after the Project Completion Date and before the Financing Closing Date.*
- *The expenditure shall be incurred by a Project Party.*
- *If the Agreement allocates the amount of the Financing to categories of Eligible Expenditures and specifies the percentages of such Eligible Expenditures to be financed by the Financing, the expenditure must relate to a category whose allocation has not been depleted and shall be eligible only up to the percentage applicable to such category.*
- *The expenditure shall be otherwise eligible in accordance with the terms of the Financing Agreement.*
- *The Fund may from time to time exclude certain types of expenditure from eligibility.*
- *Any payment prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, shall not be eligible for financing by the Financing.*
- *Any payments to a person or an entity, or for any goods, works or services, if making or receiving such payment constitutes a coercive, collusive, corrupt or fraudulent practice by any representative of the Borrower/Recipient or any Project Party, shall not be eligible for financing by the Financing.*
- *All expenditures must be supported by sufficient supporting documentation as stated in the LTB and the IFAD disbursement handbook (please see section below on supporting documentation).*
- *The proceeds of the financing shall not be used to pay taxes. However, taxes paid by the ultimate recipient of an expenditure (e.g. withholding tax, income taxes paid by a Project employee or taxes on the profits of a contractor) are not considered to be taxes paid by the Project.*

### 11.2 Disbursement procedures

The following disbursement procedures may be used for withdrawal from the IFAD Grant:

Type	Description
<i>Advance withdrawal</i>	<p>The advance withdrawal modality for PROJECT is imprest. For specific limitation (imprest account):</p> <ul style="list-style-type: none"> <li>▪ The ceiling amount is usually sufficient to cover average Projected eligible expenditures for a period of approximately 6 months.</li> <li>▪ It may be disbursed in one or several applications, depending on the type of financing and level of expenditures to be incurred.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Replenishment application should be requested when the amount withdrawn from the designated account is equal to about 20-30% of the advance.</li> </ul>
<i>Direct payment</i>	<p>The direct payment modality is used for eligible Project expenditures to be paid directly by IFAD. This payment method is used when IFAD has been requested to pay the Supplier directly and is suitable in the following situations:</p> <ul style="list-style-type: none"> <li>▪ Payment of large civil works</li> <li>▪ Retention payments</li> <li>▪ Consultancy fees</li> <li>▪ Importing goods (when a letter of credit is not practical)</li> <li>▪ When exchange control regulations are present in the country.</li> </ul> <p><u><i>The Withdrawal Application MUST indicate the date on which payment becomes due to the supplier.</i></u></p>
<i>Reimbursement</i>	<p>Reimbursement is applicable when eligible Project expenditures are pre-financed by the Recipient before access to IFAD finance is possible. Such reimbursements are expected to be claimed no later than 90 calendar days from the date of payment by the Recipient.</p>

Written request for disbursement from Government into the MALR TSA sub-account should be submitted to the Ministry of Planning, quarterly in advance.

#### 11.3 Evidence of Authority to sign Withdrawal Applications

IFAD requires PROJECT's representative, as designated in the financing agreement, to furnish satisfactory evidence of the authority and authenticated specimen signatures of the individuals who will sign WAs on behalf of PROJECT. This evidence must reach IFAD before the first WA is presented by PROJECT and should be the original (photocopies, facsimiles or other means of transmission are not acceptable). A sample template is provided in annex 1 of the IFAD Loan disbursement handbook. Each WA should be signed by such duly authorized individuals, and the Fund must be notified of any change in the signatories authorized to withdraw funds from the loan/grant account.

IFAD must also be notified of the designated signatories for operating any designated and/or Project or other accounts, including changes thereto, whether or not these authorized signatories are included in the financing agreement. Such changes, as effected during the life of the Project, must be communicated promptly to the IFAD. PROJECT, guided by the sample in annex 1 of the IFAD Loan Disbursement Handbook, should provide the names and specimen signatures of the newly appointed signatories and include the date when such change is to take effect. The original of such changed documentary evidence is to be provided to IFAD.

#### 11.4 Withdrawal of Financing Proceeds using withdrawal applications

The Finance Managers is required to ensure that WAs are prepared and submitted to IFAD with consideration of the following requirements:

<b>Requirement</b>	<b>Guidance</b>
<i>Timeliness</i>	Withdrawal applications should be prepared when the expenditure equals 30% of the advance in the designated account or quarterly (whichever occurs first)
<i>Completeness and accuracy of supporting documentation</i>	Prepare and submit the required forms and supporting documentary evidence of expenditure as outlined in the IFAD Loan Disbursement Handbook. (refer to IFAD Loan Disbursement Handbook for detailed guidance). Ensure that information is complete and accurate.

Requirement	Guidance
<i>Account reconciliation</i>	The Project should submit the designated account reconciliation and statement, prepared the same reporting period in which the eligible expenditures are being claimed. This form needs to be accompanied by bank statements of the designated account and that of any other operating Project accounts ensuring that the closing bank balances for all these accounts correspond to the balances at the end of the same reporting period as indicated in the WA period.
<i>Duly authorised</i>	Ensure that WAs are duly authorised in terms of Project's authorisation procedures and signed by the duly authorised representatives.
<i>Document retention</i>	Submit copies of supporting documentation with the WA. Retain original documentation for inspection by IFAD upon request.

### 11.6 Initial advance

In order to request the initial advance, ensure the disbursement conditions as per the financing agreement and the Letter to the Borrower (LTB) have been met.

### 11.8 Withdrawals using Statements of Expenditures (SOE) and the SOE Thresholds

The statement of expenditure (SOE) procedure is normally used for those expenditure types where it is impracticable or unduly burdensome to require submission of full documentation. However, the supporting documentations for the Statements of Expenditures must be maintained by Project and made available for review by IFAD supervision missions upon request and to external auditors during their annual review of Project accounts to enable issuing of an independent audit opinion.

Details regarding the use of the Statement of Expenditure (SOE) are provided in section 4 of the IFAD Loan disbursement handbook.

In accordance with the Letter to the Borrower, the SOE procedure may be used for all Project expenditures up to **USD xxxx (to be updated in line with LTB)**

### 11.9 Foreign exchange conversion in preparing withdrawal applications

When claiming expenditures in local currency in Withdrawal Applications (forms 101, 102 and 104) or preparing a financial report, it is important to use the prevailing rate (historical exchange rate) at the time of transfer of funds from the Designated Account (denominated in EUR) to the local currency account. This type of conversion is also called the First in First out (FIFO) basis.

The historical exchange rate/FIFO basis of converting is to be used in the following two cases in particular:

- When preparing a designated account reconciliation as part of a WA or a financial report, the closing balance of the local currency account(s), and any expenditures already incurred in local currency but not yet claimed must be converted to the denomination currency of the designated account using the historical exchange rate/FIFO basis of converting.
- When preparing withdrawal applications (form 101 and 102) the expenditures incurred in local currency (or any other currency than the denomination currency of the designated account) and claimed in the WA, must be converted to the denomination currency of the designated account using the historical exchange rate/FIFO basis of converting.

### **Example:**

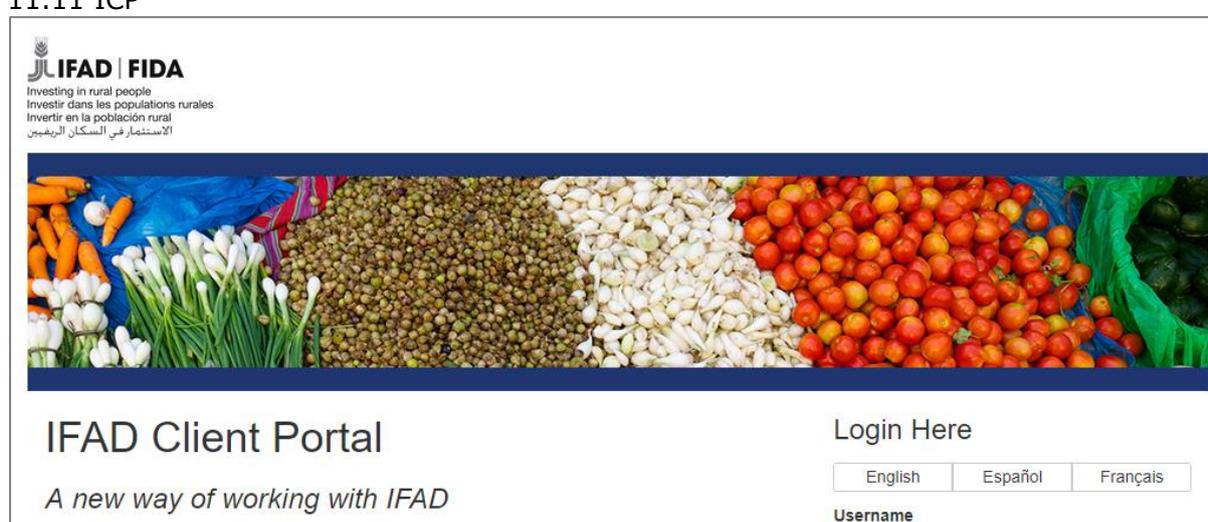
The Project has a Designated Accounts denominated in USD and an Operating Account denominated in EGP:

- USD 100 000 is transferred to the Project Operating Account in EGP on 1 Oct 2018 at a prevailing rate of 15 EGP to 1 USD (equalling 1 500 000 EGP).
- During the reporting period of 1 Oct to 31 Dec 2018 the Project incurs expenditures in local currency up to 500 000 EGP.
- Replenishment request for total expenditures incurred during the reporting period is submitted to IFAD in Jan 2019, but the exchange rate is now 17 EGP to 1 USD.
- The withdrawal application should be prepared using the historical rate of 15 EGP

#### 11.10 Suspension and the designated account

During a full suspension, IFAD will not replenish the designated account. However, Borrowers may continue, except as otherwise indicated, to use any balance in the designated account to meet eligible expenditures and applications documenting these expenditures should continue to be regularly submitted.

#### 11.11 ICP



The IFAD client portal (ICP) enables the Project to:

- access real-time financing information on country portfolios as well as operational and financial information related to Projects
- submit Withdrawal Applications directly and obtain electronic approvals required both from concerned ministries and IFAD
- manage banking instructions electronically
- create and download relevant reports

The Project may submit electronic copies of its withdrawal applications and maintain hardcopies for audit purposes.

#### 11.12 Refund of withdrawals

If the IFAD determines that any amount withdrawn from the Loan and/or Grant Accounts was not used for the purposes indicated or will not be needed thereafter to finance Eligible Expenditures, the Borrower shall promptly refund such amount to the IFAD upon instruction by the Fund.

## 12. Processing of payments

- ✓ Payment processing is centralised at the NPCU to the extent possible. If processing of payments take place at GPCUs, the guidelines in this section may be tailored to consider the organisational structure at GPCUs (Finance Manager = PCU Coordinator, Accountant/ Accountant = GPCU accountant)

- ✓ IFAD funds may not be used for payment of taxes, customs or duties.
- ✓ Implementing partners to implement proposed payment processes

### 12.1 Supporting documentation

The processing of all payments are subject to the Project retaining the following original supporting documentation after processing:

Expenditure type	Supporting documentation
<i>All</i>	<ul style="list-style-type: none"> <li>▪ Signed contract or confirmed purchase order – showing the specified amount that is due to be paid;</li> <li>▪ The bank guarantee for:               <ul style="list-style-type: none"> <li>○ advance payment, as specified in the contract documents;</li> <li>○ performance, as specified in the contract documents;</li> </ul> </li> <li>▪ Copies of communications sent by the IFAD country Project manager to the Project providing the 'no objection' to the contract award; and</li> <li>▪ Evidence of payment made by the Project.</li> </ul>
<i>Goods</i>	<ul style="list-style-type: none"> <li>▪ Items listed above under "all"</li> <li>▪ Supplier's invoice, duly certified for payment by the National Programme Manager– specifying the goods, their quantities, and prices;</li> <li>▪ Bills of lading or similar documents; and</li> <li>▪ As appropriate, the certificate of delivery (to include condition of goods on delivery).</li> </ul>
<i>Civils works</i>	<ul style="list-style-type: none"> <li>▪ Items listed above under "all"</li> <li>▪ The claim of the contractor, including a financial progress report, stating the work performed and the amount due;</li> <li>▪ A certificate – signed by the Project consultants or owner's representative, if any, or by the borrower's chief engineering officer or resident supervising engineer assigned to the Project, to the effect that the work performed is satisfactory and the payment claimed is due in accordance with the terms of the contract; and</li> <li>▪ A copy of the contract payment monitoring form signed in original by the certifying officer.</li> </ul>
<i>Services (including consultants)</i>	<ul style="list-style-type: none"> <li>▪ Items listed above under "all"</li> <li>▪ The supplier's or consultant's claim duly certified for payment by the National Programme Manager and showing sufficient detail.</li> <li>▪ As appropriate, a certificate of delivery of satisfactory services.</li> </ul>
<i>For payment of Trips, fuel, stationary and other expenses</i>	<ul style="list-style-type: none"> <li>▪ Items listed above under "all"</li> <li>▪ Supplier invoices;</li> <li>▪ Evidence of payment;</li> <li>▪ Back to office report;</li> <li>▪ Training certificate,</li> <li>▪ Travel authorization; and/or</li> <li>▪ Expense reports by the traveller (including invoices)</li> <li>▪ Boarding passes</li> </ul>

Expenditure type	Supporting documentation
<i>Subsistence payments – young professional program</i>	<ul style="list-style-type: none"> <li>▪ Confirmation of training attendance</li> <li>▪ Copy of graduate participation agreement which indicates the name, ID number, bank details of the participant (including copy of ID document)</li> </ul>
<i>Payment related to software development</i>  <i>(e.g. MOOCs, Mobile Apps)</i>	<ul style="list-style-type: none"> <li>▪ Supporting documentation which provides evidence of milestone achievement (<b>payments based on milestones are encouraged- to be negotiated during procurement stage and documented in supplier contract</b>)</li> <li>▪ Milestones may include: <ul style="list-style-type: none"> <li>○ Installation</li> <li>○ Software tailoring and customisation</li> <li>○ End-user testing</li> <li>○ Live running</li> </ul> </li> </ul>

Pro forma invoices are not acceptable replacements for invoices. In all instances, supporting documentation need to include final invoices.

## 12.2 General guidelines for processing of payments

For invoice related payments, the following general process is applicable:

Activity	Procedures
<i>Request and approve activity in line with AWPB</i>	Generally, ensure that expenses are in line with the AWPB/Procurement Plan and that IFAD no objection has been obtained if required.
<i>Service delivered, or goods received</i>	Obtain evidence that the goods were delivered / services received to the satisfaction of the Project. Evidence to be retained for the purposes of providing supporting evidence for processing of invoice. (delivery notes, completion reports etc.)
<i>Request for payment</i>	Technical team requests a payment for goods delivered / services received and provides supporting documentation to accounts assistant for purposes of preparing payment request.
<i>Prepare payment request</i>	<ul style="list-style-type: none"> <li>▪ The Accounts Assistant prepares a payment request which includes supporting documentation and indicates accounting codes, category of payment, component of payment and source of finance.</li> <li>▪ The Accountant reviews the payment request for accuracy and validity.</li> <li>▪ The Accountant adds the correct account codes for the purposes of recording the transaction in the accounting software.</li> </ul>
<i>Review and approval of payment request – Finance Manager and National Programme Manager</i>	<p>The accounts assistant forwards the payment request with supporting documentation to the Finance Manager for review and sign off.</p> <p>The Finance Manager shall review and sign the payment request, checking/confirming:</p> <ul style="list-style-type: none"> <li>▪ The expenditure is included in the approved AWPB</li> <li>▪ IFAD no objection was obtained (if applicable).</li> </ul>

Activity	Procedures
	<ul style="list-style-type: none"> <li>All expenditures are eligible in line with the financing agreement and has been incurred before/completed before Project completion date.</li> <li>Payment was cleared by the relevant component technical officer/head.</li> <li>All supporting documentation is attached (refer 12.1)</li> </ul> <p>The National Programme Manager shall sign the payment request after the Finance Manager.</p>
<i>Review and approval of payment request – MALR internal auditor and Financial Controller</i>	Once approved by the Finance Manager/National Programme Manager, payment requests are reviewed and approved by the MALR internal auditor (on a sample basis) and MoF Financial Controller.
<i>Process payment</i>	<ul style="list-style-type: none"> <li>The approved payment request with related documents shall be sent to MoF accounting unit for processing via the Government e-Payment System.</li> <li>Once loaded on the Government Payment System, the payment to be released by 2 authorised signatories (using unique digital signatures) – one from MALR and one from MoF</li> </ul>
<i>Record payment</i>	<ul style="list-style-type: none"> <li>The accountant / accounts assistant to record the transaction in the accounting software, using the correct codes as captured on the payment request.</li> <li>File supporting documentation, include proof of payment (bank statement/bank confirmation of payment)</li> <li>Reconcile transactions to the Government e-Payment System on a periodic basis.</li> </ul>

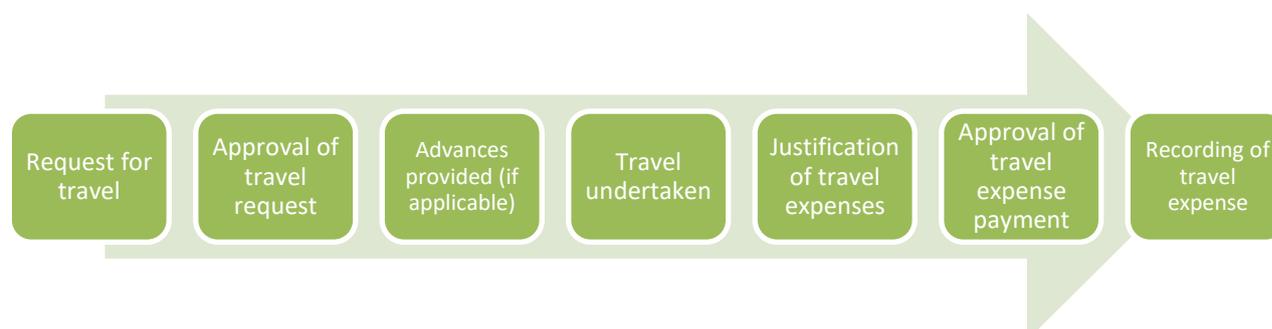
12.3 General guidelines for processing of payments when beneficiaries contribute to the purchase price (to be developed)

#### 12.4 Travel related payments

The following type of travel may take place by Project staff or Project beneficiaries:

- International travel – 12.4.1
- Local travel – 12.4.2

All types of travel payments follow the general process:



The processes for each type of travel is outlined below:

#### 12.4.1 International travel

<b>International travel</b>	
<i>Type of travel</i>	<ul style="list-style-type: none"> <li>▪ Training which is conducted for Project staff or beneficiaries at an international location.</li> <li>▪ Business trips</li> </ul>
<i>Overview of entitlement</i>	<ul style="list-style-type: none"> <li>▪ Individuals are entitled to DSA, paid based on the number of days of travel for training purposes.</li> <li>▪ The per diem should be used to pay for the cost of accommodation, meals and travel</li> <li>▪ Taxi trips to/from airport and visa is paid for separately based on actual cost estimates.</li> <li>▪ Unused per diem is not returned to the Project.</li> <li>▪ The per diem amount is determined in line Government decree.</li> <li>▪ The per diem is reduced in the event that meals or accommodations is provided to the individual.</li> <li>▪ 100% of the DSA is advanced before commencement of the travel.</li> <li>▪ The number of travel days are calculated from date of departure from home until last day of the training.</li> <li>▪ Air travel is booked by the Project and paid for by the Project directly.</li> </ul>
<i>Request for travel</i>	<p>The relevant department will prepare a request for travel which includes:</p> <ul style="list-style-type: none"> <li>▪ List of individuals to attend external training</li> <li>▪ Dates of training</li> <li>▪ Invitation to training / training registration confirmation</li> <li>▪ Overview of training (agenda, location noted) – brochure / email correspondence or other suitable evidence</li> <li>▪ Related AWPB classification (category, component)</li> <li>▪ Calculation of total per diem due (100%)</li> <li>▪ Estimated cost of air travel</li> <li>▪ Estimated cost of visas</li> </ul> <p><i>(Air travel is paid directly by the Project)</i></p>
<i>Approval of travel request</i>	<ul style="list-style-type: none"> <li>▪ The travel request is reviewed by the accountant for: <ul style="list-style-type: none"> <li>○ Accuracy and compliance with the Government decree in terms of the per diem rate applied.</li> <li>○ Alignment with the approved ABPB</li> </ul> </li> <li>▪ The travel request is submitted to the National Programme Manager for approval.</li> <li>▪ IFAD no-objection should be obtained for travel request after approval by the National Programme Manager (as applicable).</li> </ul>
<i>Advance provide</i>	<ul style="list-style-type: none"> <li>▪ Upon approval of the travel request by the National Programme Manager, the Project accountant will advance 100% of the total per diem to individuals or the team leader as appropriate. (advance made to</li> </ul>

International travel	
	<p>employee bank account via Government e-Payment System and recorded as staff loan until justified)</p> <ul style="list-style-type: none"> <li>▪ The Project accountant will record the advance in the accounting system, indicating the amount, date of advance, to who advanced and related budget line item. (advance is not recorded as an expense at this stage)</li> </ul>
<i>Justification of travel expenses</i>	<ul style="list-style-type: none"> <li>▪ Within 10 business days after the travel, the team leader / individual is required to prepare a travel expense report which includes: <ul style="list-style-type: none"> <li>○ Advance report (refer <a href="#">22.10</a>)</li> <li>○ Boarding passes for air travel</li> <li>○ Attendance register completed at the training event</li> <li>○ Back to the office report</li> <li>○ Confirmation of IFAD/Ministry no objection (email correspondence)</li> </ul> </li> <li>▪ The travel expense claim is submitted to the accountant who confirms the accuracy and validity of the travel expense claim.</li> <li>▪ The accountant reviews the travel expense claim for accuracy and validity and captures the correct account codes on the request (in line with AWPB line items). (sign as evidence of review)</li> </ul>
<i>Approval of travel payment</i>	<ul style="list-style-type: none"> <li>▪ The travel expense is approved by the National Programme Manager by way of signing the travel expense report.</li> </ul>
<i>Review and approval of payment request – MALR internal auditor and Financial Controller</i>	<ul style="list-style-type: none"> <li>▪ Once approved by the Finance Manager/National Programme Manager, payment requests are reviewed and approved by the MALR internal auditor (on a sample basis) and MoF Financial Controller.</li> </ul>
<i>Recording of expense</i>	<ul style="list-style-type: none"> <li>▪ The total travel expense is recorded as training expenditure/business trip, by clearing the travel advance, in terms of the correct category and component, in line with the account codes which are captured on the travel expense report.</li> </ul>

**In all instances, unjustified travel advances will need to be reimbursed to the Project by the traveller within one month after the travel date or the amount will be deducted from the payroll (initial advances paid is recorded as staff loan in GPS for purposes of tracking).**

#### 12.4.2 Local travel

Local travel	
<i>Type</i>	Training / field visits
<i>Overview of entitlement</i>	<ul style="list-style-type: none"> <li>▪ The number of travel days used for the calculation of per diem is calculated from date of departure from home until last day of the training.</li> <li>▪ If Project vehicles are used, the driver is responsible for ensuring the vehicle is refuelled in terms of the process outlined in 16.4.</li> </ul>

Local travel	
	<ul style="list-style-type: none"> <li>▪ If private vehicles are used, staff are reimbursed in line with the allowable rate per kilometre as specified in the staff bylaws, based on actual distance travelled.</li> </ul>
<i>Request for travel</i>	<p>The relevant department will prepare a request for travel which includes:</p> <p>Training:</p> <ul style="list-style-type: none"> <li>▪ List of individuals to attend training</li> <li>▪ Dates of training</li> <li>▪ Overview of training (agenda, location noted) – brochure / email correspondence or other suitable evidence</li> <li>▪ Related AWPB classification (category, component)</li> <li>▪ Confirmation from the <b>Officer Manager</b> that a Project vehicle(s) is available for the travel dates should this be the mode of transportation</li> <li>▪ Calculation of per diem in line with Government decree.</li> </ul> <p>Field visits:</p> <ul style="list-style-type: none"> <li>▪ Request for field trip from technical department</li> </ul>
<i>Approval of travel request</i>	<ul style="list-style-type: none"> <li>▪ The travel request is reviewed by the accountant for: <ul style="list-style-type: none"> <li>○ Accuracy and compliance with the staff bylaws in terms of the pocket money allowance / estimation for fuel costs</li> <li>○ Alignment with the approved ABPB</li> </ul> </li> <li>▪ The travel request is submitted to the National Programme Manager for approval.</li> <li>▪ Once approved, the team leader or individual should submit a request for vehicle use.</li> </ul>
<i>Advance provide</i>	<ul style="list-style-type: none"> <li>▪ No fuel advances are provided in cash (use fuel vouchers)</li> <li>▪ Applicable per diem is advanced to employee bank accounts <b>via the Government e-Payment system and recorded as a staff loan.</b></li> </ul>
<i>Justification of travel expenses / return of unused fuel advance</i>	<ul style="list-style-type: none"> <li>▪ Within 5 business days after the travel, the team leader / individual is required to prepare a travel expense report which includes: <ul style="list-style-type: none"> <li>○ Attendance register completed at the training event</li> <li>○ If a private vehicle was used, indication of total distance travelled in kilometres with payment due to vehicle owner, based on the approved rate in the bylaws.</li> <li>○ Back to the office report (in case of field visits)</li> <li>○ Copies of used fuel vouchers and related invoices</li> </ul> </li> </ul>

Local travel	
	<ul style="list-style-type: none"> <li>▪ The accountant confirms the accuracy and validity of the travel expense claim and determines the per diem which is due.</li> <li>▪ The accountant reviews the travel expense claim for accuracy and validity and captures the correct account codes on the request (in line with AWPB line items). (sign as evidence of review)</li> </ul>
<i>Approval of travel payment</i>	<ul style="list-style-type: none"> <li>▪ The travel expense is approved by the National Programme Manager by way of signing the travel expense report.</li> </ul>
<i>Review and approval of payment request – MALR internal auditor and Financial Controller</i>	<ul style="list-style-type: none"> <li>▪ Once approved by the Finance Manager/National Programme Manager, payment requests are reviewed and approved by the MALR internal auditor (on a sample basis) and MoF Financial Controller.</li> </ul>
<i>Recording of expense</i>	<ul style="list-style-type: none"> <li>▪ The total travel expense is recorded as expenditure in terms of the correct category and component, in line with the account codes which are captured on the travel expense report. (advance cleared at this stage)</li> <li>▪ Only fuel expenses may be charged to the training budget code. If other vehicle maintenance was incurred, this expense is recorded as maintenance.</li> </ul>

## 12.5 Civil works, equipment and tools

Activity	Procedures
<i>Request and approve activity in line with AWPB</i>	<ul style="list-style-type: none"> <li>▪ Civils works, equipment and tools are defined and outlined in both the AWPB and the Procurement Plan.</li> <li>▪ Civil works, equipment and tools is contracted via a procurement process as outlined in the PIM.</li> <li>▪ IFAD no objection is required on the bidding document, recommendation of award and contract outline before the final bid award is made. (refer to Letter to the Borrower)</li> </ul>
<i>Prepare payment request</i>	<ul style="list-style-type: none"> <li>▪ The procurement officer will request payment of invoices, subject to providing the following supporting documentation: <ul style="list-style-type: none"> <li>- Copy of civils contract with award letter (for civils only)</li> <li>- Contract amendment letter (if applicable)</li> <li>- Bid analysis and evaluation report</li> <li>- Evidence of IFAD no objection related to the contract award</li> <li>- Purchase order / Invoice</li> <li>- Progress report prepared by consulting engineer</li> </ul> </li> <li>▪ The accounts assistant prepares a payment request which includes supporting documentation and indicates accounting codes, category of payment, component of payment and source of finance.</li> <li>▪ The Accountant reviews the payment request for accuracy and validity.</li> </ul>

Activity	Procedures
	<ul style="list-style-type: none"> <li>▪ The Accountant adds the correct account codes for the purposes of recording the transaction in the accounting software.</li> </ul>
<i>Review and approval of payment request</i>	<p>The Finance Manager reviews and signs the payment request before submission to the National Programme Manager. The National Programme Manager shall review and sign the payment request, checking/confirming:</p> <ul style="list-style-type: none"> <li>▪ The expenditure is included in the approved AWPB</li> <li>▪ IFAD no objection was obtained related to procurement as applicable</li> <li>▪ All expenditures are eligible in line with the financing agreement and has been incurred before/completed before Project completion date.</li> <li>▪ Payment was cleared by the relevant component technical officer/head.</li> <li>▪ All supporting documentation is attached (refer 12.1).</li> <li>▪ <b><u>Where stipulated in the contract, the required bank guarantees are valid and is retained in the Project's safe.</u></b></li> </ul>
<i>Review and approval of payment request – MALR internal auditor and Financial Controller</i>	<p>Once approved by the Finance Manager/National Programme Manager, payment requests are reviewed and approved by the MALR internal auditor (on a sample basis) and MoF Financial Controller.</p>
<i>Process payment</i>	<ul style="list-style-type: none"> <li>▪ The approved payment request with related documents shall be sent to the MoF Accounting unit for processing via the Government e-Payment System.</li> <li>▪ The accountant shall confirm that the bank details provided by the supplier corresponds to the signed legal agreement / original bank letter provided.</li> <li>▪ Once loaded on Government e-Payment System, the payment to be released by 2 authorised signatories (using unique digital signatures)</li> </ul>
<i>Record payment</i>	<ul style="list-style-type: none"> <li>▪ Accountant / accounts assistant record the transaction in the accounting software, using the correct codes as captured on the payment request.</li> <li>▪ File supporting documentation, include proof of payment (bank statement/bank confirmation of payment)</li> <li>▪ Accountant to reconcile accounting records with MoF Treasury ledger information.</li> </ul>

#### 12.6 Payments for consultant services

Activity	Procedures
<i>Request and approve activity in line with AWPB</i>	<ul style="list-style-type: none"> <li>▪ The process for requesting and approving consultants is outlined in the procurement section of the PIM (and LTR) and is dependent on whether the service is recruited internationally, nationally, locally or on a single source basis.</li> </ul>

Activity	Procedures
	<ul style="list-style-type: none"> <li>▪ In all instances the procurement of consulting services is subject to IFAD's no objection.</li> </ul>
<i>Prepare payment request</i>	<ul style="list-style-type: none"> <li>- The procurement officer will request payment of consulting services subject to providing the following supporting documentation:</li> <li>- Copy of consulting contract and invoice requesting payment (invoice to specify bank details in line with contract)</li> <li>- Copy of output (report / study etc)</li> <li>- Copy of timesheets (if time-based payment is required)</li> <li>- Written recommendation for payment from the relevant technical department which confirms that the consultant(s) have delivered the key outputs as specified in the consulting contract.</li> <li>- Confirmation of IFAD no objection.</li> <li>- The accounts assistant prepares a payment request which includes supporting documentation and indicates accounting codes, category of payment, component of payment and source of finance.</li> <li>- The Accountant reviews the payment request for accuracy and validity.</li> <li>- The Accountant adds the correct account codes for the purposes of recording the transaction in the accounting software.</li> </ul>
<i>Review and approval of payment request</i>	<p>The Finance Manager reviews and signs the payment request before submission to the National Programme Manager. The National Programme Manager shall review and sign the payment request, checking/confirming:</p> <ul style="list-style-type: none"> <li>▪ The expenditure is included in the approved AWPB</li> <li>▪ IFAD no objection was obtained related to procurement as applicable</li> <li>▪ All expenditures are eligible in line with the financing agreement and has been incurred before/completed before Project completion date.</li> <li>▪ Payment was cleared by the relevant component technical officer/head.</li> <li>▪ All supporting documentation is attached (refer 12.1).</li> </ul>
<i>Review and approval of payment request – MALR internal auditor and Financial Controller</i>	<p>Once approved by the Finance Manager/National Programme Manager, payment requests are reviewed and approved by the MALR internal auditor (on a sample basis) and MoF Financial Controller.</p>
<i>Process payment</i>	<ul style="list-style-type: none"> <li>▪ The approved payment request with related documents shall be sent to the MoF Accounting unit for processing via the Government e-Payment System.</li> <li>▪ The accountant shall confirm that the bank details provided by the supplier corresponds to the signed legal agreement / original bank letter provided.</li> </ul>

Activity	Procedures
	<ul style="list-style-type: none"> <li>▪ Once loaded on Government e-Payment System, the payment to be released by 2 authorised signatories (using unique digital signatures)</li> </ul>
<i>Record payment</i>	<ul style="list-style-type: none"> <li>▪ Accountant / accounts assistant record the transaction in the accounting software, using the correct codes as captured on the payment request.</li> <li>▪ File supporting documentation, include proof of payment (bank statement/bank confirmation of payment)</li> <li>▪ Accountant to reconcile accounting records with MoF Treasury ledger information.</li> </ul>

### 12.7 Subsistence payments – Young professional program (extension services)

Activity	Procedures
<i>Request for payment</i>	The Governorate Deputy Manager to submit on a monthly basis, the list of graduates who participated in the Young Professional Program and are due to receive a subsistence payment.
<i>Prepare payment request</i>	<ul style="list-style-type: none"> <li>▪ The accounts assistant prepares a payment request which includes the following supporting documentation and indicates accounting codes, category of payment, component of payment and source of finance: <ul style="list-style-type: none"> <li>- List of young graduates</li> <li>- Evidence of attendance of training programs</li> <li>- Evidence of field visits (back to the office reports)</li> <li>- Other supporting documentation to confirm involvement in the program</li> </ul> </li> <li>▪ The Accountant reviews the payment request for accuracy and validity.</li> <li>▪ The Accountant adds the correct account codes for the purposes of recording the transaction in the accounting software.</li> </ul>
<i>Review and approval of payment request – Finance Manager and National Programme Manager</i>	<p>The accounts assistant forwards the payment request with supporting documentation to the Finance Manager for review and sign off.</p> <p>The Finance Manager shall review and sign the payment request, checking/confirming:</p> <ul style="list-style-type: none"> <li>▪ The expenditure is included in the approved AWPB</li> <li>▪ IFAD no objection was obtained (if applicable).</li> <li>▪ All expenditures are eligible in line with the financing agreement and has been incurred before/completed before Project completion date.</li> <li>▪ Payment was cleared by the relevant component technical officer/head.</li> <li>▪ All supporting documentation is attached (refer 12.1)</li> </ul> <p>The National Programme Manager shall sign the payment request after the Finance Manager.</p>

Activity	Procedures
<i>Review and approval of payment request – MALR internal auditor and Financial Controller</i>	Once approved by the Finance Manager/National Programme Manager, payment requests are reviewed and approved by the MALR internal auditor (on a sample basis) and MoF Financial Controller.
<i>Process payment</i>	<ul style="list-style-type: none"> <li>▪ The approved payment request with related documents shall be sent to MoF accounting unit for processing via the Government e-Payment System.</li> <li>▪ Graduates to be registered as employees in GPS for the purposes of receiving subsistence if possible.</li> <li>▪ Once loaded on the Government Payment System, the payment to be released by 2 authorised signatories (using unique digital signatures) – one from MALR and one from MoF</li> </ul>
<i>Record payment</i>	<ul style="list-style-type: none"> <li>▪ The accountant to record the transaction in the accounting software, using the correct codes as captured on the payment request.</li> <li>▪ File supporting documentation, include proof of payment (bank statement/bank confirmation of payment)</li> <li>▪ Reconcile transactions to the Government e-Payment System on a periodic basis.</li> </ul>

### 12.8 Rural finance related payments / supporting documentation

Rural Finance Implementing Partners will be responsible for rural finance activities which include the provision of loans to beneficiaries. These parties will be responsible for using internal systems and procedures to disburse funds to beneficiaries using adequate controls related to authorisation, segregation of duties and verifications.

At all times, these parties are responsible to ensure that disbursements to intermediaries and end-beneficiaries are evidenced by supporting documentation. Supporting documentation should be retained in line with 15.5. Where intermediaries receive funds for on-lending, related intermediary loan agreements should specify the requirement to retain supporting documentation in line with 15.5.

**NB:** *Loans provided to WUA for mesqa improvements as per subcomponent 2.1 is allowed in line with a signed implementation agreement entered into between the WUA/MWRI and MALR. Signed copies of implementation agreements should be attached to loan agreements and retained as required. In addition, evidence that the WUA was duly established in line with Law 213 should be retained.*

#### Beneficiary contributions

Beneficiaries (such as CDAs) may access lines of credit via MSMEDA / ADP for the purposes of purchasing machinery and equipment (*subcomponent 2.2. Improved crop farming practices*), subject to providing a minimum cash contribution. In such instances:

- The beneficiary loan agreement should stipulate the minimum required beneficiary contribution in line with the requirements of the relevant technical / other committee (refer minutes of meetings)
- Beneficiary contributions are paid directly to the selected supplier and evidence of such payment should be retained with other supporting documentation.

## 12.9 Petty cash payments and replenishments

***Petty cash is not used for travel advances (paid via GPS to staff bank accounts) or for purchase of fuel (use fuel vouchers).***

The NPCU and Governorate PMUs will maintain petty cash accounts. The purpose of the petty cash is to make payments for low value items in a quick and efficient manner. Payments through petty cash will only be allowed for amounts up to xxx EGP.

The advance to petty cash is xxx EGP (at each location) and is managed by the Officer Manager (or administrative assistant). The purpose of the petty cash is to make payments for low value items in a quick and efficient manner.

The Petty cash disbursements may be in the form of an advance or a reimbursement. Advances must be justified with proper supporting documentation (receipts etc.) on a timely basis.

- An initial petty cash advance is made.
- The cash is placed in a locked cash box which is kept in the Officer Manager's custody. The Petty cash disbursements may be in the form of an advance or a reimbursement (when the staff member has personally advanced the funds).
- For advances, the Officer Manager delivers petty cash advances on the basis of the approved request. After the purchase is made, the requestor must return the invoice/receipt along with the change, if any, to the Finance Officer for recording into the Accounting system.
- For reimbursements (i.e. when the goods or services have already been delivered), the invoice or receipt is given to the Officer Manager who reimburses the requesting staff member or directly pays the supplier. The form is signed by the individual who receives the money.
- All disbursements from the Petty Cash must be recorded on a Cash Voucher form showing all particulars: the amount, the account being charged, the description of the transaction, authorization (by Office Manager) and the signature of the payee. The necessary documents (invoice, payment tapes, receipts) must be firmly attached. The Office Manager must never disburse from the petty cash to herself without the Finance Manager's authorization.
- The petty cash replenishment point is set to xxx EGP. Once the level of the petty cash on hand falls below this point, the Officer Manager must request replenishment by submitting a completed petty cash replenishment form ([22.13](#)). This form will show a listing of all disbursements made, the accounts debited and the total sum replenished. All the necessary petty cash vouchers and their supporting documents will be attached. A payment request will be prepared for the amount to be replenished and the Finance Manager is required to review and confirm all disbursements on the Petty Cash form before signing the check.
- Petty cash is replenished upon presentation of actual receipts to the Finance Manager. All Petty cash replenishments will bring the balance of cash on hand to xxx EGP.
- The Petty Cash Vouchers, Receipts and Electronic Petty Cash Reconciliation Sheet should be updated frequently. At the end of each week, the accountant will reconcile the petty cash journal with the physical cash count. These will be checked, along with a surprise cash count by the Finance Manager, (or National Programme Manager in the absence of the Finance Manager) via unannounced inspections at least once per month.

**Section 12 to be updated once implementation has commenced.**

## 13. Financial Reporting

The section on financial reporting deals with:

- Financial reports for submission to IFAD and other financiers

- Implementing agencies – monthly reporting to the NPCU
- Internal reporting within each implementing agency

### 13.1 Financial reports for submission to IFAD and other financiers

The Project is responsible for submitting consolidated financial reports to IFAD. *The applicable financial reporting requirements applicable to IFAD-financed Projects are outlined in the IFAD Handbook for Financial Reporting and Auditing for IFAD-financed Projects* which may be updated from time to time. The Finance Manager should ensure adherence to the latest version of the Handbook.

Project is required to prepare financial reports and submit to IFAD as outlined in the table below:

Type	Period / Frequency of submission
<i>Annual Financial Statements</i>	<ul style="list-style-type: none"> <li>▪ <b>Unaudited:</b> Prepare annual reports and submit to IFAD within 4 months of the end of the financial year-end.</li> <li>▪ <b>Audited:</b> Submit audited financial statements within 6 months of the end of the financial reporting period.</li> </ul> <p>The reports should be prepared in line with requirements are outlined in 13.4. The annual financial statement should be authorised by the National Programme Manager for authorisation before submission to the auditor/IFAD.</p>
<i>Interim financial reports</i>	Prepare quarterly reports and submit to IFAD within 45 days of the end of the quarter. The reports should be prepared in line with requirements are outlined in 13.4

### 13.2 Financial reporting requirements

The Project is required to prepare financial reports in line with IPSAS, “Financial Reporting under the Cash Basis of Accounting” (IPSAS Cash). Should the Project propose to use a different accounting standard, this should be agreed with IFAD. In all instances, IFAD required Projects to use internationally accepted accounting standard.

### 13.3 General principles for the preparation of financial reports

The Project shall prepare financial reports with consideration of the following specific principles:

Principal	Guidance
<i>Completeness</i>	<ul style="list-style-type: none"> <li>▪ The financial reports shall be complete and include the activities of the NPCU, GPCUs and all implementing agencies and present the results of a single entity.</li> <li>▪ The sources and uses of all categories/components shall be included (including sources received in-kind).</li> <li>▪ The sources and uses from all financiers as outlined in the financing agreement.</li> </ul>
<i>Accuracy</i>	<ul style="list-style-type: none"> <li>▪ Ensure that the various disclosures as outlined in 13.4 are reconcilable as appropriate</li> </ul>

### 13.4 Minimum prescribed content for interim and annual financial reports

The Project is required to prepare financial reports (annual and interim) which includes the following minimum prescribed content (an illustrative financial report is outlined in [22.11](#)):

Detailed guidance on the preparation of the disclosures as prescribed by IPSAS Cash can be found in the Standard (<https://www.ifac.org/publications-resources/revised-cash-basis-ipsas>). PROJECT is required to adopt all reporting requirements as outlined in Part 1 of

IPSAS Cash. The Project is encouraged to adopt Part 2 of IPSAS Cash on a voluntary basis.

Content	Source of requirement	Guidance on preparation of content
<i>Statement of Cash Receipts and Payments</i>	Prescribed by IPSAS Cash	<ul style="list-style-type: none"> <li>▪ Layout:               <ul style="list-style-type: none"> <li>○ Receipts – Payments = Surplus/Deficit + Opening Cash +/- Exchange rate difference = Closing Cash Balance</li> </ul> </li> <li>▪ The opening and closing cash balance should include the balance of the designated accounts (USD) and all Project accounts (Kyrgyz Som)</li> <li>▪ The opening and closing cash balance in the Designated Account is derived by applying the spot rate on the date of translation</li> <li>▪ Disclose cash receipts using an appropriate classification system (<i>Contributions from external financiers, Contributions from Government, Contributions from Beneficiaries, Cash generated from Project activities</i>)</li> <li>▪ Disclose cash payments in line with the categories outlined in Schedule 2 of the IFAD financing agreement</li> <li>▪ Disclose the exchange rate gain or loss (resulting from the translation of funds in the designated account from USD to Kyrgyz Som).</li> </ul>
<i>Budget to Actual Comparison</i>	Prescribed by IPSAS Cash	<ul style="list-style-type: none"> <li>▪ Ensure that the Budget period corresponds to the Financial Reporting Period</li> <li>▪ Derive the budget disclosure from the approved AWPB. Disclose both the original and final approved AWPB.</li> <li>▪ Calculate the variance between budgeted and actual results for both receipts (sources) and uses (payments)</li> <li>▪ Provide narrative on the reason for the variances observed.</li> </ul>
<i>Accounting policies and explanatory notes</i>	Prescribed by IPSAS Cash	<ul style="list-style-type: none"> <li>▪ Develop accounting policies with reference to the guidance provided in IPSAS Cash</li> <li>▪ Disclose the authorisation date</li> <li>▪ Disclose the basis of presentation</li> <li>▪ Disclose the presentation currency as Kyrgyz Som</li> </ul>
<i>Sources and Uses of Funds Statement</i>	Prescribed by the IFAD Handbook for Financial Reporting and Auditing for IFAD-financed Projects	<ul style="list-style-type: none"> <li>▪ Include both cash and in-kind contributions in the Sources of Funds</li> <li>▪ Provide disclosure on uses of funds by financier/by category and financier/component</li> </ul>

Content	Source of requirement	Guidance on preparation of content
<i>Designated account reconciliation</i>	Prescribed by the IFAD Handbook for Financial Reporting and Auditing for IFAD-financed Projects	<ul style="list-style-type: none"> <li>▪ Prepare reconciliation which provide justification for the IFAD advance – disclose for each designated account.</li> <li>▪ Explain variances.</li> <li>▪ The IFAD Loan Disbursement Handbook provides detailed guidance on the preparation of the reconciliation.</li> </ul>
<i>Designated account Statement</i>	Prescribed by the IFAD Handbook for Financial Reporting and Auditing for IFAD-financed Projects	<ul style="list-style-type: none"> <li>▪ Prepare for each designated account.</li> <li>▪ Ensure that opening and closing cash balances presented in this Statement is reconciled with the cash balances used in the Statement of Cash Receipts and Payments.</li> <li>▪ Disclose the exchange rate gain/loss separately and ensure that this is reconciled with the Statement of Cash Receipts and Payments.</li> <li>▪ The IFAD Loan Disbursement Handbook provides detailed guidance on the preparation of the reconciliation.</li> </ul>
<i>Summary of Withdrawal Applications</i>	Prescribed by the IFAD Handbook for Financial Reporting and Auditing for IFAD-financed Projects	<ul style="list-style-type: none"> <li>▪ Ensure that summary information is reconcilable with the IFAD historical transaction statement (to be requested from the IFAD Finance Officer) with regards to the value date of the transaction amount of withdrawal in loan denomination currency.</li> <li>▪ Cross reference amounts included here per WA to amounts included in the Designated Account Statement / Designated Account Reconciliation.</li> </ul>
<i>Fixed asset register</i>	Prescribed by the IFAD Handbook for Financial Reporting and Auditing for IFAD-financed Projects	<ul style="list-style-type: none"> <li>▪ Include a fixed asset register which lists all Project assets (<i>including those purchased on behalf of the Community Groups if the Project retains the title and the assets will be returned to the Project at Project closure</i>).</li> <li>▪ Indicate the implementing agency which procured the asset and related component.</li> <li>▪ Ensure that all fields are included – refer illustration included in <a href="#">22.11</a>.</li> </ul>

In addition to the above disclosures, the Project is required to maintain and Action Tracker log which is a log of agreed actions. This document should be maintained on an ongoing basis provide together with the financial report (interim or annual). The Action Tracker format is outlined in [22.11](#). It is required that the Action Tracker include actions which have been agreed on with IFAD during missions or the Auditor during the audit (derived from the management letter). The purpose of the Action Tracker is to keep track of progress regarding agreed on actions.

#### 13.5 Other considerations

The following specific issues should be considered in the preparation of the financial reports:

- Accrual related information should be disclosure in the notes of the financial statements. This includes outstanding advances, which, in terms of the cash basis of

accounting, should be expensed when provided. This entails that the advance will be recorded in the relevant categories /components at year-end. *(NB: Best practice is that zero advances are outstanding at the end of the fiscal year).*

- In-kind contributions from Government should be reported in the financial statements in line with the process as outlined in section 9.7. Also refer to 22.11 to see the illustrative accounting policy and explanatory notes.

### 3.6 IAs reporting to PROJECT

MWRI (and possibly rural finance partners selected after project start) as implementing agent is required to submit monthly reports to the Project. The NPCU will review the reports and verify bank balances/expenses with reference to supporting documentation attached to the report. The NPCU will proceed to record individual transactions in accounting software and clear related advances. MWRI is required to submit monthly reports using the report format as outlined in 22.16.

### 13.7 Internal reporting

Type	Period / Frequency of submission
<i>Quarterly Project reports</i>	<p>The NPCU Finance Manager to prepare a quarterly Project report which includes (but not limited to):</p> <ul style="list-style-type: none"> <li>▪ Consolidated budget to actual expenditure comparison with variance explanation.</li> <li>▪ Individual budget to actual expenditure report per implementing agency with variance explanation.</li> </ul> <p>This report to assist the NPCU National Programme Manager to monitor overall and implementing agency level performance for the purposes of taking corrective action if needed.</p>
<i>Monthly management accounts</i>	<p>It is required that each implementing agency prepare monthly management accounts for the purposes of monitoring allocated components/sub-components. The content may include (but not limited to):</p> <ul style="list-style-type: none"> <li>▪ A financial progress report (sources and uses)</li> <li>▪ Monthly bank reconciliations</li> <li>▪ Cashflow forecast</li> <li>▪ Summary of contract commitments</li> <li>▪ Overview of budget to actual expenditure analysis with variance explanations</li> </ul> <p>The monthly management accounts should be prepared within 10 days of the end of the month and submitted to the respective National Programme Managers for review and discussion during management meetings. The purpose of the monthly management accounts is to provide a monitoring tool for management with the purposes of identifying issues and taking corrective action.</p>

## 14. Audit matters

### 14.1 Internal Audit

- ✓ In the absence of an internal audit function at the NPCU, the Finance Manager will consider recommended control environment improvements as outlined in the CAO report.

## 14.2 External Audit

***(This section is an extract from the IFAD Handbook on Financial Reporting and Auditing of IFAD-Financed Projects – refer to the most recent publication on the IFAD website)***

*The NPCU Finance Manager will be responsible for the preparation of a consolidated financial report which includes all sources of funds as outlined in the financing agreements and all uses thereof by the NPCU and other implementing partners.*

### 14.2.1 Auditing standards

IFAD promotes the use of internationally accepted auditing standards and requires that PROJECT be audited in terms of the International Standards on Auditing (ISA).

### 14.2.2 Appointment of the auditor

IFAD required the appointment of a private auditor for the purposes of auditing the Project. In selecting a private auditor (via relevant procurement procedure), the following should be considered during the assessment process:

- ✓ The auditor must be independent of the Project, its staff and activities, in accordance with international best practices.
- ✓ The Project auditor may not provide consultancy services to the Project or prepare the Project financial statements or have done so in the previous two years.
- ✓ The auditor must be suitably qualified and be a member of a professional body affiliated with the International Federation of Accountants.
- ✓ The auditor's work must conform to international auditing standards
- ✓ The audit firm must be able to assign an audit team to the audit possessing the necessary competence and skills.
- ✓ The audit firm must have a proven track record in conducting audits of a similar nature and complexity.
- ✓ ***If possible, the Project can consider the appointment of a single audit firm to conduct the audits of all IFAD Projects managed by the NPCU.***

Auditors should normally be appointed in advance of the start of the period to be audited, to allow the auditor sufficient time to plan and carry out a comprehensive examination of the borrower's/recipient's financial records and accounts.

The IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects require that the following appointment process should be adhered to:

Step	Procedures	Guidance/timing
Development of the auditor's terms of reference	<ul style="list-style-type: none"> <li>✓ The B/R prepares TORs for the audit (appendix 7).</li> <li>✓ The B/R sends the TORs to IFAD for review and no-objection.</li> <li>✓ IFAD communicates "no objection" to B/R on the final TORs, within thirty days of receipt.</li> </ul>	In sufficient time to allow the appointment of auditors by the start of the financial year to be audited.
Procurement process	<ul style="list-style-type: none"> <li>✓ The B/R initiates the procurement process, using the agreed TORs.</li> <li>✓ The B/R informs IFAD of the name of the proposed auditor and the procurement process that was followed.</li> </ul>	The B/R should attempt to finalize the procurement process at least thirty days before the start of the financial year. The auditor should be appointed before the start of the financial year to be audited. <sup>29</sup>
Auditor appointment	<ul style="list-style-type: none"> <li>✓ The B/R appoints the auditor.</li> <li>✓ The appointed auditor will issue a formal engagement letter.<sup>30</sup></li> </ul>	The B/R's representative will sign and return a copy of the engagement letter to the auditor.

#### 14.2.3 Auditor terms of reference

A proposed TOR is included in [22.9](#). The Finance Manager should use and refine this TOR as required. Incorporate all financiers' requirements (specifically also AfDB and WFP) and seek approval from other financiers as appropriate.

#### 14.2.4 Audit opinion and audit package

The audit report will outline the audit opinion on the audited financial statements.

The auditor is expected to submit an audit package that at a minimum includes the audited financial statements, the audit report and the management letter. The management letter is an integral part of the audit package, which documents internal control issues identified by the auditor. The management letter should:

- Outline the auditor's recommendations to address identified internal control issues, and the responses to them on the part of the Project's management.
- Where applicable, provide follow-up commentary on the issues identified in the previous year's management letter.
- Include any ineligible expenditures identified during the audit be outlined in the management letter.

#### 14.2.5 Audit reporting period

IFAD generally requires an annual audit of Project financial statements. However, the frequency of the audit may be changed by IFAD as a function of the Project's risk profile. In all instances, IFAD will confirm the frequency with which Project's financial statements are to be audited.

The audit reporting period may be amended for the first and/or final audits, in line with the following guidance:

- For the first audit, in cases in which the Project commences during the financial year, the following procedures will generally apply:
  - When the period between the first disbursement and the end of the financial year is less than six months, IFAD may allow the results for the first financial period to be included in the following financial year's audit; or
  - When the period between the date of the first disbursement and the financial year-end is greater than six months, audited financial statements for the period are always required.

- For the final audit, IFAD may recommend an audit reporting period that is longer or shorter than 12 months, but that in no case may exceed 18 months. This is to ensure that the final audit can be concluded and the audit report submitted to IFAD by the Project Closing Date.

In such instances, IFAD will discuss and agree on its requirements with the borrower well in advance of commencement of the final audit.

#### 14.2.6 IFAD Audit reviews

IFAD will conduct reviews of Project’s audit reports. The main purpose of the reviews is to determine whether the private auditor conducted a quality audit resulting in an audit opinion acceptable to IFAD, and to assess the quality of the financial reporting of the Project.

IFAD will communicate the results of the audit report review process within sixty days following receipt of the audit package. If required, the Project will be requested to take corrective actions within a specified time frame. These actions should be included and monitored in the Action Tracker (illustrated in [22.11](#)).

#### 14.2.7 Public disclosure of audit reports

IFAD will disclose the Project’s Project financial statements and audit reports, subject to processes applicable to their publication. In line with the standards of the International Aid Transparency Initiative, MALR and/or MIIC is encouraged to publish financial information on it’s own website, for increased accountability. The Project must ensure that the audit TORs explicitly mention the right of the Project and of IFAD to publish the audit report, with no limitation-of-use clause.

## 15. Records Management

### 15.1 Maintenance of separate accounts and records

In terms of IFAD’s General Conditions for Agricultural Finance:

*"The Project Parties shall maintain separate accounts and records in accordance with consistently maintained appropriate accounting practices adequate to reflect the operations, resources and expenditures related to the Project until the Financing Closing Date..."*

In order to comply with the above requirement, all Project parties are required to maintain accounts. Such accounts and records may include:

Type	Example
<i>Electronic information</i>	<ul style="list-style-type: none"> <li>• Data and information maintained within the accounting software accounting software</li> <li>• Other documents and files maintained electronically, either on desktops, laptops or removable storage devices</li> </ul>
<i>Correspondence</i>	<ul style="list-style-type: none"> <li>• Emails</li> <li>• Hard copy correspondence (letters)</li> </ul>
<i>Documents received from external sources</i>	<ul style="list-style-type: none"> <li>• Bank statements</li> <li>• Supplier documentation</li> </ul>
<i>Internally generated information</i>	<ul style="list-style-type: none"> <li>• Employee files</li> <li>• Withdrawal applications</li> <li>• Forms</li> </ul>

All documents and information are the property of Project and may not be removed.

#### 15.2 Filing and storage of the financial records

All Project parties are responsible for filing records. To fulfil this responsibility:

- Project parties should maintain files in a chronological order, assigning appropriate codes/sequential numbers;
- Project parties should perform filing activities on a regular basis to prevent the accumulation of papers and to ensure that the financial records are always maintained in an up-to-date manner.
- Project parties should allocate an appropriate storage area for the financial records in paper format and maintain them in locked cabinets, safe from water and fire, to which access is controlled and limited.
- Project parties should also classify the financial records as "Confidential", or "General".

#### 15.3 Off-site archiving of financial records

All Project parties should ensure that the financial records are archived at an off-site location on a regularly basis. Once a year, the respective parties should make sure that the completed or inactive files are archived in a manner that will allow for easy retrieval of the files in case they are required at some future date.

#### 15.4 Electronic back-up procedures

All Project parties should ensure that electronic back-up procedures are implemented. Access to backup files are subject to authorisation by management. The access of external persons is prohibited except for the auditors and IFAD staff.

#### 15.5 Retention period

Project parties are required to retain accounts and records for at least ten (10) years after Financial Close. The NPCU Finance Manager should ensure that all documents and records (electronic and paper) are retained at the NPCU for 10 years after Project Closure.

## **16. Fixed Asset Management**

Fixed asset management is an important process that seeks to track fixed assets for the purposes of financial accounting and to ensure preventive maintenance, and theft deterrence. Adequate Fixed asset maintenance also increases the sustainability of the Project. There are three elements in fixed asset management that require the attention of the NPCU Finance Manager:

- Purchase of equipment
- Setting up and maintaining an asset register including verification
- Setting up a plan for disposal and/or handover of the asset once the Project is completed

#### 16.1 Purchase of Equipment

The NPCU / Governorate PMUs should follow the following process for each fixed asset purchased:

- Assign a unique, sequential asset number (excluding minor items such as stationary).
- Tag each item with its unique asset number.
- Record the item of equipment in fixed asset register module of the accounting software.

#### 16.2 Fixed asset register

The Project must maintain a fixed asset register in the asset management module of the accounting software. The asset register should record the following information for each individual piece of equipment (refer 22.11 for illustration):

- Asset description
- Asset number
- Individual responsible for asset

- Implementing agency responsible for purchase
- Source of funding of asset (IFAD, government etc),
- Location of the asset
- Date of purchase
- Cost of purchase and invoice number
- Remarks regarding the condition of the asset

*Assets purchased for beneficiary use should be included in the fixed asset register if the assets remain under the ownership of the Project (therefore beneficiaries to return to Project at Project closure).*

#### 16.3 Asset Verification Review

Under the management of the NPCU Finance Manager, the Project must conduct an annual asset verification process whereby the following checks are performed:

- Verify that all fixed assets are still held in the location recorded on the register;
- Confirm the completeness and accuracy of the information recorded on the fixed asset register;
- Check that equipment and vehicles are still in a reasonable state of repair and that remarks regarding the condition of the assets are correct as recorded in the fixed asset register;

The verification review must be performed by different staff from those who use the equipment, to ensure adequate segregation of duty. Discrepancies between the verification exercise and the fixed asset register should be investigated. Where assets are missing or seriously damaged, they should be removed from the asset register. The removal should be formally documented and approved by Finance Manager and National Programme Manager. Moreover, the Finance Manager will undertake random verification of fixed assets during field visit.

#### 16.4 Vehicle Maintenance and Fuel

Drivers are required to maintain logbooks ([22.14](#)).

The Project purchases fuel vouchers from the Ministry of Oil via the Government Payment System, subject to request for purchase approved by the National Programme Manager.

- Fuel vouchers are not expensed in the accounting system until used.
- Drivers may request fuel vouchers by submitting approved travel requests which indicate the estimated distance of travel.
- Fuel vouchers are issued and recorded as an advance to the driver.
- Upon refuelling, the driver should obtain a receipt with an amount which corresponds to the voucher amount and indicated the vehicle registration number. – information captured on the vehicle log.
- On a monthly basis the vehicle logs with supporting documentation are submitted to the accountant / accounts-assistant for review. At this time, fuel vouchers are expensed, and the related driver advance cleared. No outstanding advances are allowed at month-end.

#### Monitoring of fuel usage

On a monthly basis the administrative assistant will compare all fuel invoices with the relevant logbooks and prepare an analysis of consumption per vehicle. The analysis will consider the purposes of the trips undertaken with the intention of allocating the monthly fuel expense to the correct budget items in the accounting software.

#### Vehicle insurance

The Finance Manager should ensure that all Project vehicles are comprehensively covered and that all drivers are noted on the insurance policy. Under no circumstances may unlicensed drivers drive the vehicles. The insurance policies should be renewed annually or as stipulated in the policy. The safety of cars is the responsibility of the

drivers assigned to the vehicles. Consequently, they must ensure that the vehicles are parked in a secure area when not in use or outside working hours.

## 17. IFAD financial management support

### 17.1 Overview of IFAD support

IFAD's Financial Management Division (FMD) will remain involved with Project from Project inception to Financial Closure to ensure that PROJECT fiduciary requirements are met.

FMD's Finance Officer will establish ongoing contact with the Project, by liaising with the NPCU Finance Manager and will be available to provide remote support on financial management matters. In addition, FMD will visit the Project during missions to the (represented by either the Finance Officer or an appointed consultant). Mission types include supervision missions, mid-term reviews and implementation support missions. During missions, FMD will assess and monitor the adequacy of Project financial management arrangements such as accounting, budgeting, internal controls, flow of funds, financial reporting and the auditing practices.

If financial management arrangements of the Project are deemed acceptable, IFAD will rely on them to provide assurance that the financing proceeds are being used for the intended purposes. In the case that IFAD identifies weaknesses in the financial arrangements, it will require the Project to take the appropriate measures to mitigate those risks.

The key findings and recommendations of missions will be captured in the Aid Memoire which includes an overview of issues identified and proposed actions to be undertaken by the Project/IFAD to address issues identified.

### 17.2 Roles and responsibilities related to IFAD support

The Project will be required to participate in IFAD missions as follow:

Stage	Project roles and responsibilities
<i>Before IFAD missions</i>	<ul style="list-style-type: none"> <li>• Prepare Appendix 1 (<a href="#">22.12</a>) and submit to the FO/Consultant in electronic format (Excel Workbook, including formulae) <u>before</u> commencement of the mission – the FO/Consultant will specify the date range to be covered within Appendix 1.</li> <li>• NPCU to complete the Financial Management Assessment Questionnaire (FMAQ) and submit to the FO/Consultant in electronic format (FO to provide most recent template).</li> <li>• Prepare all other information as requested by FO/Consultant before commencement of the mission (refer <a href="#">22.2</a>).</li> </ul>
<i>During IFAD missions</i>	<ul style="list-style-type: none"> <li>• Provide the FO/Consultant with all information which was requested before the mission.</li> <li>• Arrange meeting with the auditors (internal and external) and any other selected party requested by the mission.</li> <li>• Ensure that all FM staff are available to assist the FO/Consultant in performing their duties which may include:               <ul style="list-style-type: none"> <li>○ Review of financial reports, reconciliations</li> <li>○ Physical verification of fixed assets and inventory</li> <li>○ Meeting with the auditor</li> <li>○ Reviewing and completing the FMAQ</li> </ul> </li> <li>• Discuss identified FM weaknesses and risks and assist the FO/Consultant with developing appropriate actions for inclusion in the aide memoire.</li> </ul>
<i>After IFAD missions</i>	<ul style="list-style-type: none"> <li>• Respond to any wrap-queries from the FO/Consultant</li> <li>• Commence with implementing all actions which are included in the Aide Memoire</li> </ul>

Stage	Project roles and responsibilities
	<ul style="list-style-type: none"> <li>Update the Action Tracker (see illustration in <a href="#">22.11</a>) with all actions raised during the missions.</li> </ul>
<i>Ongoing</i>	<ul style="list-style-type: none"> <li>Monitor and update the Action Tracker to ensure all actions are implemented in a timely manner. Liaise with the Finance Manager if required.</li> <li>Respond to ad-hoc queries received from the Finance Manager or other IFAD staff as it related to FM matters.</li> </ul>

## 18. Project completion and closure

The Project completion date is defined in the financing agreement and the Project closure date is 6 months thereafter. The following is relevant to period before Project completion up to Project closure:

STAGE 1 Prior to Project Completion date	STAGE 2 Between Project Completion and Closure	STEP 3 Subsequent to Project Closure Date
Up to the Project completion date	Between Project completion and closure	Project closure date
<ul style="list-style-type: none"> <li>Submit an advance recovery plan to IFAD, indicating how the advance will be recovered up to Project closure (in line with financing agreement) (<i>request template for plan from IFAD</i>)</li> <li>Agree on the audit scope of work and submit to IFAD for no objection</li> <li>Incur eligible expenditure up to the Project completion date</li> </ul>	<ul style="list-style-type: none"> <li>Commencement of the final audit</li> <li>Auditor performs the final audit in line with scope of work approved by IFAD</li> <li>Incur winding up expenditure only (cost of audit, staff salaries, operating costs, Project completion report)</li> <li>Submit final withdrawal application and recover advance via this process</li> <li>Develop an asset handover and disposal plan (include up to date fixed asset register, indicate condition of all assets and to which entity the assets will be transferred).</li> </ul>	<ul style="list-style-type: none"> <li>Submit final audit report on or before the Project closure date</li> <li>Submit Project completion report on or before the Financial Closure Date (as required in the financing agreement)</li> <li>Confirm the final withdrawal application with IFAD</li> <li>Return outstanding advance if applicable (if due and not recovered via recovery process)</li> <li>Closure of the grant with IFAD</li> </ul>

A notice is sent to the Borrower at least six months prior to the Project Closure Date (PCD) to advise that all applications must be submitted before the closing date, and to remind the Borrower that expenditures incurred and commitments made after the PCD will not be honoured, except for authorised expenditures during the "Winding Up Period" (from PCD to Financing Closing Date). This means that goods are delivered, civil works are completed and services are rendered on or before such date.

After the financing closing date, IFAD informs the Borrower of the formal closure of the loan/grant account, provides a history of disbursement transactions and cancels the unused loan/grant balance. A re-amortisation plan should be sent where relevant.

#### Asset handover plan

The plan should develop report outlining the following for the purposes of handing over Project assets to the identified beneficiaries:

- The value of all the assets bought under the Project
- Summary of the current condition of the assets,
- To which entity, will the assets be transferred to and on which date and for what purpose.
- List the assets that will be disposed and the reason for being disposed.

### **19. IFAD Financing agreements – amendments and budget reallocations**

If amendments are required to the financing agreement:

- a formal written request should be submitted to IFAD
- outlining the required amendment and motivation thereof.

Amendments to the agreement may be required for (but not limited to):

- Changes to the Project completion date and grant closing date,
- Changes to the Project budget/budget reallocation (noting that the budget may not be increased above the original total amount)

#### Budget reallocations

- In some cases, the expenses category amounts as outlined in the financing agreement requires a revision if the Project notes that actual expenditure is deviating from the original budget.
- In such instances a reallocation is required, depending on the size of the reallocation per category (expressed as %)
- Reallocation of equal to or less than 10% (of each category) between the various categories if such a reallocation ***does not change the basic purpose of the Project.***
- For reallocation greater than 10% of any expense category, the Borrower is required to formally request a reallocation from IFAD (supported by a detailed motivation).
- Ensure TSA budget is updated in line with changes – request from MoF in writing (or use process as prescribed at the time).

### **20. Management of implementing partners – financial management considerations**

Some activities are implemented by 3<sup>rd</sup> party implementing agencies . The financial management specialist and National Programme Manager will have an oversight role over the activities of 3<sup>rd</sup> party implementing agencies and the following should be considered:

Topic	Consideration
<i>Terms of subsidiary agreements</i>	Each implementing partner will enter into a subsidiary agreement /MOU with the Project. This agreement will outline the roles and responsibilities of both parties. Some proposed terms are outlined in <a href="#">22.15</a> . The NPCU should monitor adherence to terms of these agreements with regards to financial management related aspects.
<i>Adherence to laws and regulations</i>	Rural finance implementing partners may be subject to regulation by the Egyptian Financial Regulatory Authority (previously EFSA) or the Central Bank of Egypt. The NPCU should be aware of regulatory changes that may impact implementing partners (specifically considering impacts on

Topic	Consideration
	Project financial management) and engage with partners to monitor compliance issues.
<i>Advances to 3<sup>rd</sup> parties</i>	MWRI will receive advances from the NPCU (and possibly rural finance implementing partners selected after project start-up). MWRI may request advances using the Request for advance form <a href="#">(22.17)</a> and should report thereon on a monthly basis using the template provide in <a href="#">22.16</a> . The NPCU Finance Manager has overall oversight over the advances arrangement and should ensure that advances are justified and recorded in the NPCU accounting system on a monthly basis.
<i>Post investment monitoring of rural finance activities</i>	The NPCU Finance Manager and M&E specialist to collaborate on post monitoring activities in this regard to ensure: <ul style="list-style-type: none"> <li>✓ Loans to end-beneficiaries were provided subject to a duly approved loan agreement</li> <li>✓ Loan funds disbursed were used by end-beneficiary for the activity as outlined in the loan agreement.</li> </ul>

## 21. Useful links

Document	Link
<i>IFAD financial management e-learning</i>	<a href="https://www.ifad.org/elearning_cfs_a/index.html">https://www.ifad.org/elearning_cfs_a/index.html</a>
<i>Revised IFAD policy on preventing fraud and corruption in its activities and operations (December 2018)</i>	<a href="https://www.ifad.org/en/document-detail/asset/40189695">https://www.ifad.org/en/document-detail/asset/40189695</a>
<i>IFAD General Conditions for Agricultural Development Financing</i>	<a href="https://www.ifad.org/documents/38711624/39421024/general_e.pdf/47c5f14b-2903-4285-b0b0-62c67cd650b8">https://www.ifad.org/documents/38711624/39421024/general_e.pdf/47c5f14b-2903-4285-b0b0-62c67cd650b8</a>
<i>IFAD Handbook for Financial Reporting and Auditing of IFAD-financed Projects (English)</i>	<a href="https://www.ifad.org/documents/38711624/39421009/IFAD+Handbook+for+Financial+Reporting+and+Auditing+of+IFAD-Financed+Projects/133b165d-15c7-4f79-8217-ae95b79dd67">https://www.ifad.org/documents/38711624/39421009/IFAD+Handbook+for+Financial+Reporting+and+Auditing+of+IFAD-Financed+Projects/133b165d-15c7-4f79-8217-ae95b79dd67</a>
<i>IFAD Loan Disbursement Handbook</i>	<a href="https://www.ifad.org/web/guest/document-detail/asset/39635782">https://www.ifad.org/web/guest/document-detail/asset/39635782</a>
<i>IFAD Financial Administration Manual</i>	<a href="https://www.ifad.org/web/guest/document-detail/asset/39637251">https://www.ifad.org/web/guest/document-detail/asset/39637251</a>
<i>IPSAS Cash Standard</i>	<a href="https://www.ifac.org/publications-resources/revised-cash-basis-ipsas">https://www.ifac.org/publications-resources/revised-cash-basis-ipsas</a>
<i>ICP page</i>	<a href="https://icp.ifad.org/">https://icp.ifad.org/</a>
<i>ICP support email</i>	<a href="mailto:icpsupport@ifad.org">icpsupport@ifad.org</a>
<i>STAR design report</i>	[insert link]

## **22. Annexures**

## 22.2 Information checklist – preparing for IFAD missions

It is required that PROJECT prepare the following in anticipation of IFAD missions:

Information		Guidance
1.	<i>Appendix 1</i>	<ul style="list-style-type: none"> <li>Prepare <a href="#">Appendix 1</a> in Excel Workbook and include formulae as appropriate.</li> </ul>
2.	<i>FMAQ</i>	<ul style="list-style-type: none"> <li>Include comments in the Financial Management Assessment Questionnaire (with exception of the summary section).</li> </ul>
3.	<i>Withdrawal applications/ SOEs</i>	<ul style="list-style-type: none"> <li>Make hardcopy files of all recent withdrawal applications/statement of expenditures available (at least covering 12 months prior to the missions). Upon request, provide supporting documentation for a selection of expenditures.</li> <li>Provide a summary of pending withdrawal applications / SOEs for review.</li> </ul>
4.	<i>Bank and petty cash reconciliations</i>	<ul style="list-style-type: none"> <li>Make hardcopy files of most recent bank and petty cash reconciliations available. Include copies of relevant bank statements. Ensure that IFAD designated account reconciliations are prepared in the correct format as outlined in the IFAD Loan Disbursement Handbook</li> </ul>
5.	<i>Financial reports</i>	<ul style="list-style-type: none"> <li>Provide most recent financial reports (as at end of most recent completed month), which include summary information (including all sources and uses of funds).</li> <li>Provide most recent interim financial report (format illustrated in 22.9)</li> <li>Provide copy of most recent audited financial statement.</li> </ul>
6.	<i>Fixed asset register</i>	<ul style="list-style-type: none"> <li>Provide updated fixed asset register in Excel Workbook format (export from accounting software).</li> </ul>
7.	<i>Manuals and procedures</i>	<ul style="list-style-type: none"> <li>Provide an electronic of the most recent version of the Financial Manual (to which IFAD provide a no objection).</li> <li>Provide a copy of the accounting software manual.</li> </ul>
8.	<i>Contract register and monitoring forms</i>	<ul style="list-style-type: none"> <li>Make available the update Contract Register and Contract Monitoring Forms (export from Accounting software).</li> </ul>
9.	<i>Action tracker</i>	<ul style="list-style-type: none"> <li>Update the action tracker with progress to date.</li> </ul>
10.	<i>AWPB/Procurement Plan</i>	<ul style="list-style-type: none"> <li>Make available electronic copies of the AWPB and Procurement Plan (provide in Excel Workbook format).</li> </ul>
11.	<i>Advances</i>	<ul style="list-style-type: none"> <li>Make available a summary of outstanding advances with supporting documentation.</li> </ul>

## 22.3 Terms of reference: NPCU Finance Manager

<b>Post title:</b>	Finance Manager
<b>Organisation:</b>	STAR NPCU within MALR
<b>Location:</b>	Cairo, Egypt
<b>Name of Project:</b>	STAR
<b>Duration:</b>	One-year renewable
<b>Type of contract:</b>	short term
<b>Closing date:</b>	insert

### **Background**

MALR has established a Central Project Management Unit (NPCU) to coordinate the management and implementation of IFAD-funded Projects in Egypt.

### **The Project Financial Management Unit**

The NPCU has a financial management function responsible for financial and accounting matters of IFAD-funded Projects which it manages. The Finance Manager has key responsibility for the financial management function and reports to the NPCU Director. The Finance Manager is assisted by an accountant and accounts assistant at the NPCU.

### **Job Description**

- The Finance Manager is responsible for the financial and administrative management of the programme including Accounting, Budgeting, Financial Reporting, Internal Controls, Auditing Arrangements, Flow of Funds and the efficient management of Project resources in accordance with the requirements of IFAD. He/she will report directly to the NPCU Director and will work in close collaboration with his or her counterparts at MALR.
- Operating within a computerized environment, the Finance Manager will perform the following duties:
  - Develop behavioural ways of working within the finance team that promotes value addition, continuous professional improvement and a culture of cost effectiveness by all managers.
  - Take a leading role on financial aspects of preparation and consolidation of the Annual Workplan and Budget.
  - Ensure timely uploading of the AWPB to the accounting system.
  - Master IFAD key documents such as, the disbursement handbook, procurement guidelines and handbook, IFAD Handbook for Financial Reporting and Auditing of IFAD-financed Projects, the Financing Agreement (FA) and the Letter to the Borrower (LTB).
  - Work closely with the accounting system developer on customizing and maintaining an efficient accounting system and reliable internal control procedures and guidelines for financial reporting and recordkeeping.
  - Ensure compliance with all legal and statutory reporting requirement in country.
  - Ensure that administrative and financial directives and guidelines are reflected in all Project financial activities.
  - Ensure that all financial accounts are managed with respect to disbursement and replenishment in accordance with the approved procedures stipulated by the financiers.
  - Take prompt and definite action on non-compliance with procedure and practices. Verify all withdrawal applications for submission to IFAD, and ensure the

availability of funds for all planned activities. Manage the Projects bank accounts, approve and co-sign all payments.

- Facilitate timely receipt of Government counterpart funds in the MoF treasury single account system with allocation thereof to the Project budget.
- Prepare and provide annual financial reports which are compliant with the IFAD Handbook For Financial Reporting and Auditing of IFAD-Financed Projects and the Project's Financial Manual.
- Prepare financial reports as outline in the Project Implementation Manual and as may be requested from IFAD, MoF or MALR from time to time.
- Act as focal point for all related Project financial correpondances.
- Prepare terms of reference for the annual statutory audit in line with the guidelines as outlined in the Project Implementation Manual and obtain IFAD no-objection.
- Request procurment of statutory audit services well in advance of the audit start-date.
- Coordinate and supervise statutory audit arrangements.
- Act as focal point for the Central Auditing Organisation audit review.
- Consider outcomes of both the statutory audit and Central Auditing Organisation audits with regards to control weaknesses / other observations and implement recommendations.
- Develop and maintain a system of financial control over all expenditure incurred by the Project and its implementing agents.
- Review and assess the internal control environment within implementing agencies and propose improvements if required to ensure that monthly reporting to the NPCU is accurate and complete.
- Manage funds flows to the local currency accounts to ensure sufficient funds are available for Project cashflow needs.
- Monitor the level of advances/funds to implementing agencies to ensure both that there are sufficient funds to implement the Project activities and that the level of advances/fund are adequate and there are no idle funds.
- Monitor compliance with the Project Financing Agreements.
- Monitor compliance with the IFAD Letter to the Borrower.
- Approve all reconciliations including bank and advance reconciliations.
- Supervise and coordinate the work of staff placed under his/her direct authority as well as supervising the work of the financial management staff at the GPCUs.
- Undertake annual performance reviews of staff at the NPCU and develop skills development plans as required.
- Review and regularly update the financial section of the Project Implementation Manual
- Take responsibility for the implementation of IFAD mission recommendations related to financial matters.
- Act as key contact with the Ministry of Finance controller assigned to the NPCU for the purposes of ensuring timely reconciliation of the Projects accounting system with payments made via the treasury single account.
- Liaise with Ministry of Finance on matters pertaining to required customisations to the TSA ledger for the Project / accounting for Projects transactions in the Treasury Ledger and other issues which impact the NPCU ability to account for transactions via the Government Payment System.
- Undertake any other activities assigned by the National Programme Manager.

### **Qualifications and Experience**

- ✓ An acceptable accounting and finance qualification. A Master's Degree is preferable.
- ✓ A minimum of 15 years professional experience with at least 10 years experience in financial management preferably in management position.
- ✓ Experience on donor financed Projects is required.
- ✓ The candidate would be expected to have a thorough understanding of accounting practices, finance and investment. Familiarity and experience in use of accounting software is a must.
- ✓ Candidates with previous experience in IFI-funded Projects in Egypt will be given preference.
- ✓ Good command of Arabic and English, both oral and written.
- ✓ Prior experience working with government of Egypt regulations and procedures – specifically Minister of Finance / Central Bank of Egypt / Egyptian Financial Regulatory Authority.
- ✓ Good knowledge of Microsoft Office.
- ✓ The ability to lead and to work as part of a team.
- ✓ Good communication skills.
- ✓ Ability to work with multi stakeholders, including government, private sector companies, civil society organizations, and community.
- ✓ Professional and personal endurance and commitment to complete complex assignments efficiently and effectively in a high demanding working environment.

The initial contract will be for one year with six-month probation, period, renewable every year on continued satisfactory performance.



## 22.4 Terms of reference: NPCU Finance Coordinator

<b>Post title:</b>	Finance Coordinator
<b>Organisation:</b>	STAR NPCU within MALR
<b>Location:</b>	Cairo, Egypt
<b>Name of Project:</b>	STAR
<b>Duration:</b>	One-year renewable
<b>Type of contract:</b>	short term
<b>Closing date:</b>	insert

### **Background**

MALR has established a Central Project Management Unit (NPCU) to coordinate the management and implementation of IFAD-funded Projects in Egypt.

### **The Project Financial Management Unit**

The NPCU has a financial management function responsible for financial and accounting matters of IFAD-funded Projects which it manages. The NPCU Finance Coordinator plays a key role in financial management and reports directly to the Finance Manager. The NPCU Finance Coordinator has close contact with counterparts at a Governorate level for the purposes of centralized accounting of all Project activities.

### **Job Description**

- Assist the Finance Manager with overall financial management activities of the Project.
- Support preparation of consolidated Annual Work Plan & Budget (AWPB).
- Review monthly transactions of the GPCUs.
- Review monthly reports received from implementing agencies and record related transactions in the accounting system, using appropriate cost categories /components /sources of finance.
- Work alongside the Finance Manager to ensure timely and accurate submission of withdrawal applications to IFAD;
- Assist the Finance Manager in Preparation and submission of all financial statements, budgets, financial Projections, cash flow forecasts and all other Projects reports as requested by the Project, IFAD and the Ministry of Finance.
- Prepare specific budgetary documentation, according to Egyptian legislation, issue payment requests and obtain the necessary approvals for finalizing payments to the suppliers/contractors;
- Review and validate Payment requests against approved AWPB and supporting documents;
- Submit payment vouchers to the MALR internal auditor / MoF Controller for the purposes of review and approval before submission to the MoF accounting unit for processing.
- Operate and maintain the financial management software system related to accounting and financial management by ensuring that all financial transactions are entered into the system; accurately on a regular basis;
- Ensure that all NPCU's financial transactions (hard and soft copies) are filled properly and on daily basis and easily accessible;
- Monitor actual expenditure and disbursements against allocations for each category;
- Ensure smooth and timely transfer of approved payments for eligible expenditure to Contractors in compliance with FM Manual and Legal Agreement (collaborate with MoF accounting unit who is responsible for processing payments).

- Maintain the master contract register for all contracts issued at central and governorate level.
- Maintain and update the fixed assets register for the entire Project;
- Maintain and update advance registers and ensure timely clearances;
- Prepare on monthly bank reconciliations.
- Follow up and maintain an up to date records on in-kind contributions;
- Occasional field visit to Governorates to support GPCU accountants if needed.
- Perform other duties, of financial nature which pertains to the implementation of the Project, as may be requested by the National Programme Manager and Finance Manager.

### **Qualifications and Experience**

- ✓ An acceptable accounting and finance qualification.
- ✓ A minimum of 10 years professional experience with at least 5 years experience in accounting and financial management.
- ✓ The candidate would be expected to have a thorough understanding of accounting practices, finance and investment. Familiarity and experience in use of accounting software is a must.
- ✓ Good command of Arabic and English, both oral and written
- ✓ Prior experience working with donor-funded Projects.
- ✓ Good knowledge of Microsoft Office.
- ✓ Ability to work in team and multi-tasking.
- ✓ Good communication skills.
- ✓ Ability to work with multi stakeholders, including government, private sector companies, civil society organizations, and community.
- ✓ Professional and personal endurance and commitment to complete complex assignments efficiently and effectively in a high demanding working environment.

The initial contract will be for one year with six-month probation, period, renewable every year on continued satisfactory performance.

## 22.5 Terms of reference: NPCU Accountant

*(can amend TORs for recruitment of GPCU accountants)*

<b>Post title:</b>	Accountant
<b>Organisation:</b>	STAR NPCU within MALR
<b>Location:</b>	Cairo, Egypt
<b>Name of Project:</b>	STAR
<b>Duration:</b>	One-year renewable
<b>Type of contract:</b>	short term
<b>Closing date:</b>	insert

### **Background**

MALR has established a Central Project Management Unit (NPCU) to coordinate the management and implementation of IFAD-funded Projects in Egypt.

### **The Project Financial Management Unit**

The NPCU has a financial management function responsible for financial and accounting matters of IFAD-funded Projects which it manages. The NPCU accountant plays a key role in financial management and reports directly to the Finance Manager.

### **Job Description**

- Assist the NPCU Accountant with financial management activities of the Project.
- Support preparation of consolidated Annual Work Plan & Budget (AWPB).
- Review monthly transactions of the GPCUs.
- Review monthly reports received from implementing agencies and record related transactions in the accounting system, using appropriate cost categories /components /sources of finance.
- Work alongside the Accountant and Finance Manager to ensure timely and accurate submission of withdrawal applications to IFAD;
- Review and validate Payment requests against approved AWPB and supporting documents;
- Submit payment vouchers to the MALR internal auditor / MoF Controller for the purposes of review and approval before submission to the MoF accounting unit for processing.
- Operate and maintain the financial management software system related to accounting and financial management by ensuring that all financial transactions are entered into the system; accurately on a regular basis;
- Ensure that all NPCU financial transactions (hard and soft copies) are filled properly and on daily basis and easily accessible;
- Monitor actual expenditure and disbursements against allocations for each category;
- Ensure smooth and timely transfer of approved payments for eligible expenditure to Contractors in compliance with FM Manual and Legal Agreement (collaborate with MoF accounting unit who is responsible for processing payments).
- Maintain the master contract register for all contracts issued at central and governorate level.
- Maintain and update the fixed assets register for the entire Project;
- Maintain and update advance registers and ensure timely clearances;
- Prepare monthly bank reconciliations.
- Follow up and maintain an up to date records on in-kind contributions;

- Perform other duties, of financial nature which pertains to the implementation of the Project, as may be requested by the Accountant and Finance Manager.

### **Qualifications and Experience**

- ✓ An acceptable accounting and finance qualification.
- ✓ A minimum of 5 years professional experience with at least 3 years experience in accounting and financial management.
- ✓ The candidate would be expected to have a thorough understanding of accounting practices, finance and investment. Familiarity and experience in use of accounting software is a must.
- ✓ Good command of Arabic and English, both oral and written
- ✓ Prior experience working with donor-funded Projects.
- ✓ Good knowledge of Microsoft Office.
- ✓ Ability to work in team and multi-tasking.
- ✓ Good communication skills.
- ✓ Ability to work with multi stakeholders, including government, private sector companies, civil society organizations, and community.
- ✓ Professional and personal endurance and commitment to complete complex assignments efficiently and effectively in a high demanding working environment.

The initial contract will be for one year with six-month probation, period, renewable every year on continued satisfactory performance

## 22.8 Supporting documentation for withdrawal applications

As specified in chapter 3 of the IFAD Loan disbursement handbook, the following supporting documentation is required:

Type of payment	Supporting documentation
<i>All types of payments</i>	<ul style="list-style-type: none"> <li>▪ The signed contract or confirmed purchase order (Showing the specified amount that is due paid. If this has been sent earlier to the fund a reference to the accompanying letter or document should be given in a footnote to the relevant Application summary Sheet – form 100)</li> <li>▪ The bank guarantee for advance payment, as specified in the contract documents</li> <li>▪ The bank guarantee for performance, as specified in the contract documents</li> <li>▪ Copies of communications sent by the IFAD country Project manager to the lead Project agency (LPA) providing the IFAD’s no objection (post or Prior) to the contract award, and</li> <li>▪ Evidence of payment.</li> </ul>
<i>Payment of goods</i>	<ul style="list-style-type: none"> <li>▪ Supplier’s invoice duly certified for payment by the National Programme Manager – specifying the goods, their quantities and prices</li> <li>▪ Bills of lading or similar documents; and</li> <li>▪ As appropriate, the certificate of delivery (to include condition of goods to delivery).</li> </ul>
<i>Payments for services (including consultants)</i>	<ul style="list-style-type: none"> <li>▪ The supplier or consultant claim, duly certified for payment by the National Programme Manager and showing sufficient detail. If such Services relate to the importation of goods (for example, freight and insurance payments), adequate reference should be given to enable IFAD to relate each of these items to specific goods whose cost has been or is to be financed by the financing closing date; and</li> <li>▪ As appropriate, a certificate of delivery of satisfactory services</li> </ul>
<i>Progress and retention payments of civil works</i>	<ul style="list-style-type: none"> <li>▪ the claim if the contractor, including a financial progress report, stating the work performed and the amount due;</li> <li>▪ A certificate-signed by the Project consultants or owner’s representative, if any, or by the borrower’s chief engineering officer or resident supervising engineer assigned to the Project, to the effect that the work performed is satisfactory and the payment claimed is due in accordance with the terms of the contract, and</li> <li>▪ A copy of the contract payment monitoring form signed in original by the certifying officer.</li> </ul>

## 22.9 Terms of reference: External Auditor

**Borrower:** MoIIC (Egypt)  
**Project:** STAR  
**Financing Agreements:** Specify

### **Background**

- The International Fund for Agricultural Development (IFAD) and other as specified is aiding the Borrower in the form of a loan and grants.
- The financiers' requires the Borrower to appoint an independent auditor to audit the accounts related to the Project.
- The entity prepares its financial statements in accordance with the IPSAS Cash Basis of Financial Reporting.
- (insert other relevant info)

### **Objective**

The objective of this audit is to enable the auditor to express an opinion on whether the financial statements (including additional disclosures as outlined in section 5) present fairly, in all material respects, the financial position of the reporting entity as at [insert year-end date], and/or the results of its operations and its cash flows for the years then ended, in conformity with the [applicable accounting standards].

### **Responsibilities of the Borrower**

#### **General**

- Provide financial statements for the activities financed by loans/grants/contributions that are reconcilable to its records and accounts.
- Provide the auditor with access to all legal documents and correspondence with consultants, contractors and other persons or firms engaged by the Project, and any other information associated with the Project and deemed necessary by the auditor.
- Ensure that the accounting policies are consistently applied and disclosed.
- Ensure that appropriate internal controls are implemented to prevent misstatements and susceptibility to fraud.
- Ensure compliance with all relevant laws and regulations that pertain to the entity, as well as with the financing agreements between the Borrower and IFAD/xxx.
- Provide the financial statements to the auditor within a reasonable time and be available for any queries that the auditor may have.

#### **Financial statements**

The Borrower shall:

- Prepare financial statements covering the reporting period [date] to [date], in accordance with IPSAS Financial Reporting under the Cash Basis of Accounting. In addition, the following IFAD specific disclosures will be included in the financial statements:
  - Budget to actual comparison - refer to Project Financial Manual for illustration;
  - Withdrawal application summary - refer to Project Financial Manual for illustration;
  - Sources and uses of funds statement - refer to Project Financial Manual for illustration;
  - Designated Account statement and reconciliation - refer to Project Financial Manual for illustration;

- Fixed asset schedule - refer to Project Financial Manual for illustration

## **Responsibilities of the auditor**

### ***Auditing standards***

The audit shall be conducted in accordance with the International Standards of Audit (ISA) published by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC). These standards require that the auditor plans and performs the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. The audit includes examining, on a test basis, evidence, supporting the amounts and disclosures in the financial statements. The audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. In complying with ISA, the auditor is expected to pay particular attention to the following matters, including special considerations for public sector entities:

- In planning and performing the audit to reduce audit risk to an acceptably low level, the auditor should consider the risks of material misstatements in the financial statements due to fraud as required by the [International Standard of Audit 240: The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements](#).
- When designing and performing audit procedures and in evaluating and reporting the results thereof, the auditor should recognize that noncompliance by the entity with laws and regulations may materially affect the financial statements as required by the [International Standard of Audit 250: Consideration of Laws and Regulations in an Audit of Financial Statements](#).
- The auditor should communicate audit matters of governance interest arising from the audit of financial statements to those charged with governance of an entity as required by the [International Standard of Audit 260: Communication with those Charged with Governance](#).
- The auditor should communicate appropriately to those charged with governance and management deficiencies in internal control that the auditor has identified in an audit of financial statements as required by the [International Standard of Audit 265: Communicating Deficiencies in Internal Control to Those Charged with Governance and Management](#)
- In order to reduce audit risk to an acceptably low level, the auditor should determine overall responses to assessed risks at the financial statement level, and should design and perform further audit procedures to respond to assessed risks at the assertion level as required by the [International Standard of Audit 330: The Auditor's Responses to Assessed Risks](#).
- In instances where certain aspects of an entity's operations are performed by a third party service provider, the auditor is expected to include an understanding and assessment of the internal control environment of the service provider during the audit process as required by the [International Standard of Audit 402: Audit Considerations Relating to an Entity Using a Service Organization](#).
- As part of the audit process, the auditor is expected to obtain written representations from management and, where appropriate, those charged with governance as required by the [International Standard of Audit 580: Written Representations](#).

### **General principles**

By agreeing to these terms, the auditor confirms that:

- The firm is independent from the Project, its staff and activities, in accordance with international best practices.

- The firm is not providing consultancy services to the Project or preparing its Project financial statements (nor has it done so in the previous two years).
- The auditor is suitably qualified and a member of a professional body affiliated with the International Federation of Accountants.
- The auditor is able to conduct the audit in line with international auditing standards.
- The firm can assign an audit team to the audit that has the necessary competence and skills.
- The firm has a proven track record in conducting audits of a similar nature and complexity.

### **Management letter**

The management letter is an integral part of the audit package that documents accounting and internal control issues identified by the auditors. The management letter should:

- Outline the auditor's recommendations to improve identified accounting and internal control issues;
- Include the responses of Project management to the identified control issues, and its proposal to address the issues identified within a specific time period.
- Where applicable, follow up on the issues identified in the previous year's management letter.
- report on instances of non-compliance with the terms of the financing agreement;
- quantify and report expenditures that are considered to be ineligible and either paid out of the designated (special) accounts or which have been claimed from the IFAD;
- communicate matters that have come to their attention during the audit which might have a significant impact on the implementation of the Project;

### **Reporting**

The Auditor is required to deliver an audit package that includes:

- The audited financial statements, including additional specific disclosures as specified.
- An audit opinion on the financial statements
- A management letter
- A report on factual findings, within the scope of agreed-upon procedures as outlined. Any ineligible expenditure identified should be clearly mentioned.

The audit report should provide sufficient detail as to the nature and extent of the procedures performed by the auditor. The auditor is required to provide the audit package by no later than [insert date]. Reports are to be delivered in English.

### **Scope of the financial audit**

In performing the audit, at a minimum the auditor shall:

- Obtain an understanding of the internal controls related to the financial reporting process, to identify and assess any weakness in internal control that might result in misstatements, whether due to fraud or to error;
- Design and conduct audit procedures in response to any weaknesses identified in the internal controls relating to the financial reporting process, to obtain audit evidence that the financial statements are fairly presented and free from material misstatements, in accordance with the applicable accounting framework;
- Verify whether expenditure that was incurred in the name of the Project is in line with the terms of the financing agreement(s) and incurred for the purposes intended in this agreement. Both IFAD and third-party funding should be taken into consideration;
- Verify that the fixed assets held by the entity exist, are complete, are properly accounted and are used for the Project purposes;

- Note any weaknesses in the internal control environment and in the financial reporting process, and communicate those in the management letter.
- [List others].

### **Scope of the agreed-upon procedures**

The auditor is required to perform the following specific procedures and report on factual findings as outlined:

#### Designated account statement(s) (page xxx)

- Confirm/agree that opening and closing bank balances (in USD and EGP) disclosed on the designated account statement(s) agree to the bank account statement and that such balances reconcile with disclosures in the notes the financial statements.
- Recalculate the closing balance of the designated account statement (in USD and EGP).
- Confirm/agree that the USD denominated amounts disclosed have been accounted for in COM at the historical exchange rate, in line with the procedure as outlined in the IFAD Financial Administration Manual (available on IFAD website).
- Recalculate the foreign exchange gain / loss as included in the designated account statement and agree to the amount disclosed in the Statement of Cash Receipts and Payments.
- Agree replenishments / transfers and direct payments to the bank account statement and IFAD historical transaction information.
- Confirm amounts disclosed for withdrawal applications agree to the information disclosed on the withdrawal application summary.

#### Designated account reconciliation(s) (page xxx)

- Confirm the accuracy of the reconciliation.
- Confirm that the designated account has been managed in line with the provisions of the financing agreement / Letter to the Borrower.
- If applicable, review and determine the reasonability of the explanation for variance as disclosed on the designated account reconciliation.
- Agree disclosed amounts to supporting documentation (bank statements / IFAD historical financial information).

#### Withdrawal application summary

- Determine whether goods and services have been purchased through the SOE mechanism in line with the stipulated SOE threshold.
- Determine whether the expenditures claimed through SOE procedures were properly and appropriately authorized, classified and supported by audit documentation.
- Select a sample of withdrawal applications and confirm the accuracy of the disclosures to the underlying documentation submitted to IFAD.
- Test a sample of Project expenditure transactions from the withdrawal applications and confirming eligibility of expenditure / adequacy of supporting documentation. Summarise all ineligible expenditures identified in the conclusions section.

#### Fixed asset register (page xxx)

- Select a sample of fixed assets from the fixed asset register and confirm the accuracy and completeness of the information included in the fixed asset register.
- Select a sample of Project assets from the floor and confirm that the asset is accurately recorded in the fixed asset register.

#### Rural finance component – loans to beneficiaries

- Select a sample of loans (*10% of loans, sample to cover all governorates*)

- Design and perform procedures to confirm whether loans made in line with approved loan agreements and for eligible expenditure as defined in the IFAD financing agreement.
- Verify beneficiary contributions (provide in cash and in-kind) if applicable.

#### Other

- Confirm the degree of compliance with the Borrower's procurement policy and identify non-compliance.

#### **Public disclosure**

IFAD promotes public disclosure of Project financial information to enhance the level of transparency and accountability. IFAD will disclose Project audit reports, as appropriate, in line with the Fund's disclosure policy. Management Letters issued by auditors are not subject to public disclosure by IFAD. In agreeing to the terms of reference, the auditor explicitly acknowledges IFAD's right to publicly disclose audit reports (audited financial statements and audit opinion) and will issue reports without a limitation of use clause.

To facilitate the public disclosure process, the auditor is requested to submit two separate files as follows:

- Audited financial statements and audit opinion; and
- Management Letter.

#### **Appendices** [list as applicable]

Appendix: Financing/grant agreement(s)

Appendix: Letter to the Borrower

Appendix: IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects

Appendix: IFAD General Conditions for Agricultural Develop Financing

## 22.11 Illustrative financial statements

**[PROJECT NAME]**  
**ANNUAL FINANCIAL STATEMENTS**  
**FOR THE 12 MONTH PERIOD ENDING xxx**  
*[THIS ILLUSTRATION IS BASED ON A NEW PROJECT. FOR EXISTING PROJECT,  
DISCLOSE PRIOR PERIOD COMPARATIVE INFORMATION AND CUMULATIVE  
INFORMATION ON S&U STATEMENT]*

### **Table of content:**

1. Background
2. Management Statement
3. Audit report
4. Statement of Cash Receipts and Payments
5. Budget to Actual Comparison
6. Accounting policies
7. Notes to the financial statements
8. Designated account statement
9. Designated account reconciliation
10. Withdrawal application summary
11. Fixed asset register
12. Action tracker (supplementary)

### **Background**

*Insert Project background information*

- *Indicate Project start date*
- *Indicate reporting lines*
- *Provide overview of categories and components and indicate responsible IAs*
- *Provide description of Project activities*
- *Status update*
- *Indicate the relevant legislation governing the Project activities*
- *Overview of financing facilities – see table below:*

<b>Source of funds</b>			
<i>Facility/agreement number</i>			
<i>Amount approved (indicate currency)</i>			
<i>Undrawn balance at period end</i>			
<i>If applicable, interest rates and repayment periods</i>			
<i>Restrictions on use of funds (e.g. designated account workings, authorised allocation)</i>			

### **Management Statement**

*Insert management responsibility statement*

### **Audit report (illustrative only)**

#### **Independent Auditor's report (Provided on Auditor letterhead)**

Report on the Audit of the Financial Statements

#### **Opinion**

We have audited the financial statements of the xxxx PROJECT) funded by the International Fund for Agricultural Development (loan xxx and grant xxx) and xxx. The financial statements comprise of the Statement of Cash Receipts and Payments, Budget to Actual Comparison, accounting policies and explanatory notes.

In our opinion, the accompanying financial statements of the Project give a true and fair view of the Financial performance and cash flows for the year then ended in accordance with *IPSAS Financial Reporting Under the Cash Basis of Accounting*.

***Basis for Opinion (refer to ISA705 for modifications)***

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA code) together with the ethical requirements that are relevant to our audit of the financial statements in Egypt, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

***Key audit matter***

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon. We do not provide a separate opinion on these matters.

***[insert matters if applicable]***

***Other information***

The Board of Directors is responsible for the other information. The other information comprises the xxxx. Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

***Responsibilities of Management and Those Charged with Governance for the Financial Statements***

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IPSAS and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. Those charged with governance are responsible for overseeing the Project's financial reporting process.

***Auditors' Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements. Whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Project's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were or most significance in the audit or the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

***Public disclosure***

This report has been prepared on request of the Project, the International Fund for Agricultural Development and the xxx, however, the report is a matter of public record and its distribution is not limited.

The engagement partner on the audit resulting in this independent auditors' report is xxx from xxxx audit firm.

## **Independent Assurance Report prepared for IFAD (provided on auditor letterhead)**

This report represents the results and conclusions of the independent assurance engagement undertaken on behalf of IFAD.

### **Background**

[Summarise details of financiers, facilities and amounts of funding provided for the period under review and committed in total to the Project]

### **Audit Objectives and Scope**

An assurance engagement was undertaken in line *ISAE 3000 Assurance Engagements other than audits or reviews of historical financial formation* in order to provide a report to the International Fund of Agricultural Development on the following:

1. Whether the expenditures, reported by the Project are in eligible in terms of the financing agreement with the International Fund of Agricultural Development.
2. Whether the Project has adhered to other terms and conditions of the IFAD Financing agreement / Letter to the Borrower/Recipient and other financial management related requirements related to maintenance of the designated account records.
3. Whether the IFAD specific disclosures are accurate and complete and agree to IFAD financial records (statements etc).

The financial information outlined in pages xxx to xxx was the subject of this assurance engagement.

### **Summary of work performed**

The following specific work was performed in order to address the scope of work:

#### Preparatory

- Review financing agreements and related amendments to determine key financing terms and conditions application to the Project.
- Review the Letter to the Borrower and related amendments to determine key financing terms and conditions applicable to the Project.
- Obtain IFAD financial information related to the Project from the IFAD finance officer, as may be appropriate and required.

#### Designated account statement(s) (page xxx)

- Confirm/agree that opening and closing bank balances (in USD and EGP) disclosed on the designated account statement(s) agree to the bank account statement and that such balances reconcile with disclosures in the notes the financial statements.
- Recalculate the closing balance of the designated account statement (in USD and EGP).
- Confirm/agree that the dollar denominated amounts disclosed have been accounted for in USD at the historical exchange rate, in line with the procedure as outlined in the IFAD Financial Administration Manual (available on IFAD website).
- Recalculate the foreign exchange gain / loss as included in the designated account statement and agree to the amount disclosed in the Statement of Cash Receipts and Payments.
- Agree replenishments / transfers and direct payments to the bank account statement and IFAD historical transaction information.
- Confirm amounts disclosed for withdrawal applications agree to the information disclosed on the withdrawal application summary.

#### Designated account reconciliation(s) (page xxx)

- Confirm the accuracy of the reconciliation.
- Confirm that the designated account has been managed in line with the provisions of the financing agreement / Letter to the Borrower.
- If applicable, review and determine the reasonability of the explanation for variance as disclosed on the designated account reconciliation.

- Agree disclosed amounts to supporting documentation (bank statements / IFAD historical financial information).

#### Withdrawal application summary

- Determine whether goods and services have been purchased through the SOE mechanism in line with the stipulated SOE threshold.
- Determine whether the expenditures claimed through SOE procedures were properly and appropriately authorized, classified and supported by audit documentation.
- Select a sample of withdrawal applications and confirm the accuracy of the disclosures to the underlying documentation submitted to IFAD.
  - Test a sample of Project expenditure transactions from the withdrawal applications and confirming eligibility of expenditure / adequacy of supporting documentation. Summarise all ineligible expenditures identified in the conclusions section.

#### Fixed asset register (page xxx)

- Select a sample of fixed assets from the fixed asset register and confirm the accuracy and completeness of the information included in the fixed asset register.
- Select a sample of Project assets from the floor and confirm that the asset is accurately recorded in the fixed asset register.

#### Rural finance

- Select a sample of loans made to beneficiaries.
- Design and perform procedures to confirm whether loans were made in line with approved loan applications and for eligible expenditure as defined in the financing agreement. (expenditure also included in the approved AWPB).
- Confirm beneficiary contributions (both in cash and in-kind) if applicable.

#### Other

- Confirm the degree of compliance with the recipient's procurement policy and identify non-compliance.

#### ***Conclusions on procedures performed***

[Summarise findings of procedures]

#### ***Management letter***

Other issues related to internal control weaknesses are included in the management letter issued on xxx.

[Signed by engagement partner]

## Statement of Cash Receipts and Payments

Financial statements for		STAR
For the period ending		31 December 2022
Statement of cash receipts and payments		
'000 (thousands)		
<b>TABLE 1: STATEMENT OF TOTAL CASH RECEIPTS AND PAYMENTS</b>		
		Current period
		31 December 2022
Months in period		12
Currency		EGP
'000 (thousands)		
	<i>notes</i>	
<b>TOTAL CASH RECEIPTS</b>		
Proceeds from External financiers	<a href="#">2</a>	-
Proceeds from Borrower	<a href="#">3</a>	-
Beneficiary contribution	<a href="#">4</a>	-
Private sector contribution		-
<b>Total receipts</b>		-
<b>TOTAL CASH PAYMENTS</b>		
Consultancies		-
Credit, Guarantees Fund		-
Equipment and material		-
Goods and services		-
Grants and subsidies		-
Workshop and trainings		-
Salaries, allowances and operating costs		-
<b>Total payments</b>		-
<b>INCREASE/(DECREASE) IN CASH</b>		-
Unrealised gains/(losses)	<a href="#">5</a>	
<b>CASH BEGINNING OF THE YEAR</b>	<a href="#">1</a>	-
<b>CASH AT THE END OF THE YEAR</b>	<a href="#">1</a>	-

## Budget to Actual Comparison

(Note: This disclosure is not mandatory in terms of IPSAS Cash given that the PROJECT budget is not publicly disclosed, however, IFAD requires this disclosure in terms of the IFAD Handbook on Financial Reporting and Auditing of IFAD-Financed Projects)

Financial statements for		STAR			
For the period ending		31 December 2022			
Budget to actual comparison					
'000 (thousands)					
<i>The budget has been prepared on a cash basis</i>					
<b>TABLE 2: BUDGET TO ACTUAL COMPARISON</b>					
		Current period actual	Current period budget	Variance	%
		31 December 2022	31 December 2022		
Months in period		12	12		
Currency		EGP	EGP		
'000 (thousands)					
	<i>notes</i>				
<b>CASH RECEIPTS BY FINANCIER</b>					
IFAD loan		-		-	#DIV/0!
IFAD grant		-		-	#DIV/0!
AF grant		-		-	#DIV/0!
OFID Loan		-		-	#DIV/0!
WFP Grant		-		-	#DIV/0!
AfDB loan		-		-	#DIV/0!
Beneficiary contributions - cash		-		-	#DIV/0!
Beneficiary contributions - in-kind		-		-	#DIV/0!
Government contributions		-		-	#DIV/0!
Private Sector		-		-	#DIV/0!
<b>Total receipts</b>		-	-	-	#DIV/0!
<b>Uses - By category</b>					
Consultancies		-		-	#DIV/0!
Credit, Guarantees Fund		-		-	#DIV/0!
Equipment and material		-		-	#DIV/0!
Goods and services		-		-	#DIV/0!
Grants and subsidies		-		-	#DIV/0!
Workshop and trainings		-		-	#DIV/0!
Salaries, allowances and operating costs		-		-	#DIV/0!
<b>Total payments</b>		-	-	-	#DIV/0!
<b>Uses - By component</b>					
Marketing and Enterprises		-		-	#DIV/0!
Production		-		-	#DIV/0!
Project Management, M&E and KM		-		-	#DIV/0!
		-	-	-	#DIV/0!
<b>Explanation of variances</b>					
Explain variance					

## **Accounting policies**

### **1. Definitions**

- *PROJECT – STAR*
- *Designated account* – Ring-fenced, foreign denominated bank account which is maintained on behalf of the entity. The entity may receive replenishments from the direct account in line with the working as outlined in the IFAD Disbursement Handbook.
- *IFAD* – International Fund for Agricultural Development
- *Impress account* – An account which maintains a record of all cash advances made for staff or Project expenses which are either returned to the Project or justified by valid expenditure documentation.
- *Borrower* – The Borrower is the Government of the Arab Republic of Egypt
- *Add as required*

### **2. Reporting entity**

The financial statements are for the Project. The Project is managed centrally by the NPCU and has operations in various governorates which are reported on as a single entity. The activities of implementing agents are consolidated in the reporting entity.

### **3. Reporting period**

These financial statements include a 12-month reporting period for the current and prior year with additional cumulative disclosure (from Project inception) provided in the notes where appropriate.

### **4. Basis of preparation**

The financial statements have been prepared in accordance with the Standard. The entity complies with all the requirements as outlined in Part 1 of the Standard and as described in the accounting policies. In addition, the entity has elected to adopt the following recommended disclosures in line with Part 2 of the Standard:

- Payments of Third Parties on behalf of the entity (*refer 16. Voluntary Disclosure*)

### **5. Authorisation date**

These financial statements have been authorised for issue by the National Programme Manager on [xxx]. No events after this date are included in the financial statements.

### **6. Presentation currency and level of precision**

The presentation currency is the local currency, EGP. Where appropriate, the designated account balances are reported in USD. The amounts are displayed in million (EGP'000) unless otherwise specified in the notes. Additional note disclosures may quote US Dollar amounts if loans or grants from financiers are denominated in US Dollar.

### **7. Composition of the annual financial statement**

The financial statements comprise the Statement of Cash Receipts and Payments, the Budget to Actual Comparison and the notes. The notes include various other disclosures which are required by external financiers, including IFAD, which may enhance fair presentation and accountability. Additional, supplementary information is indicated as such.

8. Cash basis of accounting

In terms of IPSAS Financial Reporting under the Cash Basis, the entity measures transactions and events only when cash is received or paid by the entity. The measurement focus of the financial statements is balances of cash and changes therein. In terms of the Standard, cash may include cash on hand, demand deposits, impress accounts and cash equivalents. Cash equivalents are investments with a maturity of less than 3 months.

9. Control of cash

In line with the Standard, cash balances reported at the end of the reporting period include all cash which the entity can use or otherwise benefit from at the exclusion of other. Therefore, cash will include all IFAD designated account balances which are maintained in foreign currency (USD) to which access is restricted in line with the financing agreement entered into between the Recipient and IFAD.

10. Materiality and disclosure

The Project discloses material information separately on the face of the financial statements or in the notes. The materiality is assessed in line with the nature and amount of the item. In all instances, payments of third parties on behalf of the Project is considered material and disclosed separately. This will include payments made on behalf of the Project to third parties or received "in-kind". – refer "*16. Voluntary disclosure*"

11. Classification of transactions

Uses of cash receipts are disclosed in line with categories as defined in the Project financing agreements. Additional useful disclosures in terms of components are provided in the notes to the financial statements. Receipts of funds are disclosure based on the source of finance.

12. Foreign currency

Cash receipts and payments arising from transactions in foreign currency are incorporated in the financial statements Statement of Cash Receipts and Payments in EGP by applying to the foreign currency amount the spot exchange rate between the reporting currency and foreign currency at the date of the receipts/payments. The spot rate is defined as the rate of exchange for immediate delivery.

Closing cash balances held in foreign currency are translated to Kyrgyz Soma the spot rate on the last day of the reporting period. Resulting foreign gains / losses are reported as a reconciling item on the Statement of Cash Receipts and payments. Further information with regard to the gains/losses per financier is disclosed in the notes.

13. Additional note disclosures – accrual basis

The notes to the financial statements provide additional information about liabilities and assets which are not presented on the Statement of Cash Receipts and Payments or Budget to Actual Comparison. These may include contingent liabilities related to suppliers, advance payments from contractors, staff loan receivable and any other material items which will enhance the fair representation of the financial statements.

14. Voluntary adoption of Part 2 of the Standard – Payments made to 3<sup>rd</sup> parties on behalf of the Project

In line with Part 2 of the Standard, the Project shall disclose payments made on its behalf to 3<sup>rd</sup> parties. For the Project, this disclosure deals specifically with payments made by the Recipient/beneficiaries for items such as salaries and xxx. Additional note disclosure is provided which outlines the total of such amounts for the period, the nature of activities paid for and the manner in which management has arrived at a value for such payments. In the event that management is of the opinion that the estimation or value may not be fully reflective of the total value received, this will be indicated in the notes.

**ADD AS REQUIRED**

**Notes to the financial statements**

<b>1</b>	<b>Cash and cash equivalents:</b>			
	Cash included in the statement of Cash Receipts and Payments comprise the following amounts:			
		<b>31 December 2022</b>		
		<b>EGP</b>		
	Bank balances per financier			
	IFAD loan			
	IFAD grant			
	GCF grant			
	AF grant			
	OFID grant			
	WFP loan			
	AfDB loan			
	Total('000)	-		
		<b>31 December 2022</b>		
		<b>EGP</b>		
	Bank balance per type of account			
	MoF TSA (NPCU)			
	MSMEDA designated account USD			
	ADP designated account USD			
	Cash on hand			
	add as applicable			
	Total ('000)	-		
		-		equal zero
	Outline description of TSA workings.			
<b>2</b>	<b>Proceeds from external financiers</b>			
	Refer to sources and uses of funds for detail.			
<b>3</b>	<b>Borrower contributions</b>			
	The Government of the Arab Republic of Egypt provided contributions to finance taxes, duties and staff salaries.			
	Add additional useful information.			
<b>4</b>	<b>Beneficiaries' contribution</b>			
	Contributions from beneficiaries include cash contributions of 30% towards the purchase of agricultural machinery. In-kind contributions include labour and materials in relation to irrigation civils works as outlined below:			
		<b>31 December 2022</b>		
		<b>EGP</b>		
	Beneficiaries' in-kind contribution	0		
	Breakdown:			
	Materials			
	Labour			197
		0		
	Provide overview of how in-kind contributions are quantified / valued / measured.			
	Beneficiaries' cash contribution	0		

## Sources and uses of funds statement

<b>TABLE 3(a): SOURCES AND USES OF FUNDS STATEMENT</b>			
	Current period	Current period	
	31 December 2022	31 December 2022	
Months in period	12	12	
Currency	EGP	EGP	
	<u>Sources</u>	<u>Uses</u>	Surplus/Deficift
IFAD loan		0	-
IFAD grant		0	-
AF grant		0	-
OFID Loan		0	-
WFP Grant		0	-
AfDB loan		0	-
Beneficiary contributions - cash		0	-
Beneficiary contributions - in-kind		0	-
Government contributions		0	-
Private Sector		0	-
<b>TOTAL</b>	-	-	-

TABLE 3(b): Summary uses by expenses category								
	Total	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5	Cat 6	Cat 7
IFAD loan	0							
IFAD grant	0							
AF grant	0							
OFID Loan	0							
WFP Grant	0							
AfDB loan	0							
Beneficiary contributions - cash	0							
Beneficiary contributions - in-kind	0							
Government contributions	0							
Private Sector	0							
<b>TOTAL USES BY CATEGORY</b>	0	0	0	0	0	0	0	0
<b>Category 1</b>	Consultancies							
<b>Category 2</b>	Credit, Guarantees Fund							
<b>Category 3</b>	Equipment and material							
<b>Category 4</b>	Goods and services							
<b>Category 5</b>	Grants and subsidies							
<b>Category 6</b>	Workshop and trainings							
<b>Category 7</b>	Salaries, allowances and operating costs							

TABLE 3(c): Summary uses by component category				
	Total	Component 1	Component 2	Component 3
IFAD loan	0			
IFAD grant	0			
AF grant	0			
OFID Loan	0			
WFP Grant	0			
AfDB loan	0			
Beneficiary contributions - cash	0			
Beneficiary contributions - in-kind	0			
Government contributions	0			
Private Sector	0			
<b>TOTAL USES BY COMPONENT</b>	0	-	-	-





## Designated account reconciliations

Financial statements for		STAR	
For the period ending		31 December 2022	
Designated account reconciliation			
<b>TABLE 5.1: IFAD LOAN DESIGNATED ACCOUNT STATEMENT - MSMEDA</b>			
IFAD Financing agreement nr:			
Bank account nr:			
	<b>SECTION 1</b>		<b>USD</b>
1	Total advanced by IFAD to designated account		
2	Less Total amount recovered by IFAD		
3	<b>= Outstanding amount advanced by IFAD</b>		-
	<b>SECTION 2</b>		
4	Balance of designated account as per bank statement		
5	Plus balance of operating accounts		
	Plus cash on hand		
	= Period end cash balance		-
6	Plus amount claimed for the period		-
	<i>Provide reasons - not yet claimed</i>		
8	Plus amounts claimed in period not yet credited at date of bank statement and claimed after date of bank statement		-
9	Less: interest earned		
10	<b>= Total advance accounted for</b>		-
11	<b>Explanation of difference between outstanding advance (line 3) and advance accounted for (line 10)</b>		-
	Insert explanations		

**TABLE 5.2: IFAD LOAN DESIGNATED ACCOUNT STATEMENT - CIB**

IFAD Financing agreement nr:									
Bank account nr:									
	<b>SECTION 1</b>								<b>USD</b>
1	Total advanced by IFAD to designated account								
2	Less Total amount recovered by IFAD								
3	<b>= Outstanding amount advanced by IFAD</b>								-
	<b>SECTION 2</b>								
4	Balance of designated account as per bank statement								
5	Plus balance of operating accounts								
	Plus cash on hand								
	= Period end cash balance								-
6	Plus amount claimed for the period								-
	<i>Provide reasons - not yet claimed</i>								
8	Plus amounts claimed in period not yet credited at date of bank statement and claimed after date of bank statement								-
9	Less: interest earned								
10	<b>= Total advance accounted for</b>								-
11	<b>Explanation of difference between outstanding advance (line 3) and advance accounted for (line 10)</b>								-
	<i>Insert explanations</i>								

## Withdrawal application summaries

Financial statements for STAR  
 For the annual period ending 31 December 2022  
 Withdrawal application statement  
 '000 (thousands)

TABLE 6.1: WITHDRAWAL APPLICATION STATEMENT - IFAD LOAN

Withdrawal application number	Type (Direct / Replenish)	Implementer (MSMEDA, ADP, NPCU)	Date	1	2	3	4	5	6	7	Total local currency	Designated account currency equivalent	Value date (transfer to project)	Rejected by IFAD / Recovery in closing period	Net reimbursed	Net reimbursed	Value date exchange rate	
<i>EGP</i>												<i>USD</i>	<i>USD</i>	<i>USD</i>	<i>Loan currency</i>			
<u>Approved withdrawals</u>																		
											-			-				
											-			-				
											-			-				
Total				-	-	-	-	-	-	-	-			-	-	-		
<u>Pending withdrawals</u>																		
											-			-				
											-			-				
											-			-				
Total				-	-	-	-	-	-	-	-			-	-	-		
<u>Category key:</u>																		
Consultancies																		
Credit, Guarantees Fund																		
Equipment and material																		
Goods and services																		
Grants and subsidies																		
Workshop and trainings																		
Salaries, allowances and operating																		

**TABLE 6.2: WITHDRAWAL APPLICATION STATEMENT - IFAD GRANT**

Withdrawal application number	Type (Direct / Replenish)	Implementer (MSMEDA, ADP, NPCU)	Date	1	2	3	4	5	6	7	Total local currency	Designated account currency equivalent	Value date (transfer to project)	Rejected by IFAD / Recovery in closing period	Net reimbursed	Net reimbursed	Value date exchange rate
												<i>EGP</i>	<i>USD</i>	<i>USD</i>	<i>USD</i>	<i>Loan currency</i>	
<b>Approved withdrawals</b>																	
											-			-			
											-			-			
											-			-			
Total				-	-	-	-	-	-	-	-	-		-	-	-	-
<b>Pending withdrawals</b>																	
											-			-			
											-			-			
											-			-			
Total				-	-	-	-	-	-	-	-	-		-	-	-	-
<b>Category key:</b>																	
Consultancies		1															
Credit, Guarantees Fund		2															
Equipment and material		3															
Goods and services		4															
Grants and subsidies		5															
Workshop and trainings		6															
Salaries, allowances and operating		7															

**TABLE 6.3: WITHDRAWAL APPLICATION STATEMENT - Other grants managed by IFAD**

Withdrawal application number	Type (Direct / Replenish)	Source (AF, OFID, GCF)	Implementer (MSMEDA, ADP, NPCU)	Date	1	2	3	4	5	6	7	Total local currency	Designated account currency equivalent	Value date (transfer to project)	Rejected by IFAD / Recovery in closing period	Net reimbursed	Net reimbursed	Value date exchange rate	
													EGP	USD		USD	USD	Loan currency	
<b>Approved withdrawals</b>																			
												-	-		-				
												-	-		-				
												-	-		-				
Total					-	-	-	-	-	-	-	-	-		-	-	-	-	
<b>Pending withdrawals</b>																			
												-	-		-				
												-	-		-				
												-	-		-				
Total					-	-	-	-	-	-	-	-	-		-	-	-	-	
<b>Category key:</b>																			
Consultancies																			1
Credit, Guarantees Fund																			2
Equipment and material																			3
Goods and services																			4
Grants and subsidies																			5
Workshop and trainings																			6
Salaries, allowances and operating																			7

**Fixed asset register**





## 22.12 Appendix 1

Financial: actual financial performance by financier; by component and disbursements by category

*Table 1: Financial performance by financier (USD '000)*

Financier	Appraisal	Disbursements	Percent disbursed
IFAD Grant			
IFAD Loan			
AF Grant			
OFID Loan			
AfDB Loan			
WFP Grant			
Government			
Beneficiaries			
Total			

**Table 2: Financial performance by financier by component (USD '000)**

Component	IFAD Loan			IFAD Grant			Add column for each source		
	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%

Total									

**Table 3: IFAD Loan disbursements (USD, as at [Insert date: dd-m-yy])**

Category	Category description	Original Allocation	Revised Allocation	Disbursement	W/A pending	Balance	Per cent disbursed
I							
II							
III							
IV							
	Initial deposit						
	Total						

Present separate table for each IFAD managed finance facility (IFAD Loan, IFAD Grant, etc.)

**22.13 Petty Cash forms**

**Petty cash request form**

Date:

Requested by:

Signature of requester:

Mode of payment: (tick selected):

- Reimbursement
- Advance

Description of purchases (goods/services)	Unit price	Quantity	Total cost**	Activity code	Explanation / Comments
<b>TOTAL AMOUNT</b>					

\_\_\_\_\_  
Approved by  
Finance Manager

\_\_\_\_\_  
Processed by  
Accountant

\_\_\_\_\_  
Payment received by

\*\* Attach supporting document (invoice, receipt, etc.)

**Petty cash reconciliation**

Date of reconciliation:

**Part 1. Petty cash reconciliation**

Petty cash balance brought forward (a)	_____
Replenishments during the current month (b)	_____
Total petty cash balance (c = a + b)	_____
Disbursements during the current month (d)	_____
Petty cash book balance (e = c - d)	_____
Cash count balance (f) - see part 2. below	_____
Difference (G = E - F)	_____

**Explanation of Difference**

---

**Part 2 - Cash Count**

Description	Quantity	Total amount
<b>Total in EGP</b>		

Counted/reconciled by (Accountant):  
Reviewed by (Finance Manager):  
Date:



**22.14 Vehicle and fuel documents**

**VEHICLE LOG**

Driver:

Vehicle registration number:

**Trips**

Date	Name	Trip purpose	Distance	Signature	
			km	Passenger	Driver

**Refueling**

Date	Speedometer reading	Fuel voucher number	Petrol station	Amount	Invoice number

Attach approved travel requests, fuel invoices.

**Vehicle History Record**

Vehicle registration number \_\_\_\_\_

Assigned driver \_\_\_\_\_

Date	Repairs			Service & maintenance			Insurance			Fitness tests	
	Description of repair	Garage	Cost	Description of service	Garage	Cost	Type	Period covered	Cost	Checked by	Cost

**Report accidents in the space below, providing all relevant details for each occurrence:**

Date:

Place:

Name of driver:

Circumstances:

Damage to Project vehicle:

Damage to other vehicles:

Injuries (indicate name of victims and describe injuries):

Insurance settlement:

**22.15 Implementing partners – subsidiary agreements / MOUs**

The Project will enter into agreements with Implementing Partners. The following recommended financial management roles and responsibilities are proposed for inclusion:

*The Project shall:*

- ✓ Provide financial management support to the implementing agency;
- ✓ Ensure that implementing agency performs its duties and enjoys rights indicated in the Subsidiary Agreement.
- ✓ Provide financial management training at Project start-up (if required) and annually thereafter in order to strengthen the financial management capacity of the implementing partner.

*The implementing partner shall:*

- ✓ Implement sound financial management practices and procedures to the satisfaction of the PROJECT.
- ✓ Ensure that all financial management staff responsible for dealing with the Project attend financial management training (hosted by PROJECT) at Project start-up and annually thereafter.
- ✓ Ensure that a qualified and experienced accountant is responsible for dealing with the financial management aspects of the PROJECT for the duration of the agreement.
- ✓ Inform the PROJECT Finance Manager of any finance staff vacancies.
- ✓ Perform an annual financial management self-assessment (questionnaire template to be provided by IFAD Finance Officer) and submit the results to the PROJECT Finance Manager. Cooperate with the PROJECT Finance Manager to address identified shortcomings within a specified timeframe.
- ✓ Assist the PROJECT with the annual budgeting process by preparing a budget for the component/sub-component which it is required to implement. For this purpose, the PROJECT Finance Manager will provide a budget template which should be used. In addition, strictly

- adhere to deadlines for submission of inputs.
- ✓ Retain all Project related document (invoices, bank statements, supporting documentation) for inspection. Documents should be retained in line with the terms and conditions as outlined in the IFAD General Conditions for Agricultural Development Financing.
  - ✓ Undertake monthly internal budget to actual monitoring and take corrective action as required.
  - ✓ Respond to queries / resubmit information as requested by the PROJECT Accountant or Finance Manager in a timely manner.
  - ✓ Conduct pre- and post investment monitoring activities to confirm eligibility of expenditures (loan disbursements to end-beneficiaries) – rural finance partners
  - ✓ When required, submit a written request for funds to the NPCU National Programme Manager. Written requests should be signed by the duly authorized representatives. Request letters should clearly indicate the related budget activity as included in the PROJECTs approved AWPB (and related procurement plan if applicable).
  - ✓ Submit a monthly reporting template to the NPCU Finance Manager (refer 22.16) for the purposes of justifying advances. Attach bank statements, a bank reconciliation and supporting documentation.



## 22.16 Monthly reporting template – implementing agencies

<b><u>MONTHLY REPORT- IMPLEMENTING AGENT</u></b>					
<b>Implementing agency:</b>					
<b>Month-end:</b>					
		<b>EGP</b>			
		<b>Total</b>			
Opening bank balance			<i>Attach bank statement</i>		
Opening petty cash			<i>Attached signed petty cash reconciliation</i>		
Plus advances from NPCU			<i>Attach bank statement</i>		
Less expenses (Note 1)		0	<i>Provide detailed list with supporting documentation</i>		
= Closing bank balance			<i>Attach bank statement</i>		
Closing petty cash			<i>Attached signed petty cash reconciliation</i>		
<i>Note 1- detailed expenses listing</i>					
Description	Amount (EGP)	Component	Category	Source of Finance	Supporting doc ref#
<div style="text-align: center; border-top: 3px double black; margin-bottom: 10px;"></div> Authorised signatory: <span style="margin-left: 100px;"><i>Indicate name and title</i></span> Date:					

*Submit the report together with copies of bank statements, petty cash reconciliation, invoices, supporting documentation. Cross-reference supporting documentation to report. Include 3-month forecast cash flow need.*

## 22.17 Request for funds form

<b><u>REQUEST FOR ADVANCE FORM</u></b>					
<i>(Only submit together with monthly report – see 22.16)</i>					
Implementing agent:					
Date:					
Summary of advances/justification:	EGP received	Date received	EGP expenses	% Justified	Supporting doc ref
Advance #1					
Advance # 2					
<p>We certify that at least 70% of the most recent advance has been justified (via providing supporting documentation) and 100% of all previous advances. We duly request an advance of xxx EGP which is equal to forecast expenditure for the next 3 months (in line with AWPB attached).</p> <p>Please disburse the advance to our bank account (details which agree to the signed subsidiary agreement):</p> <p><i>ADD BANK DETAILS</i> <i>ATTACHED STAMPED BANK LETTER WHICH INDICATES BANK DETAILS / AUTHORIZED SIGNATORIES</i></p> <p>Date:</p> <p>Signed:</p>					

<p><b>NPCU checks to be performed on request for advance form received:</b></p> <ul style="list-style-type: none"> <li>✓ Review supporting documentation which confirm advance justification</li> <li>✓ Compare bank details to stamped bank letter, accounting software (supplier bank details module)</li> <li>✓ Confirm authorised signatory</li> <li>✓ Confirm that 100% of all previous advances and 70% of current advance has been justified and expenses in NPCU accounting system</li> <li>✓ Submit to Finance Manager for review and approval before preparation of payment request</li> <li>✓ Submit payment request to National Programme Manager for approval</li> </ul>
---

## 22.19 Accounting software ToR

### **Background**

[INSERT]

In order to comply with IFAD's reporting requirements, the NPCU will need to procure an Accounting Software to be used by the NPCU centrally and the 3 GPCUs:

- to collect, analyze, store, and disseminate information that is useful for decision making
- to provide transparency and accountability of the Project activities,
- to provide timely reports, help detect errors and deficits during Project implementation and indicate necessary corrections, and
- to prepare and present progress reports to the PCU and Project financiers and stakeholder

***It must be noted that the NPCU will be responsible for the management of a few IFAD Projects. It is therefore important that the accounting software be scalable to incorporate additional Project modules / users as the NPCU structure expands.***

### **Specifications of the Software**

#### **General features**

The accounting software should be configured to have ring-fenced Project modules with the ability to assigned users to each Project module.

The Accounting software should be configured as a modular solution and the different modules should be suitably integrated, the following are the basic modules:

1. Chart of Account
2. Accounting
3. Financial Reporting
4. Budget
5. Assets
6. Withdrawal Application
7. Contract Management and integrating other modules.
8. Payroll sub-system
9. Purchases sub-system classifying the levels of the Chart of Accounts into six level collectively, partially and individually when necessary;
  - Type (Component – Location – Sub-component-Category-Sub-category-Activities)
  - General Ledger Account
  - Subsidiary Ledger Accounts
  - Subsidiary -1 Accounts, to end up with auxiliary accounts.
10. Handling all the financial transactions of the Project according to the chart of account, that is used to:
  - Capture the financial data under the appropriate headings
  - Classify and group financial data for the various financial reports.
11. The structure of the Chart of Accounts caters for data to be captured by (per Project module):
  - the Project components and sub-components
  - expenditure items under each component and sub-component
  - The IFAD disbursement category for the Project
  - Sources of funding
12. All vouchers used in the system are based on double entries.
13. Ability to account under different bases of accounting (cash basis, accrual basis).
14. Using adjusting entry when needed to reverse and correct entries
15. Handling the definition of various currencies used by the system
16. Holding multi – donor's information,
17. Recording the daily currency rates for all the predefined currencies

18. Recording the Grant number and source of fund.
19. Capacity to customize reports by e.g. exporting data to excel, word or PDF formats.

### **Financial reporting**

20. Produce the periodic Financial Reports as requested by IFAD:
  - Statement of Cash Receipts and Payments per Project components showing quarterly, yearly and cumulative balances for the period and cumulative;
  - Statement of Cash Receipts and Payments per Project categories showing quarterly, yearly and cumulative balances for the period and cumulative;
  - Summary of sources and uses by category - by financier
  - Summary of sources and uses by component – by financier
  - Statement of budget to actual comparison per category and component,
  - Statement of Designated Account reconciling period-opening and end balances;
  - Statement of Project commitments, i.e., the unpaid balances under the Project's signed contracts;
  - Statement of fixed assets,
  - Statement of Cash Payments using Statement of Expenditure (SOE).
  - Bank accounts movements and balances
  - Petty cash statements including cleared and un-cleared balances
  - Summary of withdrawal applications per financier

***(Attach the illustrative financial reports as outlined in the PIM)***

***(Attached the IFAD Handbook on Financial Reporting and Auditing of IFAD-Financed Projects)***

21. Produce other financial statements on a quarterly, semi-annual and annual basis, which are as follows;
  - Journal and Payment Vouchers
  - Statement of Special Accounts
  - Contracts monitoring forms
  - Contracts register
  - Contracts paid and committed amounts
22. Progress report (physical) and not financial by contract, component and category (all Project units). This request will involve:
  - A function will be designed and developed to allow the user to define the planned (estimated) physical % completion on each period (monthly, year, Quarter).
  - A function will be designed and developed to allow the user to enter/modify the actual reported on physical % completion on each period (monthly, year, Quarter).
  - An Inquiry function to display physical progress on each contract.
  - A report showing detailed physical progress reporting per period
  - A report showing up-to-date physical progress reporting per period
23. A fixed asset listing report indicating all relevant information (such as description, location, quantity, tag number, responsible person, purchase price, source of finance etc.) which needs to be updated and include any discrepancies between the regular physical inspection and the accounting records.

### **Specified Features**

#### **Procurement**

24. Keeping detailed records for all the suppliers, contractors and consultants (ID number, Name, Nationality, Address, Phone, Fax, e-mail, contact name "position, phone number, fax, bank account bank address") and other information needed, and the accounting system should provide information regarding the procurement cycle that take place before contract signature and report on the following:.

- Prior review thresholds;
- Procurement methods thresholds;
- Procurement reference;
- Activity description;
- Component (as per the description schedule (1) of the Grant);
- Category (as per disbursement schedule "2");
- Estimated amount;
- Procurement method used;
- Prior/Post review;
- Date of issuance of advertisement;
- IFAD No Objection on bidding documents (Goods/works) or RFP (consultants);
- Date of bid (Goods/works) or RFP (consultants) submission;
- Bid opening date (goods/works) or Financial Proposal opening date(consultants);
- IFAD No objection to evaluation report;
- IFAD no objection to contract draft;
- Date of submission to the IFAD of the Copy of signed contract;
- The system has to provide a process and control for the quoted contract analysis (technically and financially) selected contracts approval.
- The system has to enable entering the financial and other payment (e.g. deliverables, net of VAT contract value, related category) terms stated in the contract, so that to be utilized for matching when executing the payment against the contract.
- The system has to provide a tool that will monitor the execution of contract in accordance with time frame specified in the approved contract and to report any delays.
- The system should provide the matrix to ensure the following before any payment against the contract: 1-obtaining of approved deliverables certificate 2-advance payment has to be made against valid bank guarantee 3- obtaining of IFAD no-objection whenever that is required 4-the amount to be paid is matching with financial terms specified in the contract.
- The system has to create the accounting double entry by considering the following: 1- allocation of the amount paid among the financiers in accordance with the designated percentage for each financier as stated in the agreement 2-amount allocated to donor is net of VAT 3-DR/CR related current accounts of financier(S) when required 3- allocation to related category and component.
- Provide a feature for selecting the appropriate form for reporting the amount related to donor.
- Provide a feature for foreign currency conversion.
- The system has to provide the report of the contract payments as per contract payment monitoring form C-11.
- The system has to provide the report of the contracts register as per contracts register form C-10.
- All contract related data should be entered at first (date of signature, date of completion, contract amount, and contract amendments and payments terms).

## **Purchases**

The Project has methods of purchasing for each type of procurement as explained in IFAD guidelines for procurement and letter to the recipient including the ceiling for obtaining IFAD no objection (prior or post) which is explained in the letter to the recipient and the requirements for Purchase sub-system are:

1. The system has to provide an option for implementing the vendors approved list system for particular goods and services purchase.
2. The direct purchase to be for particular limit and above that must be routed through the 3 ways match (PR/PO, Receiving Report and invoice for a certain value and above that certain value the 4 ways match system can be applied (PR/PO, Quotation analysis, receiving report and invoice). The system should provide the capability to enter and update the limits.

3. The system has to provide matrix that ensures the following before any payment: 1- obtaining of IFAD no objection whenever that is required, 2- a valid bank guarantee in case of advance payment
4. The system has to create the accounting double entry by considering the following: 1- allocation of the amount paid among the financiers in accordance with the designated percentage for each financier as stated in the agreement 2-amount allocated to donor is net of VAT 3-DR/CR related current accounts of financier(S) when required 3- allocation to related category and component.
5. Provide a feature for selecting the appropriate form to report the amount as per IFAD required form
6. Provide feature for foreign currency conversion.

### **Payroll**

The Project has a payroll section and is seeking to have the payroll section to be the focal point responsible for employees' entitlements, benefits, advances, deductions and the payroll system to be integrated with the general ledger to create all related financial transactions from and to the payroll system. The system requirements are:

- A. The system has to enable the implementation of the staff manual and the Project by-laws, contracts or labour office law for: 1- salaries and allowances 2-Computation of the vacation dues 3-allowances computation 4-topping computation 5- after service benefits computation 6- penalties and absence deductions 7-social insurance deductions computation 8- Periodic deductions for personal advances.
- B. The system has to enable the recording of salaries directly paid by state government.
- C. The system has to create the accounting double entry by considering the following: 1- allocation of the amount paid among the financiers in accordance with the designated percentage for each financier as stated in the agreement 2-amount allocated to donor is net of VAT 3-DR/CR related current accounts of financier(S) when required 3- allocation to related category and component.
- D. Provide a feature for selecting the appropriate form to report the amount
- E. Provide feature for foreign currency conversion.

### **General Ledger**

The Project is planning to have all of the transactions related to the contract, purchases and payroll to be created in the related sub-modules as stated above and having the GL module to monitor and control these transactions. Other transactions have to be conducted directly in the GL. In addition to that the GL is needed to create the required report and financiers fund management. The requirements for GL are:

- GL has to allow for entering the approved annual budget and to provide actual vs. budget detailed and summary reports on monthly, quarterly, semi -annually, yearly and year to date report.
- The system has to provide a tool to control the actual expenditure of any category not to exceed 120% of budgeted amount unless an approval of the Project is obtained.
- The system has to allow the revising and re-allocation of budget after getting IFAD no-objection.
- Design of chart of accounts to cover the following: 1-PCU for consolidation, 2-The SPCUs, -3 Components ( as parent and children), 4- office location ( PCU and each SPCU), 5- category (as parent and children), 6- all the sources and uses of funds items.
- The chart of accounts maintenance to be the sole responsibility of the Finance Manager.
- The GL to be interfaced with the sub-modules in the PCU and SPCUs offices levels.
- Application of the reimbursable advances system for all of the SPCUs. Such a system is to allow the generation of internal withdrawal application and creation of the related entry in both PCU that generates the IWA.
- Recording of the initial deposit and the initial deposit recovery and related entries
- Create the different types of the withdrawal applications (i.e. replenishment, reimbursement, direct payment and special commitment).

- For replenishment withdrawal application the following parameters are to be considered: 1- to be created only after closing of the month, -2 to be only for donor related spending and separate withdrawal applications for co-financed local counterpart with each donor, - 3 to be only for the items actually paid (no payables or accruals), 4- to use the updated SMART SOEs form 102/A and 101/A.
- For reimbursement withdrawal application all of the parameters mentioned in j- above to be considered except that to use form 101 B and 102 B
- For the direct payments withdrawal application the following parameters should be considered: 1- can be generated in any time (even can be before closing of the month), -2 To be only for suppliers, contractors and consultants those performed a particular job and related amount falling due (i.e. payable), -3 the Finance Manager has to be provided a tool enabling to select the item to be included in the in direct payments withdrawal application (as per Project documents).
- The system has to create all of the entries for each withdrawal application form at closing of the monthly entries and up to receiving of the fund. Noting the importance of recording any withheld amounts and their release or not in the future.
- Recording of individual financiers transactions (e.g. financier related bank accounts, funding by each financier, inter-financier, in kind contribution, tax and duties exemptions).
- The system to be able to provide multi options for foreign currency translation for reporting this multi options can be provided by 1- spot rate, 2- FIFO-Layer.
- The system should generate: 1- Sources and Uses of Funds and all financial reports mentioned before.
- In addition to previous reports the system should generate following reports: 1- status of funds for each donor, 2- historic transaction for each donor, 3- donors grants utilization and disbursements, 4- GOS disbursement and utilization, progress on AWPB, 5- financial performance by category by financier, 6- financial performance by component by financier, 7-withheld amount, special accounts reconciliation.
- The system should provide a tool for users defined reports

### **Interface with Ministry of Finance Treasury Single Account system**

*Update this section once the NPCU has more details on the reporting functions of the MoF system*

Project payments will be made via the Government Payment System using a Treasury Single Account. It is required that the Project reconcile its accounting records with the Treasury General ledger (unique Project code allocated). For this purpose:

- Consider the format in which the Ministry of Finance Controller can provide transaction listings / reports from the MoF system and design an import tool to allow for the importation of the data into the accounting software for the purposes of reconciliation.
- Generate exception reports which flag reconciling items between the accounting software and the MoF systems reports.

### **Off-line capabilities**

- The accounting software to include off-line templates for use by GPCU. NPCU user rights to allow for the upload, approval and posting of journals as per the off-line template.

### **Security**

- Handling the required security according to predefined system security and privileges.
- The Project should have adequate security features including password protection not possible to delete a posted transaction, controlled access
- User access to be allowed on a Project module basis.
- Includes proper backup and system maintenance procedures.

### **Training and support**

- Training the NPCU and GPCU staff on all features of the software
- Provide a complete and a user-friendly manual
- Configuration and Full installation of the software in the NPCU and 3 GPCU (number of desktops = xxx)

### **A. Delivery timetable**

The commencement of services for this assignment is expected to be no later than [xxx]

The main objective of the firm is to deliver well designed software, that facilitates reflection of Project needs and be designed to provide the financial information required by all interested parties and fulfil the legal and regulatory requirements of the Government of Egypt.

## Chapter 9: Procurement and Contracting

### I. Assessment of Procurement Systems

- A. Country Procurement Systems Assessment*
- B. Programme Specific Assessment*

### II. STAR Procurement Arrangements

- A. General Considerations*
- B. Institutional Arrangements*
- C. Applicable Procurement Rules and Regulations*
- D. Procurement Planning*
- E. Procurement Methods and Thresholds*
- F. Definition of the applicable Procurement methods for Goods, Works and Non-consulting Services*
- G. IFAD Prior Review Thresholds*

Appendix 1: Procurement Procedures

Appendix 2: Measures of Combating Corruption

## **I. Assessment of Procurement Systems**

### **A. Country Procurement Systems Assessment**

1. Procurement Regulations applicable to STAR: IFAD's procurement guidelines specify that national procurement systems will be used under the conditions that the systems are assessed as satisfactory or better. The Programme will adopt the new Egypt Public Procurement Law No 182 for 2018, the Procurement Regulations (to be issued soon), and the IFAD Procurement Guidelines 2010. National systems will apply to all procurement except international competitive bidding (ICB) for contracts above an agreed threshold. The IFAD guidelines state that ICB procurement will follow the procedures recommended by the World Bank. Egyptian national procurement systems can be relied upon to undertake procurement below the agreed ICB thresholds.

2. Legal Aspects and Procurement Practices: Public procurement in Egypt is regulated by New Public Procurement Law No 182 for 2018 replacing the Tender Law No. 89 adopted in 1998 (the PPL). The Egyptian Parliament adopted Law 182/2017 to make governmental procurement more fair and transparent by subjecting it to the principals of:

- Open Announcement.
- Governance.
- Free Competition.
- Equal Opportunity.
- Innovative Approaches.
- Enabling Environment for Micro, Small and Medium Enterprises.
- E-Procurement
- Equitable Evaluation.

3. Clearly, Law 182/2018 has improved the competitive nature of governmental procurement in Egypt as follows:

- The new Public Procurement Law has taken good steps toward aligning the public procurement system with international standards. Notable developments include solidifying the scope of application of the law by limiting informal exclusions of competitive and transparent procurement procedures, enabling the use of e-procurement, and introducing framework agreements. Furthermore, the new law includes provisions on institutional arrangements in procuring entities, adds a code of conduct for public officials and employees and private sector participants and addresses conflicts of interest in public procurement.
- The New Law create the Public Procurement Complaint Office that will be in charge of dealing with all complaints submitted to it in relation to the violation of any of the provisions of this Law or the Executive Regulations; where its decisions shall be binding on the parties of the complaint. The contracting authority shall then execute the decision within 7 days from receiving it without prejudicing the contractor's right to resort to court.
- Prohibits resorting to the splitting of contracts in order to circumvent the conditions, rules and procedures.
- The New Law kept the methods of public procurement that existed under the Tender Law and supplement them with some new and special mechanisms such as the 'two-stage tender', different procurement methods for private sector initiatives, as well as different procurement methods for complex transactions and contracts of interrelated and multilateral nature.
- Obligates the procuring entities to use the Standard Bidding Documents that will be issued by the Egyptian Public Authority for Governmental services.
- Establish the procedures for determining the cost estimate that includes market survey and previous similar purchases (these could be from the procuring entity or other sister organization).

- Establish a standard procedure for evaluating the abnormally low bids.
- Obligates procuring entities to publish all tender opportunity on the newly established Electronic Procurements portal that include bidding documents, evaluation reports and the recommendations for awarding. Moreover, the procuring entities should publish its Procurement Plans.
- The New Law recognize the Contracts for consultancy services and other professional services, such as audit, training, and certain computerization assignments, etc. The Law stipulated that it shall be tendered through limited tendering, two-stage tendering or local tendering. The tender shall be evaluated according to the points system. The terms of the tender shall include the evaluation criteria and the minimum requirements for acceptance.
- The New Law allows the administrative authority to conduct a prequalification check for interested bidders to verify their technical, financial, administrative and human resources capabilities. Only prequalified participants will be allowed to bid.
- Obligates procuring entities, before initiate the procurement process to verify the availability of funds allocated to them, provided that the terms of the proposal include the fact that the contract is within necessary actual requirements.
- The Law states that each administrative authority shall have a registry for the names, details and ranks of the contractors according to their financial and technical capabilities, business reputation, track record, professional licenses and the number of their bank accounts. This registry will be updated annually. In the meantime, the General Authority for Government Services shall have a registry for those banned from dealing with any of the administrative authorities due to their bad track record.
- The procuring entity shall run an annual evaluation of contractors at the end of each fiscal year or at the end of the contract term. The evaluation results shall be published on the Public Procurement Portal, including the names of the contractors who have violated the terms of the contract and the penalties that have been imposed on them.
- Obligates the procuring entity to receive the contracting place on the dates specified in the contract if it is compatible with the agreed specifications and conditions. The contractor, in case of failure by the authority may submit a petition to the Accounting Officer (the minister or governor) to form an impartial committee to study the reasons for inaction. In order to follow up, a copy shall be submitted to the general contracting office for complaining.
- Introduces techniques specifically to promote greater opportunities for SMEs in the public procurement market, either directly or through subcontracting opportunities. Additionally, the law mandates the application and full rollout of e-procurement, an SME-friendly tool that facilitates participation of SMEs in public procurement, while boosting transparency.

At the same time, more improvements could still be made as regulatory framework suffers from a number of weaknesses the most important ones being:

- **Absence of Delegation:** Even though delegation of authority is legally permitted under the law, there are no guiding principles on delegation. Lack of these guidelines in practice has directed all procurement decisions to the highest authority. This has caused delays and inefficiencies in the implementation of important programs. Development and issuance of guidelines on delegation of authority and approval thresholds can provide GOE with more efficient procurement.
- The use of two-envelope process for the procurement of Goods, Works and Non-consulting Services.
- Allow using the point system for the evaluation of Works, Goods and Non-consulting services procurements, while it is more appropriate to restrict it to the simple

pass/fail system to avoid any subjective evaluation and achieve highest level of fairness.

- There are no rules or written guidance that defines the nature of each procurement method and its applicability in different procurement actions. As an example, the Law provides for choosing one of the two main procurement methods of Public Tender and Public Practices Negotiations through a decree issued by the Accounting Officer according to the circumstances and nature of the contract, yet, there is no rule or written guidance on how to determine “the circumstances and nature of the contract” nor on the criteria to be used to make the final contract award decision in the Public Practices Negotiations. This ambiguity can result in loss of efficiency and lack of public confidence in the procurement process.
- There are no clear limits on the nature of communications that can occur when bidders are requested to provide additional information during the technical evaluation. Permitting broad and unrecorded exchanges of information between the bidder and the Evaluation Committee without specific criteria and strict guidelines could affect the transparency and fairness of the bid evaluation process.
- The New Law is silent on the issue of Community-based procurement. In order to achieve social and employment goals and a sustainable delivery of services in situations which are unattractive to private enterprises, such as small value health care contracts, agricultural extension and informal education services, considerations need to be given to a selection method that draws on the participation of the beneficiaries in the communities.

## **B. Programme Specific Assessment**

4. The review of the procurement system in the Ministry of Agriculture and Land Reclamation, the lead implementing agency, indicated that the procurement capacity is inadequate. Common areas of weakness in procurement arrangements include: (a) the need for improvement of procurement practices; (b) weak capacity at all levels; (c) Instructions to bidders, qualification, evaluation, award criteria, and contract management are not sufficiently clear; (d) the contract conditions can be improved to achieve a more equitable balance between employer and contractor/supplier. A major shortcoming that leads to awarding contracts to nonperforming contractors/suppliers is not applying a post-qualification process on the nominated contractor/supplier for award. The overall assessment is moderately unsatisfactory. The details of the review are as follows:

5. **Procurement planning:** The legal framework provides thorough guidance on procurement planning, linking the planning process up with the budgeting process, hence providing an important first step towards actual integration of procurement planning in the budgeting process. According to the legal framework, all procurement shall be within the approved budget of the PE.

6. At the same time, the procurement planning process suffers from a number of weaknesses the most important ones being:

- a. The procurement planning was typically limited to a list of contracts and estimated budgets. In general, little or no consideration was given to timing, contract packaging, procurement methods.
- b. Although procedures supporting systematic procurement planning have been established, data from the interviews indicates that these are far from always being complied with. While it has not been possible to assess the percentage of contracts which are not part of procurement plans, the low share of procurements conducted through open tendering clearly indicates that a large part of procurements is undertaken on an ad hoc basis, by direct procurements, thus suggesting a lack of procurement planning in the PE and operational units.

- c. Despite agreement on an annual budget and improved predictability of disbursements, gaps remain in the system. Interviews reiterated that release of funds to meet contractual obligations is still irregular. Consequently, payments for goods, works, and services are frequently delayed.
  - d. Observations also show that spending units sometimes do not receive funds until the end of the fiscal year in May-June. The funds must then be disbursed quickly, which strains adherence to procedures. Choices in procurement method are limited because of the insufficient time for open tendering. If more restricted procedures are not approved (shortage of time being the weak justification), financial resources go unused.
7. **Procedures for pre-qualification:** As provided by the Law, the pre-qualification procedure is allowed based on the nature of procurement. In relation to the practice of the procuring entities for pre-qualification spelled out in the law, it is limited to registration of vendors.
8. **Preparation of bidding documents:** The New Procurement Law indicated that the Egyptian Public Authority for Governmental services will issue the necessary Standard Bidding Documents (SBDs) covering procurement of goods, works and services. However, such documents are not issued until now. The procuring entity lack capacity in preparation of Bidding Documents resulting in poor quality evaluation criteria, general and special conditions and technical specifications, which, leads to poor quality procurement of goods, works and services. In some cases, Allegation exists that technical specifications are tailored for a specific manufacturer which leads to de facto SS.
9. **Management of bidding process from advertisement to bid opening:** In the procuring entity, compliance with the mandatory steps were existed as follows:
- a. Advertisement for open tenders is mandated in at least one daily newspapers of wide national circulation and in the Electronic Procurements portal.
  - b. The minimum period provided by the current Executive Regulations for the preparation of national open tenders. However, the permissible time (10 days that could be shorten to 5 days with the approval of the Accounting Officer) could be insufficient for complex assignments.
  - c. Ensure that the place or site where tenders shall be submitted is open and accessible and provided with a secured tender box. However, secure tender box does not exist.
  - d. Carry out public opening immediately after the closing date and time.
10. **Bid evaluation and contract award:** In many cases, evaluation of bids were carried out using criteria not disclosed in the tender documents. Moreover, the evaluation committees in most cases, did not include members with a relevant type of skills, knowledge and experience relevant to the procurement requirement.
11. **Preparation and signing of contract:** Based on the recommendation of the evaluation committee the contract is signed with the lowest evaluated bidder without stating the effectiveness conditions. Unsuccessful bidders are not informed in writing that they have not won the contract.
12. **Contract management during implementation, including dispute resolution methods:** The information gathered from the assessed procuring entity confirmed that the lack of proper contract management and contract administration in place. Although the Law requires the public entity to monitor the conformity of the materials supplied by the contractor with the published technical specifications, the review highlighted that there is no independent authority that fulfils this function.

13. **Support and control systems:** Egyptian General Authority for Governmental Services (GAGS) performs procurement and financial control activities and inspections of central and local budget resources. Its Director reports directly to the Minister of Finance. However, GAGS is physically and functionally separate from the accounting and reporting functions of MOF. The value of its oversight varies. For example, GAGS participates in monitors compliance with applicable laws and government procedures, thereby offering continuity in procurement activities. However, GAGS' reports focus on lapses and irregularities in individual transactions rather than assessing overall efficiency, systemic weaknesses in financial management, management performance, and/or procedures and internal controls. Limited to financial and compliance audits, these reports do not make recommendations for the improvement of systems or procedures. Moreover, there is a poor enforcement and follow up on external audit recommendations.

14. **Record-keeping:** PE recordkeeping practices remain poor, the legal frame-work establishes norms for the safekeeping of records and documents related to procurement transactions and contract management within financial management units only. The findings of the assessment indicate that the PE surveyed did not have complete records. Lacked data on areas such as advertisement procedure followed, tender evaluation and award criteria applied, public opening or existence of contract completion reports. In addition, the assessed procuring entity confirmed that there is inadequate space for record keeping as a result of accumulated documents.

15. **Staffing:** The available expertise at PE level does not meet the need for specialised procurement knowledge: The overall lack of procurement knowledge remains a major weakness to the efficiency of procurement operations. It should be noted that there is an urgent need for additional procurement expertise who are possessing the necessary competence levels. Massive upgrading of qualifications through training as well as an increase in the supply of specialised graduates will be required to fill this gap.

## **II. STAR Procurement Arrangements**

### **A. General Considerations**

16. The responsibility for the implementation of the Programme, and therefore for the award and administration of contracts under the Programme, rests with the Borrower/MALR. The IFAD, for its part, is required to ensure that the proceeds of any loan or grant are used only for the purposes for which the loan or grant was granted. While in practice the specific procurement rules and procedures to be followed in the implementation of a Programme depend on the circumstances of the particular case, seven (7) principles generally guide the Fund's requirements: 1) Ethics, 2) Accountability, 3) Competition, 4) Fairness, 5) Transparency, 6) Efficiency, Effectiveness & Economy and 7) Value for Money.

17. **Ethics:** The guiding principles of ethical behavior are impartiality, independence and integrity. No person or entity shall use his/her/its authority, position or office for personal gain, which will be defined as soliciting, accepting or otherwise benefiting from anything of material value, in any form, either in person or indirectly through close relatives or associates, as a result of procurement financed by IFAD. Borrower/Recipient officials engaged in procurement activity have a duty to:

- a. maintain and enhance the reputation of the Borrower/Recipient country by:
    - i. maintaining the highest standards of honesty and integrity in all professional relationships;
    - ii. developing the highest possible standards of professional competence;
    - iii. maximizing the use of IFAD funds and other resources for which they are responsible for the purposes for which these funds and resources were provided to the Borrower/Recipient country; and
    - iv. complying with both the letter and the spirit of:
      - the financing agreement;
      - the laws and regulations of the Borrower/Recipient country;
      - accepted professional ethics; and
      - contractual obligations;
  - b. declare any personal interest that may affect, or might reasonably be deemed by others to affect, impartiality in any matter relevant to their duties (conflict of interest). In a situation of this nature, the official concerned should not participate in any way in the procurement process, to avoid mis-procurement; and
  - c. respect the confidentiality of information gained in the course of duty and not use such information for personal gain or for the unfair benefit of any bidder, supplier or contractor. Information given in the course of their duties shall be true, fair and not designed to mislead.
18. **Accountability:** The Borrower/Recipient is accountable to IFAD for all actions and decisions in relation to Programme-funded procurement. This includes, but is not limited to:
- a. Ensuring that the funds are used solely for the purpose for which they were provided; and
  - b. Ensuring that procurement is undertaken in accordance with IFAD Guidelines.
19. **Competition:** Full, fair and legitimate competition among eligible suppliers and contractors is the foundation on which Programme-funded procurement activities should be based. The most common method of seeking competition is through a competitive bidding process, and, in this regard, IFAD specifies that all goods, works and services should be obtained through an agreed procurement process involving at least three separate suppliers or contractors whose business is directly related to the procurement being undertaken. It is recognized that it is neither practical nor efficient to advertise internationally for low-value contracts for goods, works or services, and the degree to which the principle of competition is required for each procurement activity will be outlined in the procurement method approved by IFAD within the procurement plan. Borrowers/Recipients will be expected to promote genuine competition at every opportunity and maybe required to provide evidence of:
- a. fair and genuine competition in the compilation of shortlists and in the solicitation of bids; and
  - b. the effectiveness of competition during the bidding process.
  - c. Single sourcing and direct contracting do not provide the elements of competition required by IFAD. Only in exceptional circumstances will these approaches be considered and approved in procurement plans agreed with IFAD.

20. **Fairness:** IFAD's expectation is that Programme-funded procurement will be open to as many eligible bidders from IFAD's developed and developing Member States as is practicable in order to meet the requirements of competition. IFAD expects Borrowers/Recipients to ensure that all prospective bidders are:

- a. managed with a consistent approach and application of laws, regulations and requirements in respect of the procurement process;
- b. offered a level playing field on which to genuinely compete; and
- c. treated in a fair, impartial and unbiased way, so that principles of impartiality and equal opportunity can be demonstrated in all procurement activities.

21. In striving for fairness in its procurement operations, IFAD:

- a. will not tolerate exclusion of, discrimination, bias or prejudice against, or favouritism or inequality towards any potential supplier or contractor, either directly or indirectly through manipulation of any part of the procurement process, including, but not limited to, the preparation of technical specifications, evaluation criteria or bidding requirements. Where any such activity is suspected or proven, IFAD reserves the right to take any preventative, corrective or punitive action it considers appropriate; and
- b. will seek to address, in consultation with the Borrower/Recipient, any impositions that may deter or impinge on the attainment of fairness within the procurement process.

22. **Transparency:** IFAD expects the highest degree of transparency and openness within the procurement processes undertaken under its projects. A lack of transparency can be perceived as an attempt to withhold information, which in turn may make the fairness and integrity of the procurement process suspect. Transparency within procurement relates to disclosing the public domain, information for parties involved, interested in or affected by the process, including but not limited to information on:

- a. the availability of potential and existing procurement opportunities;
- b. where to access relevant data;
- c. the processes by which the procurement is being undertaken;
- d. the mechanisms by which contracts will be awarded;
- e. contract award data; and
- f. appeal procedures.

23. Modes of communication/publication of such information will vary depending on the nature of the data but will generally be through existing means of public information (e.g. government websites, public notice boards or media) or in the procurement documentation relevant to an individual procurement activity (e.g. bid notices and bidding documents). Borrowers/Recipients are required at all times to act openly, predictably and in accordance with the information provided.

24. **Efficiency, Effectiveness and Economy:** IFAD requires Borrowers/Recipients to demonstrate efficiency and economy in undertaking Programme-related procurement, to avoid undue implementation delays and to achieve value for money. Procurement must be well organized, carried out correctly with regard to quantity, quality and timeliness, and at the optimum price, in accordance with the appropriate guidelines, principles and regulations. Processes must be proportionate to the procurement activity, so that the overall cost of conducting the procurement process is minimized and tailored to the size of

the budget for the activity being undertaken, while upholding the guiding principles. Efficiencies can be obtained through a combination of methods. For instance, a strategic approach can be taken to planning, combining and conducting procurement activities so as to minimize loss of time and resources. For this reason, the design of all IFAD-funded projects must now include a procurement plan.

25. **Value for money:** Underpinning all of the above is the need to obtain value for money for all Programme procurement activities through the optimum combination of several factors, including:

- a. applying sound, internationally recognized procurement principles;
- b. ensuring that the goods, works or services procured meet the requirements for the task and are not over-specified;
- c. ensuring that the goods, works or services are contracted on the best possible terms, taking into account their expected life cycle; and
- d. ensuring that the provider/supplier of the goods, works or services is qualified, legally entitled and competent to execute the contract.

26. Best value does not necessarily mean the lowest initial price option, but rather represents the best return on investment, taking into consideration the unique and specific circumstances of each procurement activity; the balance of time, cost and quality required; and the successful overall outcome of the contract in meeting its original objectives.

27. Borrower/recipient officials engaged in procurement activity have a duty to:

- a. Maintain and enhance the reputation of the borrower/recipient country by:
  - Maintaining the highest standards of honesty and integrity in all professional relationships;
  - Developing the highest possible standards of professional competence;
  - Maximizing the use of IFAD funds and other resources for which they are responsible for the purposes for which these funds and resources were provided to the borrower/recipient country; and
  - Complying with both the letter and the spirit of:
    - The financing agreement;
    - The laws and regulations of the borrower/recipient country;
    - Accepted professional ethics; and
    - Contractual obligations.
- b. Declare any personal interest that may affect, or might reasonably be deemed by others to affect, impartiality in any matter relevant to their duties (conflict of interest). In a situation of this nature, the official concerned should not participate in any way in the procurement process, to avoid mis-procurement; and
- c. Respect the confidentiality of information gained in the course of duty and not use such information for personal gain or for the unfair benefit of any bidder, supplier or contractor. Information given in the course of their duties shall be true, fair and not designed to mislead.

28. The Programme will contribute to building up the in-house procurement capacity of the Ministry of Agriculture and Land Reclamation, instilling best practices and the required approach and methodology, and monitoring the timeliness and quality of the process. IFAD plans an intensive training programme at start-up to familiarise STAR staff with IFAD Guidelines. The effectiveness of procurement will be assessed during supervision and alternate arrangements put in place if necessary.

29. The Standard Bidding Documents (SBD) will be developed by the lead implementing agency to be used for undertaking procurement under this Programme and consistency with IFAD Procurement Guidelines should be ensured. Concepts relating to Accountability, Competition, Fairness, Transparency, Efficiency, Effectiveness & Economy and Value for Money contained in IFAD's Procurement Guidelines and which are central to IFAD's Procurement Philosophy are discussed above.

30. The Procurement Process involves the purchasing, acquiring, hiring or obtaining of goods, works and services by any contractual means and can be defined in more detail as procurement of goods, procurement of works and procurement of services. The procurement cycle consists of General Procurement Notice, Tender Document Preparation, Pre-Qualification, Advertisement, Receipt of Tenders, Public opening of Tenders, Evaluate of Tenders, Award of Contract, Issue of Work Order or Purchase Order and Performance of contract.

31. Each Annual Procurement Plan will identify procedures which must be implemented by the Borrower in order to ensure consistency with the IFAD Procurement Guidelines. IFAD may require that all bidding documents and contracts and other records for procurement of goods, works and services financed by the Loans/Grants are:

- a. Available for full inspection by the Fund of all bid documentation and related records;
- b. Maintained for ten years after the project completion date; and
- c. IFAD may also require that the Programme cooperate with agents or representatives of the Fund carrying out an audit or investigation into procurement issues.

32. IFAD's review of and no objection to procurement plans is compulsory under all financing agreements directly supervised by IFAD. STAR is one such agreement.

33. IFAD monitoring and review to ensure that the procurement process is carried out in conformity with IFAD procurement Guidelines and with the agreed procurement plan, IFAD will review arrangements for procurement of goods, works and services proposed by the borrower/recipient, including:

- a. Contract packaging;
- b. Applicable procedures and procurement methods;
- c. Bidding documentation;
- d. Composition of bid evaluation committees;
- e. Bid evaluations and award recommendations; and
- f. Draft contracts and contract amendments.

34. The extent to which these review procedures will be applied to each project or programme will be contained in the letter to the borrower/recipient and the procurement plan. For full details on the review processes, refer to IFAD Procurement Handbook.

35. **Post-review:** All other contracts will be subject to post-review and may be subject to procurement audit by the Fund. The Programme staff will maintain accurate records of all procurement activities and documents related to the Programme. The procurement files will be maintained for review by IFAD supervision missions and independent audits. The Programme staff will also consolidate procurement activities into quarterly and annual progress reports.

36. **Mis-procurement:** IFAD will not finance expenditures for goods, works or consulting services that have not been procured in accordance with IFAD Procurement Guidelines and the financing agreement. In such cases, IFAD may, in addition, take other remedial action under the financing agreement, including cancellation of the amount in question from the loan and/or grant account by declaring it ineligible. Even if the contract was awarded

following IFAD's "no objection" statement, the Fund may still declare mis-procurement if it concludes that this statement was issued on the basis of incomplete, inaccurate or misleading information furnished by the borrower/recipient, or that the terms and conditions of the contract had been modified without IFAD's approval.

## **B. Institutional Arrangements.**

37. STAR Procurement Activities will be implemented under two institutional arrangement, namely the CPMU at Ministry of Agriculture and Land Reclamation and PIU at the Irrigation Improvement Sector (IIS) of the Ministry of Water Resources and Irrigation (MWRI). At the central level, central PMU (CPMU) will be established within Ministry of Agriculture and Land Reclamation (MALR). With regard to procurement management, two procurement officers with required qualifications and experience will be recruited from the market. With additional TA to strengthen procurement capacity, the institutions can undertake implementation, facilitation, and coordination of the Programme with reduced risk.

38. At the central level, the CPMU anchored in the MALR will be responsible for implementing procurements under Component 1, Sub-Component 2.2 and Component. At the Ministry of Water Resources and Irrigation level, the PIU to be established within the IIS will spearhead execution of procurement activities under Sub-component 2.1 related to irrigation infrastructure and management. To enhance the procurement capacity at the PMU/PIU, the STAR will provide short-term training in IFAD procurement procedures (works, goods, and consultants) during Programme implementation. Subsequent regular procurement clinics will be held to deepen PMU procurement capacity.

39. The STAR CPMU will be responsible to manage and oversee overall Programme-related procurement including International Competitive Bidding (ICB), National Competitive Bidding (NCB) procurements and selection of consultants for larger consultancy contracts as well as National Shopping, though it will require extensive support. The majority of the procurement activities under STAR will be implemented through the application of NCB method; relatively few high-value/specialized procurement packages will attract ICB. Appropriate thresholds that can maximize the efficiency of procurement implementation but manage the governance risks will be specified in the Letter to the Borrower (LTB).

40. The two Procurement Officers (POs) will oversee and carry out STAR procurement activities (except those enrolled under sub-component 2.1 that will be implemented by IIS) in coordination with CPMU members and specialized and technical units of MALR. The POs will report to the Programme Director and their main responsibilities are to:

- a. establish and update procurement procedures for the Programme based on the IFAD Procurement Guidelines;
- b. prepare and update the annual procurement plan (in coordination with relevant staff of the CPMU) based on the AWPB;
- c. ensure the timely and transparent procurement of goods, works and services as identified in the procurement plan and in accordance with the applicable rules and procedures;
- d. prepare bidding documents and coordinate the preparation of relevant inputs such as TORs, technical specifications and bills of quantities by technical staff or consultants;

- e. supervise the bidding processes including advertisements, bid opening, bid evaluation, negotiation and selection of contractors; prepare bid opening minutes and bid evaluation reports;
- f. draft contracts for signature by authorized Programme representatives and contractors;
- g. manage the procurement monitoring database system; prepare periodic reports on the status of procurement for the Programme;
- h. compile and confidentially keep up-to-date reports, documents and records of all procurement activities, ensuring proper documentation, transparency and ease of reference; maintain procurement files;
- i. monitor the administrative implementation of contracts in coordination with the Finance Unit;
- j. constantly review procurement arrangements in relation to the procurement plan to ensure consistency with the financing agreement and identify weaknesses, if any, and measures that should be undertaken to mitigate the risks posed by any weaknesses;
- k. maintain close liaison with IFAD on all issues pertaining to procurement;
- l. participate in Programme management meetings and IFAD supervision missions, including the preparation of all information required, in particular the procurement records for facilitating post-procurement reviews;
- m. train Programme and implementing partners staff on procurement issues; and
- n. carry out any other activities that are assigned by the Programme management

41. STAR Special Procurement Committee (SPC) will be established by MALR in order to i) fast track each step of STAR procurement processes; ii) monitoring on the overall procurement processes of the Programme putting in place corrective actions when needed; iii) cooperate with STAR in planning procurement processes and in preparing procurement documentation in order to assure the right timing of the processes and that tender documents are accurately prepared; follow up on the requests of No Objections to avoid delays in treatment.

### **Works Procurement Arrangements Under Subcomponent 2.1**

42. Design of works: Design work will be centrally done through the desi unit within Irrigation Improvement sector. The IIS will ensure the participating directorates are involved in the contracting process for ownership.

43. It is proposed that the IIS will develop a STAR specific prequalified list of bidders for use in tendering Works transactions under Subcomponent 2.1. The prequalified list should be updated every two years and will require the IFAD's No Objection prior to being used for limited bidding.

44. Development of bidding documents: Bidding documents including pre-qualification documents will be prepared by the CPMU. The IIS will be provided with completed bidding documents for them to insert administrative aspects such as physical address of bid delivery and other periphery aspects. The IIS will, however, have to be involved in the development of aspects such as specifications/evaluation criteria and would have a right to seek clarification or request adjustments if their needs are not taken care of.

45. Advertising: Request for pre-qualification advertisement will be placed in the newspapers and in the UNDB website by the IIS directing bidders to download the pre-

qualification documents free of charge from specific website. Once the IIS finalise the pre-qualification process, the invitation will be sent to the pre-qualified firms directing them on how to apply for the tenders.

46. Handling of submitted bids: Receipt of completed tenders from bidders will be handled by the IIS. Bid opening will also be handled by the IIS in attendance of bidders who choose to attend. As part of a quality due diligence review, officials from the CPMU will attend bid opening. Bid evaluation and approval will be a responsibility of the IIS (PIU, and contracts committees).

47. Due diligence reviews, approvals and No Objections: Before the contract is awarded, the CPMU will undertake a due diligence review and provide comments to the IIS if they don't concur with the result. These comments should avoid taking procurement decisions or forcing IIS to take bidders other than those recommended by evaluation committees; the CPMU should provide the type of comments used in No Objections, leaving the IIS to take decisions that have legal mandate implications. The CPMU will request IFAD's No Objection once the CPMU is satisfied with the due process.

48. Contract administration: Experience under OFIDO shows that the quality of the supervision of the Irrigation Improvement Works by the OFIDO NPCU was less than satisfactory. The IIS will be fully responsible for the works supervision with support from the Ministry of Agriculture and its Directorates at governorate level.

### **Goods and Services Procurement Arrangements**

49. Goods: Goods and supplies such as vehicles, motorcycles and computers that may be common to the PMU and across governorates will be procured centrally through the CPMU in order to gain the benefits of bulk / quantity purchases.

50. Services: Most of the anticipated services will cut across governorates. These services will be procured centrally by the CPMU through. Certain services such as the TA for development of a water resources strategy and irrigation asset management plan in each governorate participating in the Programme that are unique to the implementing partners will be procured at the respective partner.

51. Service Providers: The Programme will be managed by the CPMU and implemented by contracted service providers on performance related contracts. Service providers will include: (i) preselected public institutions except IIS/MWRI who will have the status of Programme Parties and be required to ensure that procurement actions undertaken by them and financed by IFAD or Government be undertaken in compliance with the stipulated procedures of IFAD and Government; and (ii) non-preselected civil society or private sector entities such as NGOs that will participate in the Programme. Service providers not pre-selected will be procured on the basis of IFAD procurement guidelines.

52. Performance based contracts: For Contracts, MoU and Framework Agreements between CPMU and the vendors, it is suggested that performance-based contracts in the delivery of hardware and software goods and services will be adopted. Such contracts will focus on outputs and outcomes of service provision, with clear milestones, with triggers for contract extension linked to achievements. There will be no automatic extensions in time or scope. All contracts, MOUs and Framework Agreements will include the payment schedules with performance incentives and penalties, monitoring and quality assessment, and value-for-money assessment. They will also define the key responsibilities of the partners at national and field levels, and will be jointly monitored and supervised. This is not dissimilar to current government personnel procedures which incorporate performance-based assessment.

## **C. Applicable Procurement Rules and Regulations**

### **Overriding principles**

As provided in Section 7.05 of the General Conditions, procurement of goods, works and services shall be carried out in accordance with the provisions of the Borrower/Recipient's procurement regulations, to the extent such are consistent with the IFAD Procurement Guidelines and by observing the following specific principles:

- Procurement will be carried out in accordance with Financing Agreement and any duly agreed amendments thereto;
- Procurement will be conducted within the Programme implementation period, except as provided under Article 4.10(a)(ii) of IFAD General Conditions;
- The cost of the procurement is not to exceed the availability of duly allocated funds as per the Financing Agreement;
- Procurement is to be consistent with the duly approved annual work plan and budget (AWP/B) including a procurement plan (for the first time, the procurement plan will cover the first 18 months of the Programme implementation period);
- Procurement is to result in the best value of money and fit for purpose.
- All goods, works and services procured will be exempt from duties and taxes.

## **D. Procurement Planning**

53. At the outset of the Programme, the Programme in conjunction with IFAD, shall establish a procurement plan covering the first 18 months of the Programme, followed by 12-month successive plans synchronized with the annual work plans and budget during implementation. IFAD's review of and No objection to procurement plan is compulsory.

54. For each contract to be financed by IFAD proceeds, the types of procurement methods, estimated cost, prior review requirements and time-frame would be agreed between the Programme and IFAD respectively in the Procurement Plan.

Procurement plan should be divided into goods, works and services and as a minimum, the procurement plan must contain the following information:

- i. A brief description of each procurement activity to be undertaken during the period or the plan;
- ii. The estimated value of each activity;
- iii. The method of procurement to be adopted for each activity
- iv. The method of review IFAD will undertake for each activity;
- v. In addition to the minimum information above, it is considered good practice for the procurement plan to capture additional information such as:
  - Planned timing of the procurement activities;
  - Procurement by Programme component;
  - Dates for IFAD prior review;

The procurement plan shall be prepared in excel sheets and each procurement category (goods/works/consulting services/non-consulting services) in separate excel sheets as follows: -

### **For goods, Works and Non-Consulting Services**

- Programme title:

- Financiers:
- Period:
- Type of procurement: goods/works/services
- Code as per AWPB
- Component/unit
- Procurement tender number
- Item description
- Plan vs Actual with two rows:
  - planned
  - actual
- Contract type: Lumpsum or exact /BQS
- Total amount in USD
- Procurement method
- Prior or post review
- Preparation of tendering process
  - bid document preparation and submission to IFAD
  - IFAD No objection
- Bidding process
  - Publication/invitation/advertisement
  - Closing/opening
- Evaluation process
  - Technical and financial evaluation and submission of report to IFAD
  - IFAD No Objection to award
- Contract
  - Award and notification of award
  - Signing of the contract
  - Contract period
  - Contract completion date
  - Comments

**For services**

- Programme title:
- Financiers:
- Period:
- Code AWPB
- Component/unit
- Procurement tender number
- Item description

- Plan vs Actual with two rows:
  - planned
  - actual
- Contract type: Lumpsum or time based
- Total amount in USD
- Selection method
- Prior or post review
- Preparation of tendering process (terms of reference)
  - Preparation date
  - IFAD No objection
- Bidding process/Request for Expression of Interest
  - Dated of invitation
  - Closing/opening
- Shortlist
  - Date proposed for submission of shortlist to IFAD
  - Date of IFAD No Objection
- Request for Proposal
  - Date prepared and submitted to IFAD
  - Date of IFAD No Objection
  - Invitation date
  - Date of opening
- Evaluation process:
  - Technical evaluation
  - IFAD No Objection to technical evaluation report
  - Date of opening financial proposals
  - Date of submission of combined evaluation report
  - Date of IFAD No Objection to the report and award
- Contract
  - Award and notification of award
  - Signing of the contract
  - Contract period
  - Contract completion date
  - Comments

#### **E. Procurement Methods and Thresholds**

55. Procurement Methods: The methods which are permitted for the procurement of works and goods are: a) international competitive bidding (ICB), b) limited international bidding (LIB) or restricted tendering, c) national competitive bidding (NCB) or open tender,

d) international or national shopping or requests for quotations, e) direct contracting, and f) procurement from United Nations agencies.

56. The methods which are permitted for the procurement of non-consulting services are: a) international competitive bidding (ICB), b) national competitive bidding (NCB) or open tender, c) national shopping or requests for quotations, and d) direct contracting..

57. The methods which are permitted for the procurement of consulting services are: a) quality and cost-based selection, b) quality-based selection, c) selection under a fixed budget, d) selection based on consultant' qualifications, e) least cost selection, f) single-source selection, and g) selection of individual consultants.

58. For each contract to be financed by IFAD proceeds, the types of procurement methods, estimated cost, prior review requirements and time-frame will be agreed between the Programme and IFAD respectively in the Procurement Plan. IFAD financed procurement of works, goods and consultancy services. While eventually the specific thresholds for procurement financed under the Programme will be stipulated in the Letter to the Borrower, the recommendations are the following (based on the guidance established by the IFAD Procurement Manual):

59. Works estimated to cost more than USD 200,000 equivalent will be procured through International Competitive Bidding (ICB) method either through pre-qualification or post-qualification procedure using the World Bank's applicable Standard Bidding Documents (SBDs). Works estimated between USD 50,000 and USD 200,000 equivalent will be procured through the National Competitive Bidding (open tender). While works estimated below USD 50,000 will be procured through National Shopping (request for quotations). Direct contracting will have to be identified and approved by IFAD in advance for those cases which justify use of such method.

60. Goods estimated to cost more than USD 100,000 equivalent per contract will be procured through the International Competitive Bidding (ICB) method using the World Bank's applicable SBDs. Goods estimated to cost between USD 25,000 and USD 100,000 equivalent per contract will be procured through National Competitive Bidding (open tender). Goods estimated to cost less than USD 25,000 equivalent per contract will be procured through the Shopping methods (request for quotations). Direct contracting will have to be identified and approved by IFAD in advance for those cases which justify use of such method.

61. Consultancy services. Quality and Cost Based Selection will be the standard method applied unless otherwise approved. The following thresholds and processes will apply: i) International Request for Proposal (RFP)– for contracts with a value of USD 100,000 equivalent and above; ii) National Request for Proposal (RFP) – for contracts with a value of less than USD 100,000 equivalent and more than USD 10,000 equivalent. Contracts with a value of USD 10,000 equivalent or bellow, or procurement of individual consultancy or Technical Assistance services, will be based on National Shopping (request for quotation).

62. Non-Consultancy services. The following thresholds and processes will apply: i) Services estimated to cost more than USD 100,000 equivalent per contract will be procured through the International Competitive Bidding (ICB) method, ii) NCB (open tender) method – for contracts with cost between USD 10,000 and USD 100,000 equivalent. Contracts with a value of USD 10,000 equivalent or bellow, will be National Shopping (request for quotation from predetermined shortlist).

63. However, these financial thresholds may be adjusted as appropriate, with prior IFAD approval, depending of the nature of the assignment. And the method of procurement to be followed will be pre-determined in each approved annual procurement plan.

## **F. Definition of the applicable Procurement methods for Goods, Works and Non-consulting Services**

64. **International Competitive Bidding: International competitive bidding (ICB)** is a procurement method suited to high-value requirements that would be of interest to the international business community. The objective of ICB is to provide all eligible prospective bidders located and operating both within the Borrower's/Recipient's country and abroad with timely and adequate notification of the Borrower's/Recipient's requirements and an equal opportunity to bid for the required goods and works. Where ICB is the identified method of procurement within an approved procurement plan, World Bank procedures as set forth in their guidelines will apply. The new Procurement Regulations for Investment Project Financing (IPF) Borrowers of the World Bank available at:

**<https://policies.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid=4005&ver=current>**, the competitive bidding is now called "Request for Bids (RFB)". RFB is a competitive method for the solicitation of Bids. It should be used when, because of the nature of the Goods, Works, or Non-consulting Services to be provided, the Borrower is able to specify detailed requirements to which Bidders respond in offering Bids. The minimum period allowed for preparation of Bids/Proposals shall be forty two (42) Calendar Days for open international competitive procurement. The Standard Procurement Document for Request for Bids is available at:

**<http://pubdocs.worldbank.org/en/299661509568509693/SPD-Request-for-Bids-GOODS-1-envelope-OCT-2017.docx>** for Goods and at:

**<http://pubdocs.worldbank.org/en/328641509642865653/SPD-Request-for-Bids-SMALL-WORKS-1-Env-OCT-2017.docx>** for works.

65. **Limited international bidding (LIB)** is essentially ICB by direct invitation without open advertisement. It may be an appropriate method of procurement where:

- Contract amounts are small;
- There is only a limited number of suppliers or contractors; or
- Other exceptional reasons exist that may justify departure from full ICB procedures.

66. Under LIB, borrowers/recipients should seek bids from a list of potential suppliers or contractors broad enough to ensure competitive prices. This list should include all suppliers and contractors when there are only a limited number. Domestic preferences are not applicable in the evaluation of bids under LIB. In all respects other than advertisement and preferences, ICB procedures apply to procurement under LIB, including the publication of the contract award.

67. **National Competitive Bidding (NCB)** is the competitive bidding procedure normally used for public procurement in the country of the Borrower/Recipient, and may be the most efficient and economical way of procuring goods or works that, by their nature or scope, are unlikely to attract foreign competition. NCB may be the preferred method of procurement where foreign bidders are not expected to be interested because:

- Contract values are small;
- Works are scattered geographically or spread out over time;
- Works are labor-intensive; or
- The goods or works are available locally at prices below those on the international market.

68. NCB procedures may also be used where the advantages of ICB are clearly outweighed by the administrative or financial burden involved. Advertising for procurement under NCB may be limited to the national press of the Borrower's/Recipient's government or, where possible, a free and open-access website. Bidding documents may be in an

official language of the country, and local currency is generally used for the purposes of bidding and payment. The procedures are to provide for adequate competition in order to ensure reasonable prices, and the methods used in the evaluation of bids and the award of contracts are to be objective and made known to all bidders, and are not to be applied arbitrarily. The procedures will also include public opening of bids, publication of results of evaluation and of the award of contract, and provisions for bidders to protest. In addition, bidding documents will provide clear instructions on how bids should be submitted, how prices should be offered, and the place and time for submission of bids. Adequate response time for preparation and submission of bids will be provided. If eligible foreign firms wish to participate under these circumstances, they are to be allowed to do so.

69. **Shopping** is a procurement method that entails comparing price quotations from several suppliers or contractors (usually at least three) to ensure competitive prices. It is an appropriate method for procuring readily available, off-the-shelf goods or standard specification commodities that are small in value, or simple civil works of small value. Requests for quotations should indicate the description and quantity of the goods, together with desired delivery (or completion) time and place. Quotations may be submitted by mail, electronic mail or facsimile. The evaluation of quotations will follow the principles of competition. The terms of the accepted offer are to be incorporated in a purchase order or brief contract. Under international shopping, the purchaser is to solicit quotations from at least three suppliers in two different countries. National shopping may be used where the desired goods are ordinarily available from more than one source in the country of the Borrower/Recipient at competitive prices.

70. **Procurement from United Nations agencies.** There may be situations in which procurement from specialized agencies of the United Nations, acting as suppliers and pursuant to their own procedures, may be the most economical and efficient way of procuring relatively small quantities of off-the-shelf goods. Use of such agencies as supply sources, together with the Programme component and the type of goods or works to be procured from such sources, are to be expressly and specifically agreed between the Borrower/Recipient and IFAD before proceeding with the application of this method of procurement.

71. **Direct Contracting** (for Goods, Works and non-consulting services) consists in procuring goods or works without competition (by single or sole-source selection). Due to its non-competitive nature, DC may be only permitted in the following exceptional circumstances:

- An existing contract for goods or works awarded in accordance with procedures acceptable to IFAD, may be extended for additional goods or works of a similar nature to a maximum of 25 per cent (%) of the original contract value, with the prior approval of IFAD, provided that no advantage could be obtained by further competition and that the prices on the extended contract are reasonable. Provision for such an extension, if considered likely in advance, is to be included in the original contract;
- Standardization of vehicles, equipment or spare parts to ensure compatibility with existing vehicles, equipment or machinery may justify additional purchases from the original supplier. For such purchases to be justified, the original vehicles, equipment or machinery should be suitable; the number of new items should generally be less than the existing number; the price should be reasonable; and the advantages of another make or source of equipment are to have been considered and rejected on grounds acceptable to IFAD;
- The required equipment is proprietary and obtainable only from one source;

- The contractor responsible for a process design requires the purchase of critical items from a particular supplier as a condition of a performance guarantee; and
- Purchases from the original supplier may also be justified in exceptional cases and emergencies, such as in response to a natural disaster, conflict and post conflict, or in countries where there are restrictions to free markets and enterprises.

72. Any request for direct contracting from a Borrower/Recipient must be accompanied by a detailed justification, which IFAD will examine carefully to ensure that it is satisfied that no other alternative selection methods can be used.

#### G. IFAD Prior Review Thresholds

73. In accordance with paragraph 80 of the IFAD Project Procurement Guidelines, the following will be subject to prior review by IFAD:

- First five contracts for goods and equipment and thereafter, award of any contract for goods and equipment estimated to cost USD 50,000 equivalent or more;
- First five contracts for works and thereafter, award of any contract for works estimated to cost USD 100,000 equivalent or more;
- First five contracts for consultancy services, and thereafter, award to a firm of any contract for consultancy services estimated to cost USD 50,000 equivalent or more;
- First five contracts for non-consultancy services, and thereafter, and thereafter, award to a firm of any contract for non-consultancy services estimated to cost USD 10,000 equivalent or more;
- First five contracts for individuals, and thereafter, award to an individual of any contract for consulting services estimated to cost US\$ 5,000 equivalent or more;
- Award of any contract through direct contracting, single source selection, including selection of United Nations' agencies, irrespective of the amount. Furthermore, for consultancy services, all Terms of Reference, Short-listing (if applicable) and draft contracts will be subject to IFAD prior review.

Aforementioned may be modified from time to time as notified by the Fund to the Borrower.

74. **Register of Contracts:** Procurement carried out under the Programme will be recorded and registered against the Procurement Plan. In addition, all contracts, with or without prior IFAD approval, will be listed in the Register of Contracts maintained by the procuring entity with the dates of approval as provided by IFAD. When a contract is amended, the amendment will be recorded in the Register of Contracts. If a contract is cancelled or declared ineligible for financing by IFAD, this information will be written in the Register of Contracts. As this register facilitates the review and approval of payment requests on contracts, it is to be updated and submitted to the IFAD country programme director on a monthly basis. The sample form to be used and instructions are detailed in Annex 6 of IFAD's Loan Disbursement Handbook. It will also be necessary that the CPMU prepare annual statistics disaggregated by type and methods of procurement, for the overall procurement transactions carried out for the Programme.

#### 75. RECORD KEEPING

The IFAD General Conditions for Agricultural Development Financing require that Borrower/recipients retain documents and records for review by IFAD at any time within a period of three (3) years after completion of the bid or contract. The following table shows what procurement files, folders or dossiers should contain:

Document	Preferred format
(i) A copy of the published advertisement or shortlist (if applicable) *	Hard and/or Soft copy
(ii) A copy of the published pre-qualification and invitation documents and any amendments, extensions or clarifications that were requested and issued*	Hard and/or Soft copy
(iii) A record of tender opening signed by all present	Hard and/or Soft copy

(iv) A full copy of each bid received and evaluated, plus clarifications requested and responses received	Hard and/or Soft copy
(v) A copy of the evaluation report*	Hard and/or Soft copy
(vi) Signed minutes of all meetings relating to the procurement, including pre-bid and negotiation meetings where these were held	Hard and/or Soft copy
(vii) A contract award notice*	Hard and/or Soft copy
(viii) Any letter of tender acceptance to the supplier, contractor or consultant*	Hard and/or Soft copy
(ix) The signed contract document and contract acceptance*	Hard and/or Soft copy
(x) Any contract amendments*	Hard and/or Soft copy
(xi) All contractual correspondence between the procuring entity and a supplier, contractor or consultant	Hard and/or Soft copy
(xii) Post-contract documents relating to the fulfillment of contract obligations, in particular photocopies of bank guarantees or payment guarantees	Hard and/or Soft copy
(xiii) Signed minutes of any meetings related to contract management, including contract progress or review meetings	Hard and/or Soft copy
(xiv) Signed delivery documents evidencing delivery of supplies or signed completion certificates in relation to a contract for services or works under the contract, including any contract delivery records	Hard and/or Soft copy
(xv) A copy of all invoices for works, services or supplies, including work papers verifying the accuracy of payments claimed and details of the actual payment authorized	Hard and/or Soft copy
(xvi) A copy of cumulative payment worksheets/records evidencing management of all payments made	Hard and/or Soft copy
(xvii) A copy of all submissions to and all decisions of the appropriate approval authority related to the procurement, including the approval of the invitation documents, approval of the evaluation report(s), contract award, approval of contract documents and contract amendments and any decision to suspend or cancel procurement proceedings	Hard and/or Soft copy
(xviii) A copy of any claims made by the procuring entity with respect to any warranty, non-warranty, short supply, damage and other claims upon the provider or upon the procuring entity	Hard and/or Soft copy
(xix) In the case of IFAD prior review, all submissions and correspondence in relation to the seeking of IFAD's no-objection	Hard and/or Soft copy
(xx) any other communications relating to the procurement in questions, including internal entity correspondence	Hard and/or Soft copy
<i>*Ideally, drafts of these published documents and reports should also be retained for completeness and to provide a full picture of how the published document evolved. It is, however, accepted that where issues of space exist this may not always be possible in practice.</i>	

## Appendix 1: Procurement Procedures

### A- Goods and Works and Non-consulting Services

#### I. International Competitive Bidding

- The procedure for ICB is lengthy to ensure quality of bids and approvals at various stages from IFAD, about several steps shall be observed in all cases to safe guard against misuse of the funds. These are:
  1. Preparation of bid documents:
    - a) Prepare full documentation that is detailed enough for prospective bidders to make realistic and accurate bids. There will be no use of trade names for vehicles and equipment, (e.g., Toyota Land Cruiser); rather request bids for 4x4 LWB, station wagon with 7 to 10 seats, engine size in the range of e.g. 2.0 to 3.0 litres etc. plus other requirements such as radio, air-condition etc.
    - b) All bidding documents for the procurement of goods, works and services would be prepared by the procurement officer with the support of the technical expert(s), who would supply specifications, terms of reference, Bills of Quantities and evaluation and post-qualification criteria as required.
    - c) All bidding documents and contracts for the procurement of goods, works and services financed by IFAD loan and grant would include a provision requiring bidders, suppliers, contractors, sub- contractors and consultants to permit IFAD to inspect their accounts, records or other documents relating to the bid submission and contract performance and to have them audited

by IFAD-appointed auditors and investigators, as appropriate

- d) Goods and equipment should be grouped into sizeable packages to cater for economies of scale, efficient and timely procurement. All bids will be for delivery in Egypt.
- e) Submit prepared bid documents to IFAD to obtain the no objection.
- f) Once the no objection is obtained, CPMU may proceed to advertise in one or more English-language newspapers or other publications that, together, have sufficient circulation outside Egypt to allow effective competition for the procurement. Additionally, the CPMU should advertise in the UNDB Website.
- g) The Programme shall also advertise in the dedicated government portals or its own website and at least two local dailies of nationwide circulation following the format prescribed by IFAD.
- h) Bidding documents should be available for free download through the Programme website or any other reliable website (i.e MALR website).
- i) All bidders will be given enough time to prepare and present their bids. For vehicles and equipment and related items, the bidding period shall be 42 days at least while for complex bids such as civil works where site inspections are necessary, 60 days will be given.
- j) The Programme should ensure that the tender box where tenders must be submitted is open and accessible and that the tender box has two locks, with each key to the lock kept by a different officer and that the tender box remains locked until the time for tender opening.
- k) Each tender that is delivered shall be placed unopened in the tender box by the person delivering the tender or by the staff of the Programme immediately upon receipt of the tender if it is delivered by post. If a tender is too large to be placed in the tender box, it shall be received in the manner determined by the Programme if no other manner is set out in the tender document.

## 2. Bid opening.

- Once the deadline for receiving bids has passed bids will be opened. All bidders shall be at liberty to attend the opening ceremony in person or through their appointed representatives. The bid prices shall be read out lot by lot as stipulated in the bidding documents. Tenders submitted later than the specified period shall be rejected and returned unopened.
- A bid opening committee shall be appointed by the Accounting Officer consisting of at least three members. The procurement officer or his/her authorized designate shall be the Secretary
  - The terms of the committee shall be as follows:
    - a. Immediately after the deadline for submitting bids, the bid opening committee shall open all bids received before that deadline.
    - b. Check that the bids are marked for the correct bid opening.
    - c. Check for any withdrawals and confirm that such withdrawal is authentic. Any bid withdrawn in writing shall not be eligible for evaluation or consideration in the bid process.
    - d. Check that bid packaging shows no sign of tampering. If there is damage, then this must be stated and included in the minutes

- e. Those submitting bids or their representatives may attend the opening of proposals/bids. All bidders' representatives present must sign a register, detailing their name and the name and address of the company they represent.
- f. The bid opening committee shall assign an identification number to each bid and write it on each copy of the bid document.
- g. As each bid is opened, the following shall be read out loud and recorded in a document to be called the bid opening register—
  - i. The name and address of the person submitting the bid;
  - ii. The currency of the bid and total price, where applicable including any modifications or discounts received before the deadline for submitting bids.
  - iii. The total price of the bid may not be read out where a bid consists of numerous items that are quoted separately
  - iv. The total price of the bid shall not be read out where a bid is preceded by a technical evaluation and such bid has not met the technical evaluation criteria. Where a bidder has failed the technical evaluation, the entity shall return the financial proposal unopened.
  - v. If applicable, what has been given as bid security or whether samples have been submitted where applicable;
  - vi. The number of pages paginated/serialized by each bidder for each bid submitted
  - vii. The number of copies submitted with the original bid
- h. No bidder shall be disqualified by the procuring entity during opening of bids.
- i. The Committee shall provide a copy of the bid opening register to a person submitting a bid;
- j. Each member of the bid opening committee shall —
  - (a) Sign each original and copies of bid on one or more pages as determined by the bid opening committee; and
  - (b) Initial, in each bid, against the quotation of the price and any modifications or discounts, where applicable.
- k. The bid opening committee shall prepare bid opening minutes which shall set out the following: -
  - i. A record of the procedure followed in opening the bids; and
  - ii. The particulars of those persons submitting bids, or their Representatives, who attended the opening of the bids.
- l. To acknowledge that the minutes are true reflection of the proceedings held, each member of the bid opening committee shall—
  - i. Initial each page of the minutes;
  - ii. Append his or her signature as well as initial to the final page of the

minutes indicating their full name and designation.

- m. A person who causes the physical loss of bid documents commits an offence.
- n. The chairperson should close the bid opening meeting, reminding bidders that they must not seek to influence the evaluation process and that the successful bid will be communicated in due course.
- o. Where bid openings for more than one procurement process are conducted at the same time, they must be conducted consecutively, with one opening completed, recorded and bid removed before the next opening commences.

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- 3. Bid Evaluation.

- This is the process by which the best evaluated bid is selected for award of contract from among all the bids received. Bid evaluation is important and any delay at this stage may involve requesting bidders to extend validities or lead to price increases. The evaluation committee should carry out the evaluation and quality of goods should be evaluated against costs. The lowest bidders should not necessarily be selected but the best value for money bid considering Programme needs. Special considerations such as standardizing on model of vehicle should be considered at this stage. The evaluation team must use only the criteria provided for in the bid documents and no other criteria should be introduced.
  - Evaluation consists of the following stages:
    - a) A preliminary evaluation is undertaken soon after opening bids to ascertain that the bid is responsive and conforms to all eligibility and other mandatory requirements in the bid documents and that the bid has been submitted in the correct format, has been signed by the authorized person, and that the correct number of copies, bid security (if required), validity and any required samples have been provided. Any bid that does not meet the requirements is rejected.
    - b) Technical evaluation is then conducted on bids that pass the preliminary evaluation for technical conformity. The technical evaluation precedes the financial evaluation. If the bid does not meet the technical requirements, it is not responsive and does not proceed to financial evaluation.
    - c) Financial evaluation which considers prices read out at bid opening, corrections for arithmetic errors, currency, discounts e.t.c is undertaken. Bids are then ranked according to their evaluated price and the successful bid is the lowest evaluated price.
- Bid evaluation shall be done by the Evaluation Committee appointed by the Accounting Officer within 7(seven) days after the opening of the bids.
- Evaluation committee should include members with a relevant type of skills, knowledge and experience relevant to the procurement requirement as far as possible, which may include:
  - a. Technical skills;
  - b. End-user representatives;
  - c. Procurement and contracting skills;
  - d. Financial management or analysis skills;
  - e. Legal expertise.

- The procurement officer shall be the secretary.
- The terms of reference for the evaluation committee shall be as follows: -
  - a. Examine all bids received if they conform to all the eligibility and other mandatory requirements in the bid documents
  - b. Evaluate and compare all the responsive bids other than bids rejected as non-responsive.
  - c. Assess the technical and financial aspects of the bids as per criteria in the documents as well as undertake the negotiation of the process
  - d. Carry out the evaluation with due diligence if needed.
  - e. No member of the committee shall communicate with the bidder who has submitted a bid that is under consideration of the evaluation;
  - f. The evaluation committee shall prepare an evaluation report containing a summary of the evaluation and comparison of bids and shall submit the report to the person responsible for procurement for his or her review and recommendation and submission to the accounting officer for approval.
  - g. The report prepared under paragraph (f) shall include
    - i. A summary of all bids received and opened
    - ii. The results of the preliminary evaluation, with reasons why any bid was rejected;
    - iii. details of any minor deviations accepted and the way in which such deviations were quantified and taken into account in the evaluation and comparison of the bids;
    - iv. The scores awarded by each evaluator for each bid as applicable for services;
    - v. Avoid using point/Score/merit system for evaluation of works and goods procurement.
    - vi. A summary of the relative strengths and weaknesses of each bid as applicable;
    - vii. The total score for each bid as applicable for services;
    - viii. The evaluated price of each bid, showing any discounts, corrections or adjustments to the bid price and any conversion to a common currency
    - ix. the ranking of the bids each according to its total evaluated price
    - x. the results of any confirmation of qualification conducted and
    - xi. A recommendation to award the bid to the lowest evaluated bidder or to the person who submitted the proposal with the highest total score and such other recommendation as may be necessary
  - h. The evaluation report shall be signed by each member of the evaluation committee
  - i. The committee in writing may request a clarification of a bid from a bidder to

assist in evaluation and comparison of bids. The clarification shall not change the terms of the bid;

- j. The evaluation shall be carried out within a maximum of thirty days after opening.
- k. The evaluation committee may, after bid evaluation, but prior to the award of the bid, conducts due diligence and present the report in writing to confirm and verify the qualifications of the bidder who submitted the lowest evaluated responsive bid to be awarded the contract in accordance with this Act. The conduct of due diligence may include obtaining confidential references from persons with whom the bidder has had prior engagement.
- l. To acknowledge that the due diligence report is a true reflection of the proceedings held, each member who was part of the due diligence by the evaluation committee shall—
  - i. Initial each page of the report; and
  - ii. Append his or her signature as well as their full name and designation.

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- 4. Award of Bid

- The evaluation team will make a report and a recommendation for award to the lowest evaluated bidder to the Accounting Officer who will award the bid based on the evaluation report. The CPMU will then seek for a no objection from IFAD before awarding the bid.
- All bids shall be evaluated by the evaluation committee for the purpose of making recommendation to the Accounting Officer through the procurement officer to inform the decision of the award of the contract to the successful bidders.
  - The successful bid shall be the bid with the lowest evaluated price.

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- 5. Contract formation and performance.

- Once a no objection has been granted, a contract with the awarded bidder is entered into for performance of the contract.
- The existence of a contract shall be confirmed through the signature of a contract document incorporating all agreements between the parties and such contract shall be signed by the Accounting Officer and the successful bidder. The Programme shall enter into a written contract with the person submitting the successful bid based on the bid documents and any clarification that emanate from the procurement proceedings.
- The written contract shall be entered into within the period specified in the notification.
  - The bid documents shall be the basis of all procurement contracts and shall, constitute at a minimum—
    - a) Contract Agreement Form;
    - b) Notification of Award;
    - c) Bid Form;
    - d) Special Conditions of Contract;

- e) General Conditions of Contract;
  - f) Schedule of Requirements;
  - g) Price schedule or bills of quantities submitted by the bidder;
  - h) Technical Specifications.
- If the person submitting the successful bid refuses to enter into a written contract in writing as required, he or she shall forfeit his or her bid security and the procurement process shall proceed with the next lowest evaluated bidder
  - A successful bidder shall submit a performance security equivalent to not more than ten per cent of the contract amount before signing of the contract if provided in the bid document. In case the contract is not fully or well executed, the performance security shall unconditionally be fully seized by the Programme as compensation without prejudice to other penalties provided for. The bank or authorized financial institution shall also be obliged to pay an additional interest of one percent (1%) for every day of payment delay after ten (10) working days from the receipt of the claim provided this requirement is disclosed in the performance security and if it is necessary to take the matter to courts, and that the court rules in favour of the procuring entity, this interest shall continue to accrue up to the time the courts' decision is executed.
  - The performance security may not generate interest and it shall be determined in accordance with the form provided for in the bidding document and may be paid in form of a bank guarantee, issued by an authorized financial institution. The bid document shall provide for, if necessary, other forms of performance security that may be requested from the successful bidder. The bank or authorized financial institution shall be obliged to give to the Programme all the amount of the performance security upon claim by the Programme.
  - If the contractor is foreign, the guarantee shall be issued by a local bank or authorized financial institution issued by a corresponding bank in Egypt recognized the Central Bank of Egypt.
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6. Payments.
- Under no circumstances, will payments for goods and services be realised before receipt of the goods or the services have been delivered and physical verification of the receipt of vouchers and the actual goods undertaken.
  - The inspection and acceptance shall be done by the Inspection and Acceptance Committee appointed by the Accounting Officer to ensure that the correct quantity is received and the technical standards have been met.
  - Notwithstanding the appointment of a Contract Manager who will manage the procurement subject on a day to day basis, it is the Inspection and Acceptance Committee who issue Interim / Progress / Completion / Final Certificates as required and who confirm that payment may be made.
  - The appointment letter for the Inspection and Acceptance Committee members should make clear the duties of those members and insist that they satisfy themselves personally that work has been done in accordance with the contract before authorizing payments.
  - The inspection and acceptance committee shall be composed of a chairman and at least two other members, including the head of the user component appointed on the recommendation of the Procurement officer.

- The inspection and acceptance committee shall immediately after the delivery of the goods, works or services—
  - a) inspect and where necessary, test the goods received;
  - b) inspect and review the goods, works or services in order to ensure compliance with the terms and specifications of the contract;
  - c) Accept or reject, on behalf of the Programme, the delivered goods, works or services.
  - d) Ensure that the correct quantity of the goods is received;
  - e) Ensure that the goods, works or services meet the technical standards defined in the contract
  - f) Ensure that the goods, works or services have been delivered or completed on time, or that any delay has been noted;
  - g) Ensure that all required manuals or documentation has been received; and
  - h) Issue interim or completion certificates or goods received notes, as appropriate and in accordance with the contract
- For complex and specialized procurement contract, the Accounting Officer shall appoint a contract implementation team which shall include members from the procurement function, and the head of the component, the relevant technical department and a consultant where applicable
- For the purpose of managing complex and specialized procurement contracts the contract implementation team shall be responsible for—
  - - a) Monitoring the performance of the contractor, to ensure that all delivery or performance obligations are met or appropriate action taken by the procuring entity in the event of obligations not being met;
    - b) ensure that the contractor submits all required documentation as specified in the bidding documents, the contract and as required by law;
    - c) Ensure that the procuring entity meets all its payment and other obligations on time and in accordance with the contract.
    - d) ensure that there is right quality and within the time frame, where required;
    - e) review any contract variation requests and make recommendations to the Accounting Officer for considerations and such reviews for variation shall be clearly justified by the technical department in writing backed by supporting evidence and submitted to the head of the procurement function for processing;
    - f) manage handover or acceptance procedures as prescribed;
    - g) make recommendations for contract termination, where appropriate;
    - h) ensure that the contract is complete, prior to closing the contract file including all handover procedures, transfers of title if need be and that the final retention payment has been made;
    - i) ensure that all contract administration records are complete, up to date, filed and

archived as required; and

- j) ensure that the contractor acts in accordance with the provisions of the contract
  - k) Ensure discharge of performance guarantee where required.
- The Programme may co-opt a member of the contract implementation team from another procuring entity or outsource
  - Where a supplier/contractor furnished the Programme with a performance security, the Security shall be returned to the supplier/contractor within thirty (30) days following the final acceptance by the Programme. The thirty (30) days referred to shall include the retention period except in cases of procurement for works where the period shall commence from the date of practical completion or handover, whichever is earlier.
  - No works, goods or services contract shall be paid for before they are executed or delivered and accepted by the Programme except where so specified in the bid documents and contract agreement. Such an advance payment shall not be paid before the contract is signed. Under exceptional circumstances advance payment may be granted and shall not exceed twenty per cent (20 %) of the price of the bid and shall be paid upon submission by the supplier/contractor to the Programme of an advance payment security equivalent to the advance itself and that security shall be given by a reputable bank or any authorized financial institution issued by a corresponding bank in Egypt recognized by the Central Bank of Egypt, in case the supplier/contractor is a foreigner.
  - Supplier/contractor shall use the advance paid only in activities related to the bid. If the supplier/contractor uses the entire advance or part of it in other activities that are unrelated to the bid, the advance shall immediately be considered as a debt which shall be paid by seizing the entire security or part of it.
  -

## **II. International Competitive Bidding with Prequalification Procedure (Recommended for Civil Works activities under Sub-Component 2.1)**

- In addition to the above-mentioned procedures, Prior issuing the bidding documents to the pre-qualified firms the following steps will be taken:

Development of bidding documents: Bidding documents including pre-qualification documents will be prepared by the CPMU. The IIS will be provided with completed bidding documents for them to insert administrative aspects such as physical address of bid delivery and other periphery aspects. The IIS will, however, have to be involved in the development of aspects such as specifications/evaluation criteria and would have a right to seek clarification or request adjustments if their needs are not taken care of.

- Advertising: Request for pre-qualification advertisement will be placed in the newspapers and in the UNDB website by the IIS directing bidders to download the pre-qualification documents free of charge from specific website. Once the IIS finalise the pre-qualification process, the invitation will be sent to the pre-qualified firms directing them on how to apply for the tenders.
- 

## **III. National Competitive Bidding**

- For National competitive bidding (NCB), the same principles of ICB apply to NCB, except that publication of a Specific Procurement Notice in UNDB Website. The Programme shall advertise in the dedicated government portals, its own website and at least one local dailies of nationwide circulation.
- National Standard Bidding Documents (SBD) shall be used for undertaking procurement under this Programme and consistency with IFAD Procurement Guidelines shall be ensured.

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#### **IV. National Shopping**

- This method will be applied by obtaining three quotations from various sources. Contracts will be awarded on the basis of quotations obtained from 3 qualified contractors/vendors/service providers in response to a written invitation (request for quotations).

### **B- Procurement of Consulting Services**

#### **Principles**

The procurement of consulting services under the IFAD will be guided by the following principles:

- (i) The need for high quality services;
- (ii) The need for economy and efficiency;
- (iii) The aim to give qualified consultants from Egypt and all other eligible IFAD member countries an opportunity to compete in providing services;
- (iv) The need to encourage the development and use of local consultants; and
- (v) The importance of transparency in the selection process.

#### **Definition of Consultants**

The term "consultants" includes a wide variety of consulting firms, engineering firms, management firms, architectural firms, legal practices, university and research institutions, auditors, banks, UN agencies and other multinational agencies, as well as individuals.

Consultants may associate with each other to complement their respective areas of expertise, or for other reasons. Such an association may be for the long term (independent of any particular assignment) or for a specific assignment. If "association" takes the form of a joint venture or of a sub-consultancy, all members of the joint venture shall sign the contract and shall be jointly and severally liable for the entire assignment.

#### **Selection Methods**

Contracts for the procurement of consultancy services may be awarded on the basis of:

- Quality and Cost Based Selection (QCBS),
- Quality Based Selection (QBS),
- Fixed Budget Selection (FBS),
- Least Cost Selection (LCS),
- Consultants' Qualification (CQS),
- Individual Consultants' Selection (ICS), and
- Single Source Selection (SSS).

### **Quality- and Cost-based Selection (QCBS)**

The QCBS method involves competition among consulting firms in such a manner that the quality of the proposal as well as the estimated cost of services are taken into account, and the firm with the highest combined quality and cost score is awarded the contract.

The selection process involves the following steps:

- Preparation of Terms of Reference (TOR);
- Preparation of cost estimate and the budget;
- Advertising for Expression of Interest (EOI) or Statement of Capability;
- Preparation of the short list of consultants based on evaluation of EOI;
- Preparation and issuance of the Request for Proposals (RFP) to the short-listed consultants; RFP consists of: (i) Letter of Invitation, (ii) Information to Consultants, (iii) the TOR, and (iv) proposed contract.
- Receipt of proposals;
- Evaluation of technical proposal (i.e., evaluation of quality);
- Evaluation of financial proposal (i.e., evaluation of cost of services);
- Combined quality and cost evaluation;
- Negotiations and award of the contract to the firm with the highest combined quality and cost score.

Important considerations for implementing each step are discussed briefly below.

#### Selection Process

The *Terms of Reference* (TOR) shall define the objectives of the assignment, scope of assignment outlining services necessary to carry out the assignment, clearly state the expected outputs, and shall include background information which would facilitate the preparation of the proposals. In general, the TOR should clearly state WHAT the client wants done, while it is the responsibility of the consultants to show HOW that will be done.

*Cost Estimate:* A realistic cost estimate shall be made to provide the client with reasonable estimate of resources needed to carry out the assignment. Cost estimates shall include cost of personnel (foreign and local personnel) broken down into fees and social costs, logistical support, physical inputs (vehicles, equipment), and expenses such as airfares, communication, office supplies and production of required reports.

*Advertising:* To obtain expressions of interest (EOI) or statement of capability, the assignment shall be advertised in Member countries and as required internationally (in case of International REOI) and in local newspapers of national circulation. Sufficient time (at least 14 days) should be allowed for the preparation and submission of EOI. To enable submission of comparable EOIs from prospective consultants, the advertisement should specify minimum information to be submitted. This should include:

- Eligibility criteria "evaluated through pass/fail system"
- Company profile, including name of the country in which the firm is registered "evaluated through point system";
- Experience of projects related to the assignment, including brief descriptions of most recent relevant assignments (location, client, cost, staff involved) "evaluated through point system";
- Financial capabilities (for large and complex assignments) "evaluated through point system".

*Short List of Consultants:* The short list is obtained from evaluation of EOIs submitted in response to the advertisement. The short list shall consist of minimum three firms. Once the short list is finalized, Requests for Proposals (RFPs) are issued and submitted to the shortlisted consultant.

*Preparation and Issuance of the Request for Proposals (RFP):* the RFP will consist of (i) Letter of Invitation, (ii) Information to Consultants, the TOR, and (iv) proposed form of contract. The Information to Consultants should not indicate the budget (since cost is a selection criterion), but shall indicate the expected professional time input for key staff. The standard RFP shall be used with minimum modifications.

*Receipt of Proposals:* Sufficient time shall be allowed for preparation and submission of proposals. Depending on the complexity of the assignment, 4–6 weeks shall be allowed. The technical and financial proposals shall be submitted at the same time but in separately marked envelopes. Opening of the proposals shall take place immediately after the closing time for submission of proposals. The technical proposal shall be opened but the financial proposals shall remain sealed and deposited in a safe place until the technical proposals have been evaluated.

*Evaluation of Proposals:* A two stage evaluation shall take place: firstly, the evaluation of technical quality and, secondly, the evaluation of cost of services and combination of the technical and financial scores. Evaluation shall be by a committee of relevantly qualified individuals in the areas covered by the assignment (technical, financial, social and legal). The evaluation of technical quality is based on the criteria specified in the RFP, but generally covers the following: (i) consultants' specific experience; (ii) methodology, approach and workplan; (iii) proposed key personnel; (iv) transfer of knowledge. The following weights are indicative and may be adjusted for specific circumstances. The proposed weights shall be disclosed in the RFP.

Consultant's specific experience:	5 to 10 points
Methodology, approach and workplan:	20 to 50 points
Key personnel:	30 to 60 points
Transfer of knowledge:	0 to 10 points
<b>Total:</b>	<b>100 points</b>

The RFP would normally include criteria for combining quality and cost to obtain a single combined total score. For example, Quality and Cost would be combined in proportions 70-80% for quality of proposal and 30-20% for cost of services.

*Negotiations and Contract Award:* Negotiations shall be carried out with the firm with the highest combined technical and financial score. Objective of negotiations is to reach a common understanding about the TOR, the methodology, proposed staffing, client's inputs, and conditions of contract. The consultants shall not be allowed to substitute key staff unless justified by long delays between submission of proposals and award of contract. The consultants should also not be expected to reduce their unit costs since price has already been taken into account in the selection. The contract shall be signed after successful negotiations.

#### Rejection of All Proposals

All proposals may be rejected if (i) they are non-responsive to the TOR, or (ii) the costs are substantially higher than the estimated cost. In the latter case, measures for increasing the budget should be explored. In any case, the IFAD "No Objection" is required before proceeding with the rejection of the bidding and proceeding with an alternative course of action.

#### **Quality-Based Selection (QBS)**

QBS is appropriate for the following types of consulting assignments:

- Complex or highly specialized assignments with need for demonstrable innovation by the consultants, e.g., country economic studies, urban master plan, financial sector reforms;
- assignments with high downstream impact, e.g., policy studies, management studies, engineering design of complex infrastructure;
- assignments which could be carried out in different ways, such that it is difficult to compare proposals (examples include management advice, policy studies)

For these types of assignments, short-listed consultants shall be asked to submit technical proposals and the firm with the highest technical proposal invited to submit a financial proposal and negotiate a contract.

### **Selection under Fixed Budget**

For assignments which are simple in nature and can be easily defined, the consultants may be selected under a fixed budget. The RFP should indicate that selection will be based on Selection under Fixed Budget. The process takes the following steps.

- (i) Short-listed consultants are requested to submit technical and financial proposals.
- (ii) The technical proposals are evaluated without opening the financial proposals. The technical proposals are ranked on basis of technical score.
- (iii) All the financial proposals are opened. The proposals above the budget are rejected.
- (iv) The firm that has submitted the highest ranked technical proposal among those below the budget shall be awarded the contract.

### **Least-Cost Selection**

This is applicable for assignment of a standard or routine nature (e.g., audit) with well-established performance standards. A minimum qualifying score for the "quality" is established. Technical and financial proposals are submitted in two separate envelopes from a short list of consultants. The firm with the lowest price among those scoring above the qualifying score shall be awarded the contract.

### **Consultants' Qualification**

This method is applicable for small assignments for which the need for preparing and evaluating competitive proposals is not justified. The steps in the selection process are:

- (i) prepare TOR;
- (ii) request expressions of interest and information on consultants' experience and suitability for the assignment;
- (iii) establish a short list;
- (iv) select the firm with the most appropriate qualifications;
- (v) invite the selected firm to submit a combined technical and financial proposal; and
- (vi) negotiate a contract.

### **Single-Source Selection**

This is selection without competition and is most applicable under the following conditions:

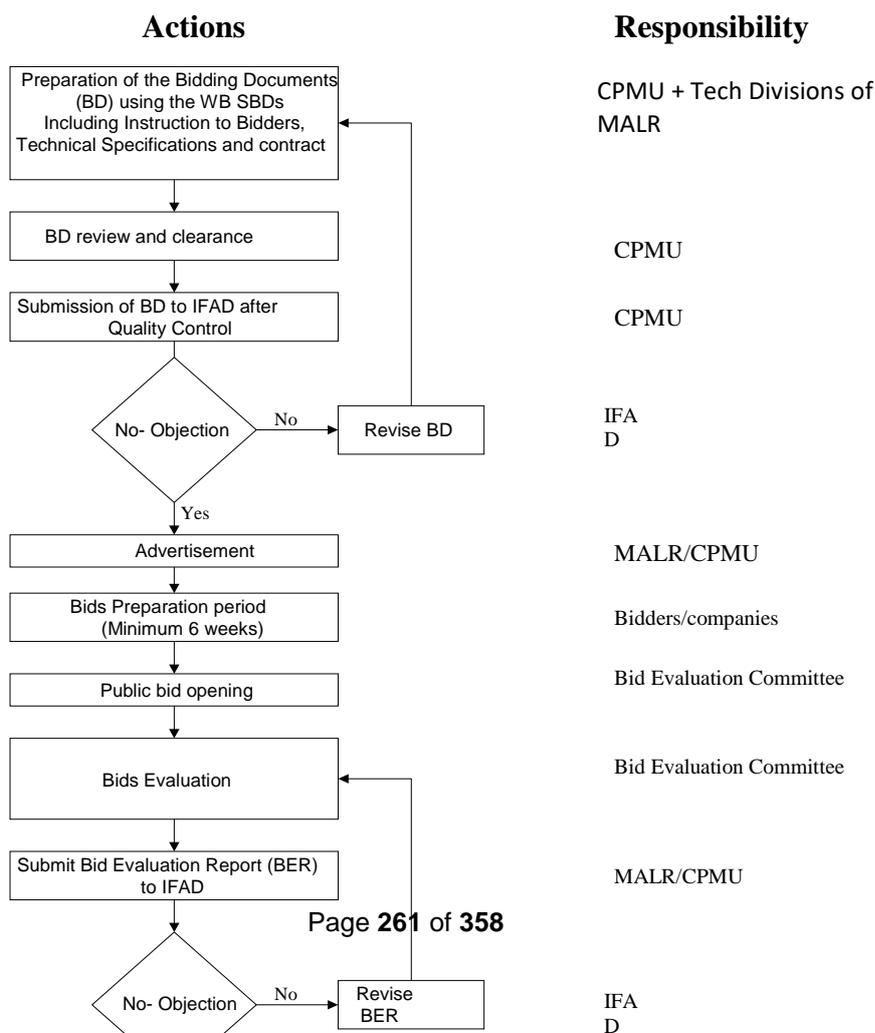
- Continuation of existing or previous contract awarded on competitive basis before;
- Need for rapid selection, such as in an emergency;

- Very small assignments; and
  - When only one firm is qualified to handle the assignment.
- The selected firm is asked to submit a technical and financial proposal, and these become the basis of negotiations and contract award.
- - **Individual consultants (IC).**
  - IC are employed on assignments for which (a) a team of experts is not required, (b) no additional outside (home office) professional support is required, and (c) the experience and qualifications of the individual are the paramount requirement. Advertisement for seeking expressions of interest (EOI) is encouraged, particularly when the Borrower does not have knowledge of experienced and qualified individuals or of their availability, or the services are complex, or there are potential benefits from wider advertising, or if it is mandatory under national law. All invitations for EOIs should specify selection criteria that are solely based on experience and qualifications.
  - Individual consultants are selected on the basis of their relevant experience, qualifications, and capability to carry out the assignment. They do not need to submit proposals and shall be considered if they meet minimum relevant requirements which shall be determined by the Borrower on the basis of the nature and complexity of the assignment, and assessed on the basis of academic background and relevant specific experience, and, as appropriate, knowledge of local conditions such as national language, culture, administrative systems, and government organization. The selection shall be carried out through the comparison of the relevant overall capacity of at least three qualified candidates among those who have expressed interest in the assignment or have been approached directly by the Borrower. Individuals selected to be employed by the Borrower shall be the most experienced and best qualified, and shall be fully capable of carrying out the assignment. The Borrower shall negotiate a contract with the selected individual consultant after reaching agreement on satisfactory terms and conditions of the contract, including reasonable fees and other expenses.
  - Individual consultants may be selected on a single-source basis with due justification in exceptional cases such as:
    - a) tasks that are a continuation of previous work that the consultant has carried out and for which the consultant was selected competitively;
    - b) assignments with a total expected duration of less than 3 (three) months;
    - c) urgent situations; and
    - d) when the individual is the only consultant qualified for the assignment. The Borrower shall submit to IFAD for its review and no objection the TOR of the assignment, a sufficiently detailed justification, including the rationale for single-source selection instead of a competitive selection process, and the basis for recommending a particular individual consultant in all such cases.

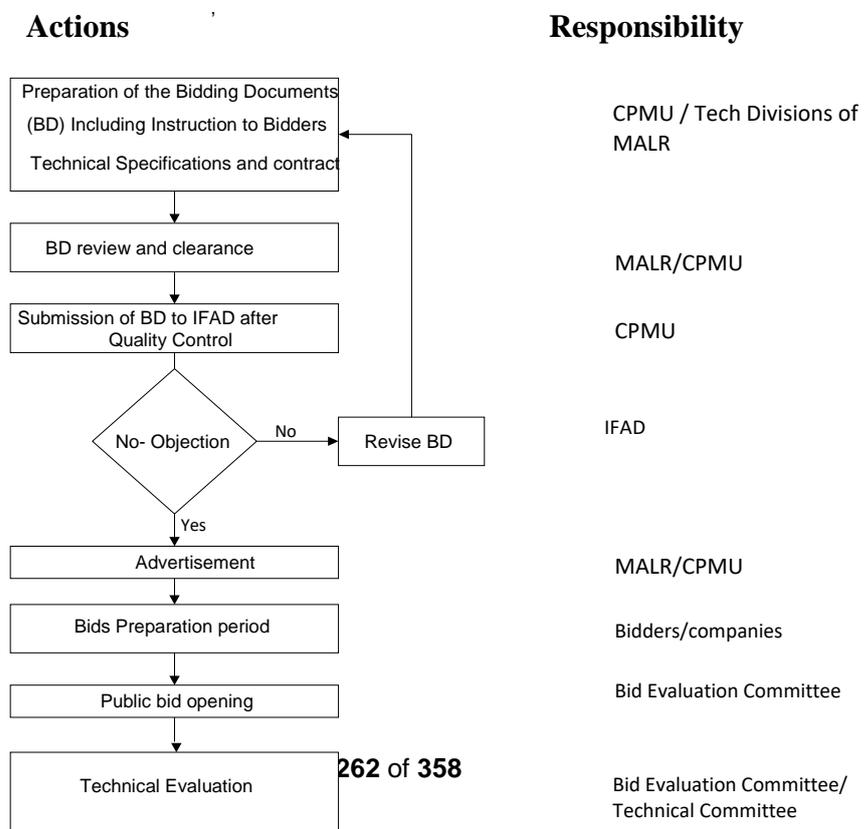


**Government officials and civil servants** of the Borrower's country may only be hired under consulting contracts in the Borrower's country, either as individuals or as members of the team of experts proposed by a consulting firm, provided that such hiring does not conflict with any employment or other laws or regulations, or policies of the Borrower's country and if they **(i)** are on leave of absence without pay, or have resigned or retired; **(ii) are not being hired by the agency they were working for before going on leave of absence without pay, resigning, or retiring** and **(iii)** their hiring would not create a conflict of interest

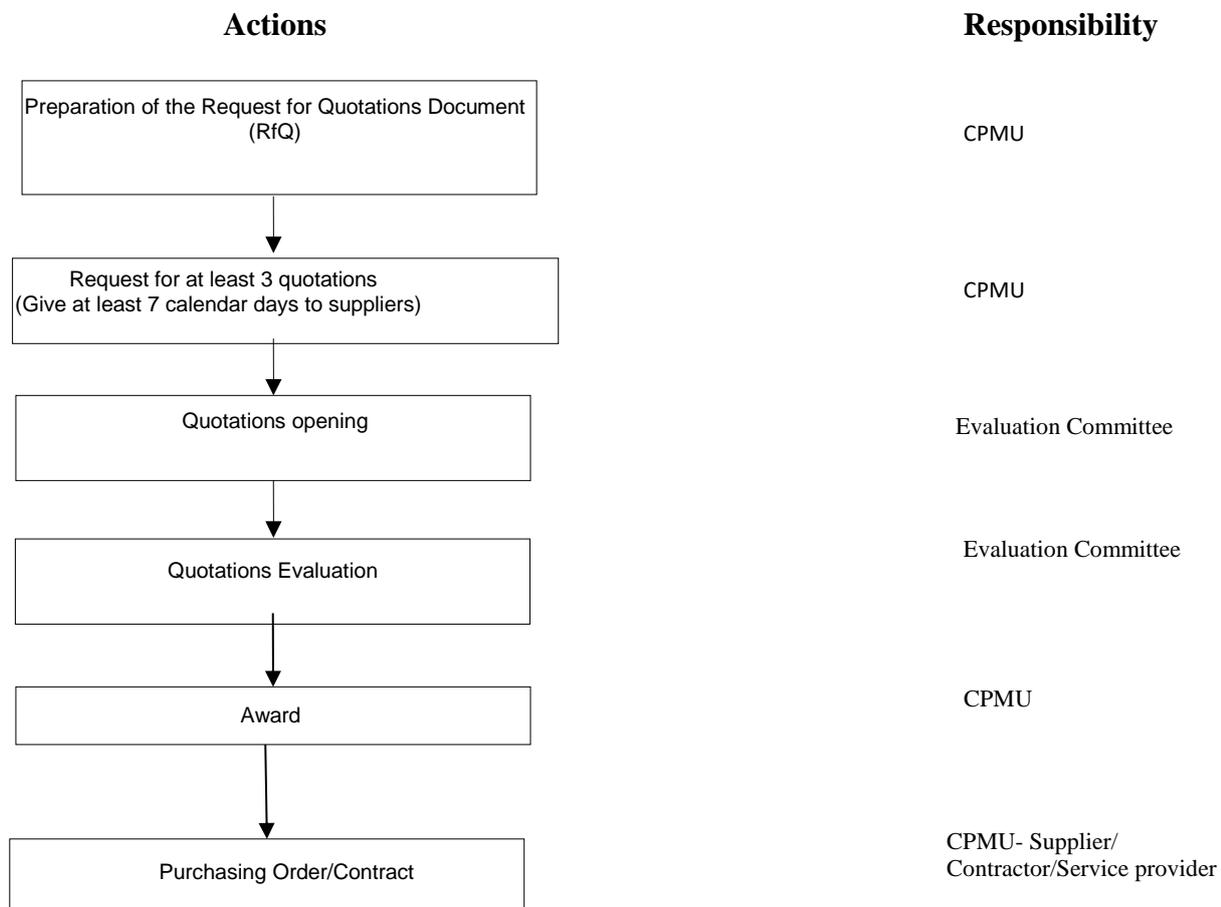
<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> International Competitive Bidding (ICB for goods, works or non-consulting services)



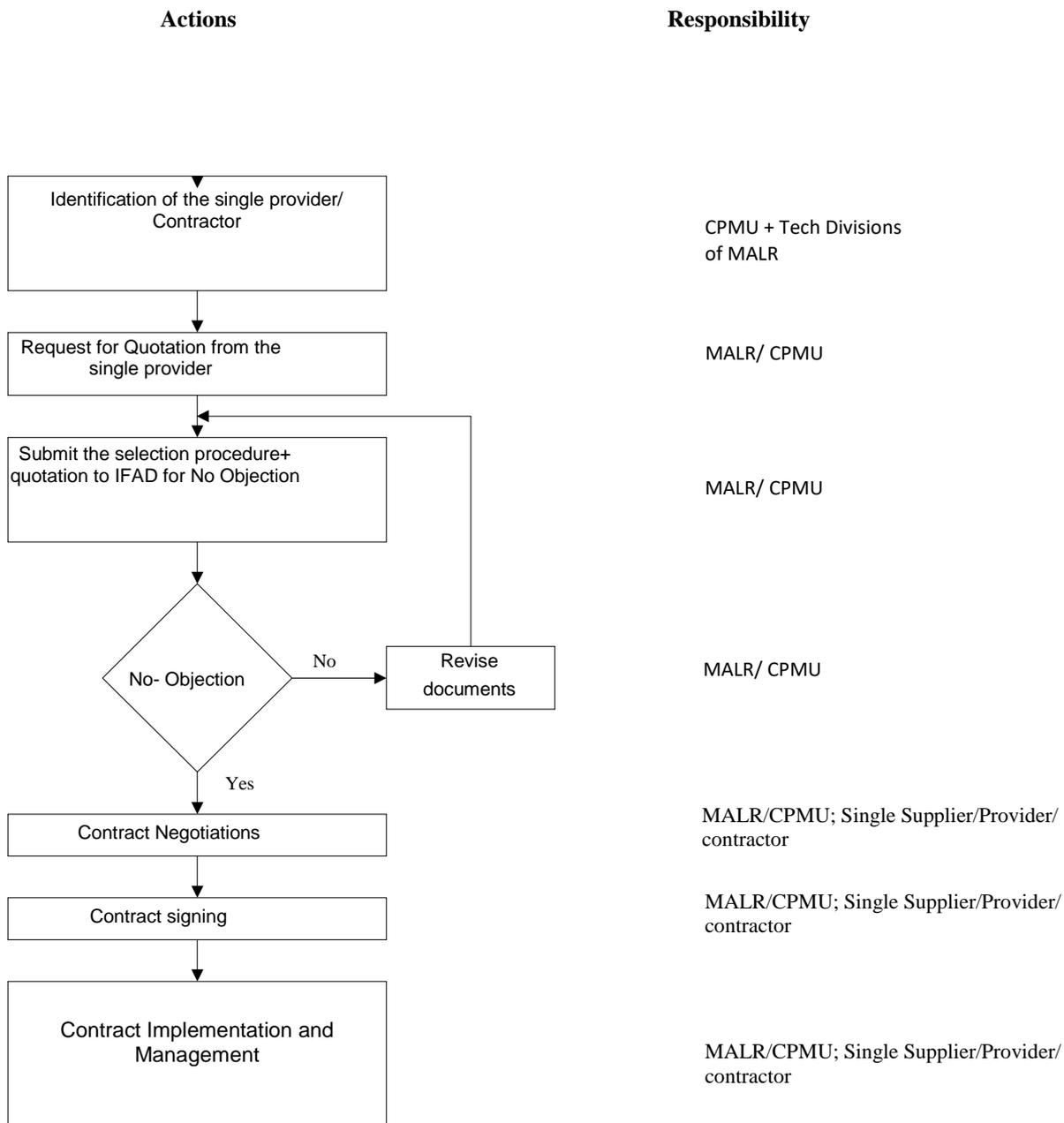
<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> National Competitive Bidding (NCB for goods, works or non-consulting services)



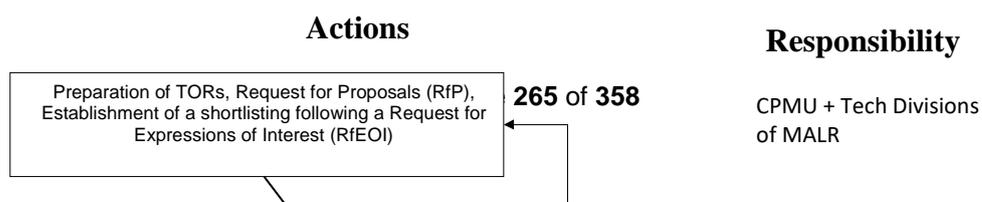
<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> Shopping (for goods; works or non-consulting services)



<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> Direct Contracting



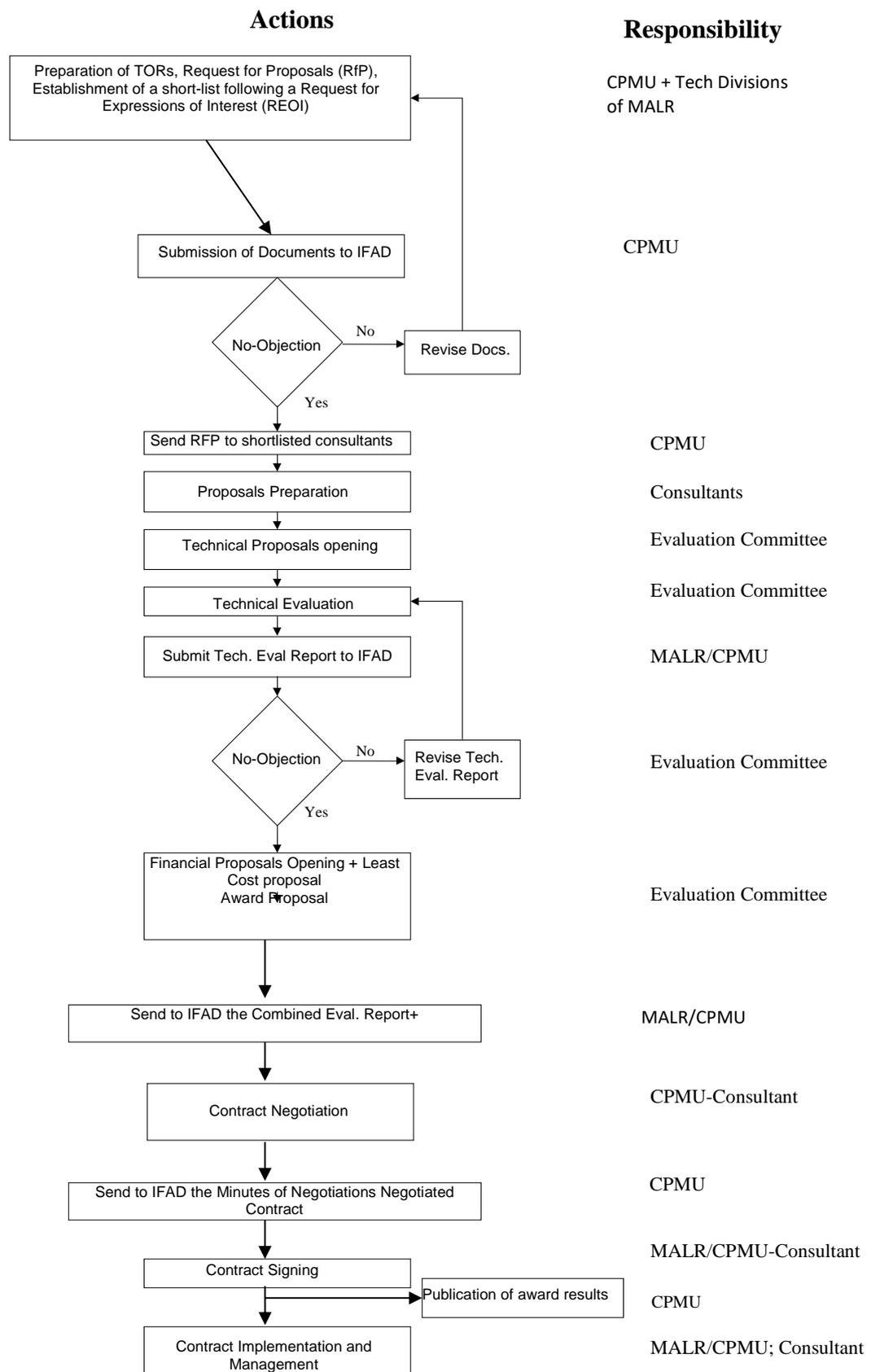
<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> Quality and Cost Based Selection (QCBS for Consulting Services)



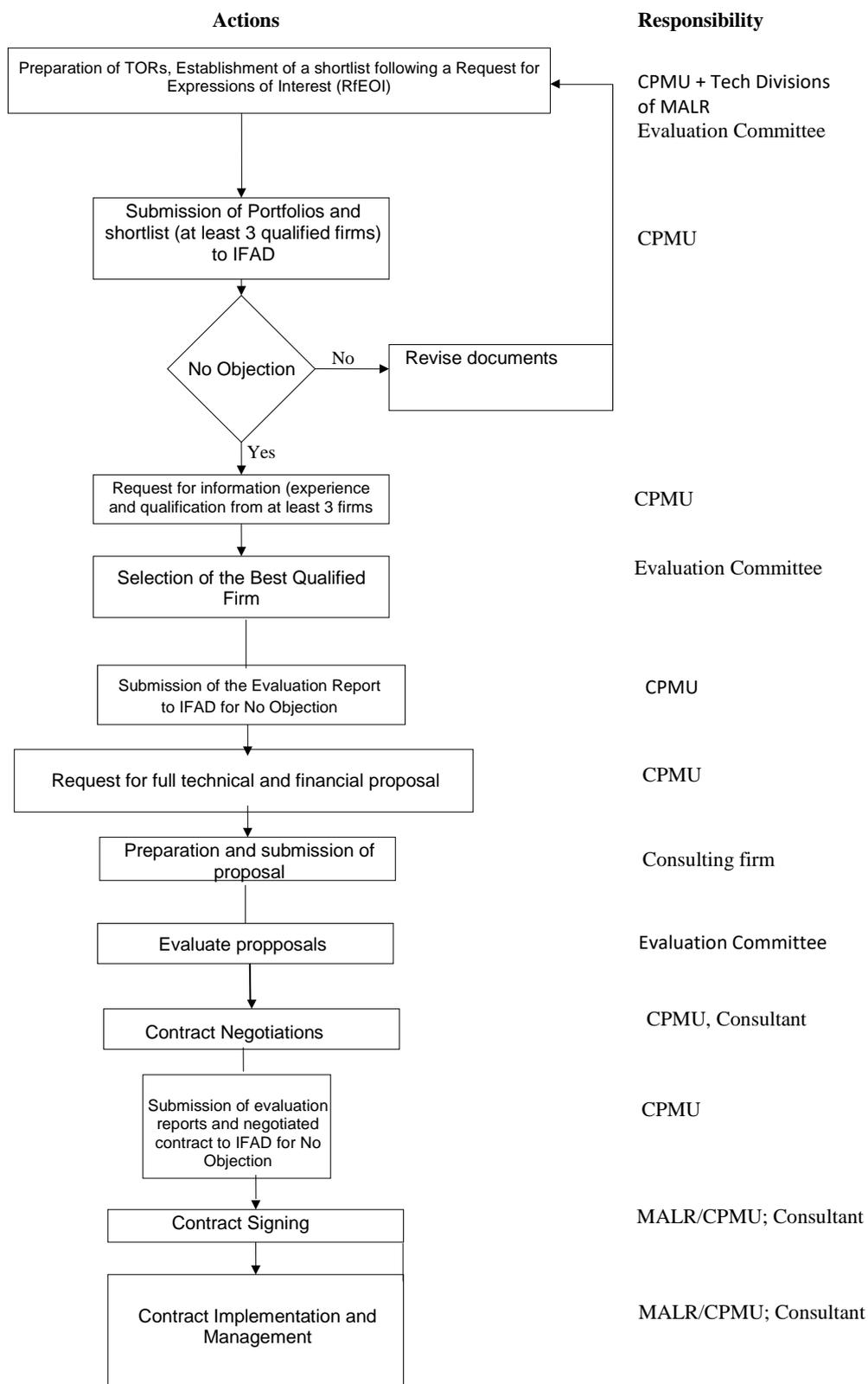
MALR/CPMU

<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
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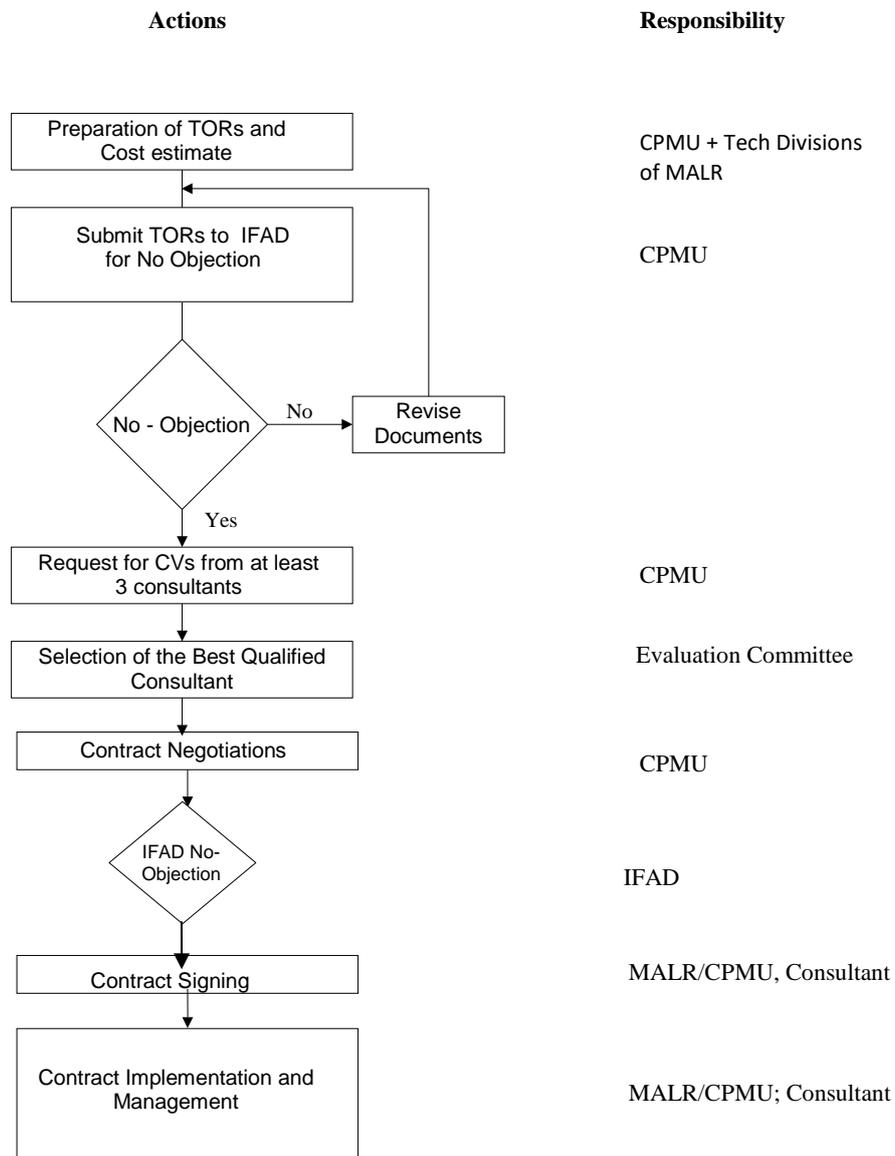
<b>Procedure:</b> Least Cost Selection (LCS for Consulting Services)
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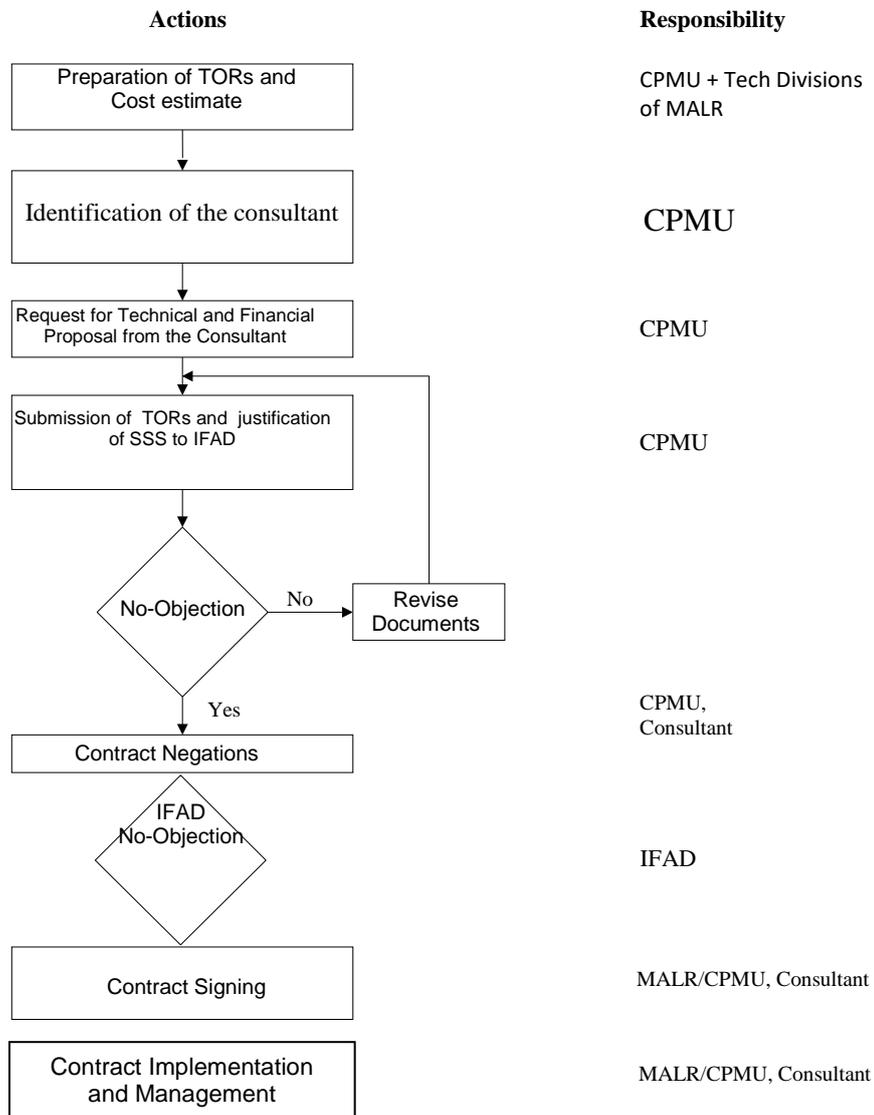
<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> Consultant’s Qualification-based Selection (CQS)



<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> Selection of Individual Consultants (IC)



<b>Programme:</b> Sustainable Transformation for Agricultural Resilience in Upper Egypt (STAR)
<b>Procedure:</b> Single Source Selection (SSS)



## **Appendix 2: Measures of Combating Corruption**

To ensure the implementation of IFAD zero tolerance anti-corruption policy, several measures should be applied as follows:

### **a- Corruption Awareness**

All projects staff must be aware of their responsibility to prevent corruption. Vendors, including private sector, NGOs are made aware of and accept that they are subject to the IFAD Sanction Procedures through the instructions on fraud and corruption issued within the Standard Bidding Documents.

### **b- Internal Control System**

Ensure that the implementing Agency has its own internal control system where policies and procedures are enforced. Communicate regularly with such unit to ensure its effectiveness.

### **c- Application and Adherence to Standards and Codes of Conduct**

Ensure that the implementing Agencies and PMU have their Standards and Codes of Conduct and all staff, vendors are fully aware with such documents and sign declaration forms to confirm their compliance.

### **d- Establishing Complaints Mechanism**

- i. Implementing a proper complaint handling mechanism requires a step-by step process, ensuring that it is undertaken in time and is of good quality. A proper implementation of a complaint mechanism also necessitates applying assigned roles and responsibilities.
- ii. Ensure that the IFAD Anticorruption Policy is translated to Arabic Language and communicated to all parties involved in IFAD projects including the project beneficiaries.
- iii. Accessibility: The mechanism should be accessible to all stakeholders, irrespective of where they live, of what language they speak and of their level of education or financial capacity. Channels to report complaints should allow all potential complainants to report their grievances. IFAD Anticorruption Hotline<sup>6</sup> and contacts of Local Authorities responsible for combating the corruption will be presented in the PMU premises, Agriculture Directorate in all participating Governorates and Agricultural Cooperatives in all participating villages. The reporting mechanisms should be tailored to the needs of the potential users.
- iv. In line with the principles of transparency and accountability and in order to build trust in the mechanism, the complaint handling procedure should be publicised. Beneficiary communities need to be fully informed (early in the project) of the existence of the complaints mechanism, its purpose, what is a complaint, who can file a complaint and how. Information should be provided in the local languages and in a culture sensitive manner. A representative of the affected beneficiaries should be able to file a complaint on their behalf.
- v. Incoming complaints handling should be done with care, in line with processes established, in time and should be well recorded in order for the responsible staff to be able to follow up appropriately. The process for handling incoming complaints includes i) receiving and recording complaints and ii) initial screening of complaints and handling of out-of-scope complaints.
- vi. Protecting whistle blowers, whether internal or external. The power inequalities between affected and perpetuating parties must be acknowledged when applying effective complaints mechanisms. Whistle blowers, whether staff or beneficiaries, must overcome their reluctance to make a complaint out of fear of the consequences. Internal procedures must be put in place to protect staff members who make disclosures from reprisals as well as to assure beneficiaries that they will not be deprived from the aid benefits if they report irregularities.

### **e- Imposing sanctions**

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<sup>6</sup> Email: anticorruption@ifad.org  
Phone: +39 0654592888  
Fax: +39 0654597888  
<https://www.ifad.org/en/anti-corruption>

If the Fund determines that IFAD non-staff personnel, non-government recipients, vendors or third parties have engaged in prohibited practices, the Fund may impose administrative sanctions on such individuals or entities. Sanctions are imposed on the basis of: (i) the findings and evidence presented by AUO, including mitigating and exculpatory evidence; and (ii) any evidence or arguments submitted by the subject of the investigation in response to the findings presented by AUO.

## Chapter 10: Environment and Social Management Plan

Interventions	Social/ Environmental/ Climate Risk Factors	Mitigating Measure	Monitoring
All interventions	All possible risks	<ul style="list-style-type: none"> <li>Develop a robust and multi-channels project level Grievance Redress Mechanism (GRM)</li> <li>Ensure dissemination of the GRM to local communities prior to starting project activities.</li> <li>Maintain solid documentation for the received complaints during the operation of the project and track the level of responsiveness (provision of feedback).</li> </ul>	<ul style="list-style-type: none"> <li>Review of the number of complaints received.</li> <li>Review of the number of complaints addressed, the mechanisms used and the time it took to address them.</li> </ul>
All interventions	<u>Social:</u> Beneficiary Dissatisfaction and Discrimination	<ul style="list-style-type: none"> <li>Create a qualitative assessment of the aspirations of women and men of various age groups, especially the most vulnerable (landless, women head of households, youth, especially young girls), through focus group discussions, to solicit feedback on the challenges being faced by them, their views on solutions and coping mechanisms, as well as feedback on the training programs and how they can be improved during all project stage.</li> </ul>	<ul style="list-style-type: none"> <li>Collecting disaggregated data and monitoring, and evaluation data. <sup>[11]</sup><sub>[SEP]</sub></li> <li>Review number of complaints and negative data compared to positive feedback and time it took to resolve them. <sup>[11]</sup><sub>[SEP]</sub></li> </ul>
All interventions	<u>Social:</u> Gender Issues and all forms of Gender Based Violence, including sexual harassment (due to the increasing mobilisation of women to participate in project activities; attend trainings, exchange visit, learning).	<ul style="list-style-type: none"> <li>Increasing local CDAs engagement to work with local leaders and male household's members and promote campaign for sensitisation on gender equality and against gender biases. Community and Household level.</li> <li>Conducting gender-sensitive and participatory consultations while finalizing and designing the various sub-project activities (enterprise development Component 1.2) such as the selection of commodities and products, training activities, and capacity</li> </ul>	Collecting gender-disaggregated monitoring and evaluation data to track the extent to which women have been able to participate and benefit from project activities.

		<p>building initiatives related to IGA/entrepreneurial development for women. These have to include safe spaces/ women-only focus groups to encourage women's meaningful participation in consultations.</p> <ul style="list-style-type: none"> <li>• Create female only spaces for women to receive trainings and services.</li> <li>• Gender mainstreaming actions should be developed as part of a Gender Development Plan (GDP) prepared by the CDAs engaged in the implementation.</li> </ul>	
<b>1. Strengthening rural institutions, enterprises and markets</b>			
1.1. <i>Strengthening marketing institutions</i>	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>• Women, Youth and other vulnerable categories are excluded from capacity building</li> <li>• Farmers are unable to fully utilize digital technologies in marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Conducting strong public information dissemination at different levels on the programme objectives, eligibility criteria, the selection process for capacity building activities</li> <li>• Investing in capacity building for communities on digital agriculture</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring the indicators for the percentage of women and youth participating in Marketing Associations.</li> <li>• Monitoring the use of digital platforms (e.g. number of hits or downloads of applications)</li> </ul>
1.2. <i>Micro enterprises development</i>	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>• Lack of ability of entrepreneurs with insufficient education or exposure to develop a good business plan</li> <li>• Elite capture</li> </ul>	<ul style="list-style-type: none"> <li>• Investing in capacity building for business plans development and enhancing entrepreneurial skills.</li> <li>• Implementing the programme's targeting strategy to make sure the component reaches the poorest and landless beneficiaries</li> </ul>	<ul style="list-style-type: none"> <li>• Conducting surveys to assess entrepreneurial skills.</li> <li>• Monitoring the percentage of poorest and landless who develop micro-enterprises.</li> </ul>
<b>2. Improvement of smallholders productivity and resilience</b>			
2.1. <i>Investments in irrigation infrastructure and management</i>	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Environmental Impact due to irrigation infrastructure work</li> </ul> <p><u>Social:</u></p> <ul style="list-style-type: none"> <li>• Poor smallholder</li> </ul>	<ul style="list-style-type: none"> <li>• The project will ensure complying with the national law regarding Environmental Impact Assessments. The project will follow the Environmental and Social Management Plan for each sub-component to ensure that the interventions are in line with IFAD's policies.</li> </ul>	<ul style="list-style-type: none"> <li>• Applying the Grievance Redress Mechanism will ensure that communities have a channel to voice any complaints regarding any negative environmental or social impact</li> </ul>

	<p>farmers not benefitting from the programme</p> <ul style="list-style-type: none"> <li>• Tension within Water Users Associations (WUAs)</li> <li>• Farmers are unwilling to participate in the programme</li> <li>• Farmers are not aware of the cost recovery policy</li> <li>• Farmers are unwilling to use their land as demonstration plots.</li> </ul>	<ul style="list-style-type: none"> <li>• Canal selection shall be based on canals that need rehabilitation and feeding the highest number of poorest villages (as defined by the governorates).</li> <li>• The programme will set up WUAs using a participatory design the builds credibility among farmers and allows them to participate in the design of improvement plans.</li> <li>• Participatory approach shall be taken through making WUAs fully responsible for the water management. WUAs shall <b>operate, maintain, rehabilitate and improve the water management infrastructure.</b></li> <li>• WUAs should be fully aware of the cost of improvement and the terms of the cost recovery prior to the improvement taking place. Farmers could be linked to credits making them responsible for the financing from the beginning.</li> <li>• Incentives shall be given to farmers who are willing to participate through receiving demonstration credit which could be set to cover 50% of cost and only to be repaid based on actual pumping cost savings</li> </ul>	<p>of the project's interventions.</p> <ul style="list-style-type: none"> <li>• The monitoring and evaluation officer in the Project Management Unit will report any negative impacts or complaints.</li> <li>• Targeting indicators will be reviewed to ensure reaching out the poorest.</li> <li>• Surveys shall be conducted to assess farmers' and WUAs' satisfaction.</li> </ul>
<p>2.2. Improved crop farming practices</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>• Women, Youth and other vulnerable categories are excluded from capacity building</li> <li>• Farmers are unable to fully utilize digital technologies in extension</li> <li>• Farmers are unwilling to use their land as</li> </ul>	<ul style="list-style-type: none"> <li>• Conducting strong public information dissemination at different levels on the programme objectives, eligibility criteria, the selection process for capacity building activities</li> <li>• Investing in capacity building for communities on digital agriculture</li> <li>• Incentives shall be given to farmers who are willing to participate through receiving demonstration credit which could be set to cover 50% of cost and only</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring the indicators for the percentage of women and youth participating in Marketing Associations.</li> <li>• Monitoring the use of digital platforms (e.g. number of hits or downloads of applications)</li> <li>• Surveys shall be conducted to assess</li> </ul>

	<p>demonstration plots.</p> <ul style="list-style-type: none"> <li>• Farmers are unwilling to share agricultural machinery</li> <li>• Young people are not willing to take part in the Young Professional Programme for on farm extension</li> </ul>	<p>to be repaid based on actual increase in profit.</p> <ul style="list-style-type: none"> <li>• Investing in training for farmers on sharing agricultural awareness and increasing awareness on the cost efficiency of machinery sharing</li> <li>• The programme shall provide subsistence allowances to the young professionals and build their capacities in order to encourage future private extensions services</li> </ul>	<ul style="list-style-type: none"> <li>• farmers' satisfaction</li> <li>• Periodic evaluation through surveys for the Young Professionals Programme</li> </ul>
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## Annexes

## **Annex 1: Terms of reference of Key staff**

### **Key staff and the NPCU**

#### **Technical specialist (STAR NPCU)**

##### **Rural finance related responsibilities**

- To have a clear understanding of STAR's priorities, objectives and strategy and a clear focus towards their achievement.
- To promote access to finance to STAR's beneficiaries and the rural poor in general.
- To coordinate the implementation of the financial subcomponent.
- To liaise with Credit Wholesalers (CWs) and Commercial Banks (CBs) to prepare them for the call for proposals and see how credit lines can be channelled to beneficiaries directly by ABE and other banks, apart from ADP and MSMEDA.
- To prepare and launch a call for proposals for Credit Wholesalers (CW) and Commercial Banks (CB) to receive credit lines for on-lending to MFIs, Credit Cooperatives (CCs) and NGOs, which in turn will offer the specified loan products to STAR beneficiaries.
- To participate in the committee for selecting the Cooperating Financial Institution (CFI) that will receive credit lines for on-lending to MFIs, Credit Cooperatives (CCs) and NGOs, which in turn will offer the specified loan products to STAR beneficiaries.
- To monitor the performance of the elected CFIs and propose disbursement of tranches accordingly.
- To assist CFIs to identify capacity-building needs and design relevant plans (starting with the CFIs themselves going to the on-lending institutions down to the beneficiaries), and possibly support with project resources in the form of a loan.
- To lead the hiring process of the EFREs
- To monitor the performance of the EFREs, setup six-monthly KPIs, coordinate with them for the achievement of set goals.
- To liaise with the CBE, the EMFF and international partners, to investigate for mutually beneficial synergies.
- To liaise with CGC for the eventual setup of a credit guarantee to alleviate collateral and/or own participation requirements.
- To liaise with MSMEDA, JICA and all other stakeholders who examine the development of the micro-insurance sector.
- To liaise with micro-insurance providers to explore the possibilities to setup specific products for rural smallholders and farmers,
- To liaise with banks for the development of savings products for the beneficiaries.
- To liaise with appropriate stockholders for mainstreaming the use of moveable assets as collateral for the project's beneficiaries.
- To resolve any glitches in the operation of the credit lines or any other part of the financing subcomponent at central level.
- To prepare short bi-annual progress reports and action plans and contribute in drafting project reports.

### **Draft ToRs for Gender and Social Inclusion Manager at NPCU:**

Minimum requirements:

- ✓ Be familiar with gender, youth and nutrition mainstreaming policies of the institutions including any national policies, policies of ministries, implementing institutions.
- ✓ Have experience in implementing development project related to gender, youth, nutrition in rural development sector.
- ✓ Serve as a channel of communications between STAR project and others working on cross cutting issues (gender, youth, nutrition) in government, implementing agencies, research centres, NGOs and other development projects of relevance for the assignment.

In reference to the cross cutting issues, the Gender and Social Development Specialist, shall perform the following functions:

- Overall coordinate all the gender, youth and nutrition related activities of the project, including trainings and supervision of the work of the PSU gender and social development experts;
- Work to sensitize all project and partners that project outcomes should be achieved with respect for the principle of gender equity and women's empowerment;
- Identify any capacity gap from project implementers that limit achievements of gender/ youth related objectives and propose practical solutions to address the gap.
- Review basic project implementation processes and outputs to provide feedback and suggestions when needed on how to achieve best possible project outcomes with respect to gender equity, women's empowerment, youth mainstreaming and nutrition mainstreaming. The basic processes to which the specialist should provide inputs are: (i) Preparation of the Annual Work Plan and Budget; (ii) Design and implementation of project M&E system; (iii) Project Progress Reports; (iv) Project Supervision Reports.
- Review project plans and budgets to ensure that adequate attention is paid (and resources allocated) to support practical and strategic support to women, youth and vulnerable groups as in line with project design document and percentage of outreach by categories is respected.
- Work with the M&E Officer to ensure that the M&E, logframe is gender sensitive and reflective of the real time situation. Address any gaps in the supervision reports for further follow up. Furthermore, work with M&E unit to ensure that lessons learned and success stories of women and youth are fully captured and reflected in relevant reports sections (i.e. Knowledge Management).
- Ensure that there are adequate communication materials on cross cutting issues, particularly for events organized at community level related to gender awareness and nutrition awareness and education; review existing

training materials and evaluate whether additional information shall be included for specific sectors/issues. Ensure that the materials the project develops are gender sensitive in their language and image, considering literacy level of target groups. Specific attention will be given to digital trainings for women.

- Be available for support in related trainings/workshops preparation and follow up, particularly at the beginning of the project and in relation to mobilization strategy, identification and selection of target groups.
- Be responsible for the overall supervision, in collaboration with M&E Officer of impact studies.
- Work in close collaboration with the Entrepreneurial Opportunities development / Value Chain Specialist: The main task will be to identify on the basis of analysis (participatory methodologies) the opportunities that the project will offer along the value chain for non-farm actors, especially women, youth and other disadvantaged categories (a menu of options will be identified and it will guide activities related to common interest around income generating groups of women and youth which will be reviewed by the gender and social development specialist).

**Post title:** Financial Coordinator  
**Organisation:** STAR NPCU within MALR  
**Location:** Cairo, Egypt  
**Name of Project:** STAR  
**Duration:** One-year renewable  
**Type of contract:** short term  
**Closing date:** insert

### **Background**

MALR has established a Central Project Management Unit (NPCU) to coordinate the management and implementation of IFAD-funded Projects in Egypt.

### **The Project Financial Management Unit**

The NPCU has a financial management function responsible for financial and accounting matters of IFAD-funded Projects which it manages. The Financial Manager has key responsibility for the financial management function and reports to the NPCU Director. The Financial Manager is assisted by an accountant and accounts assistant at the NPCU.

### **Job Description**

- The Financial Manager is responsible for the financial and administrative management of the programme including Accounting, Budgeting, Financial Reporting, Internal Controls, Auditing Arrangements, Flow of Funds and the efficient management of Project resources in accordance with the requirements of IFAD. He/she will report directly to the NPCU Director and will work in close collaboration with his or her counterparts at MALR.
- Operating within a computerized environment, the Financial Manager will perform the following duties:
  - Develop behavioural ways of working within the finance team that promotes value addition, continuous professional improvement and a culture of cost effectiveness by all managers.
  - Take a leading role on financial aspects of preparation and consolidation of the Annual Workplan and Budget.
  - Ensure timely uploading of the AWPB to the accounting system.
  - Master IFAD key documents such as, the disbursement handbook, procurement guidelines and handbook, IFAD Handbook for Financial Reporting and Auditing of IFAD-financed Projects, the Financing Agreement (FA) and the Letter to the Borrower (LTB).
  - Work closely with the accounting system developer on customizing and maintaining an efficient accounting system and reliable internal control procedures and guidelines for financial reporting and recordkeeping.
  - Ensure compliance with all legal and statutory reporting requirement in country.
  - Ensure that administrative and financial directives and guidelines are reflected in all Project financial activities.
  - Ensure that all financial accounts are managed with respect to disbursement and replenishment in accordance with the approved procedures stipulated by the financiers.

- Take prompt and definite action on non-compliance with procedure and practices. Verify all withdrawal applications for submission to IFAD, and ensure the availability of funds for all planned activities. Manage the Projects bank accounts, approve and co-sign all payments.
- Facilitate timely receipt of Government counterpart funds in the MoF treasury single account system with allocation thereof to the Project budget.
- Prepare and provide annual financial reports which are compliant with the IFAD Handbook For Financial Reporting and Auditing of IFAD-Financed Projects and the Project's Financial Manual.
- Prepare financial reports as outline in the Project Implementation Manual and as may be requested from IFAD, MoF or MALR from time to time.
- Act as focal point for all related Project financial correspondances.
- Prepare terms of reference for the annual statutory audit in line with the guidelines as outlined in the Project Implementation Manual and obtain IFAD no-objection.
- Request procurment of statutory audit services well in advance of the audit start-date.
- Coordinate and supervise statutory audit arrangements.
- Act as focal point for the Central Auditing Organisation audit review.
- Consider outcomes of both the statutory audit and Central Auditing Organisation audits with regards to control weaknesses / other observations and implement recommendations.
- Develop and maintain a system of financial control over all expenditure incurred by the Project and its implementing agents.
- Review and assess the internal control environment within implementing agencies and propose improvements if required to ensure that monthly reporting to the NPCU is accurate and complete.
- Manage funds flows to the local currency accounts to ensure sufficient funds are available for Project cashflow needs.
- Monitor the level of advances/funds to implementing agencies to ensure both that there are sufficient funds to implement the Project activities and that the level of advances/fund are adequate and there are no idle funds.
- Monitor compliance with the Project Financing Agreements.
- Monitor compliance with the IFAD Letter to the Borrower.
- Approve all reconciliations including bank and advance reconciliations.
- Supervise and coordinate the work of staff placed under his/her direct authority as well as supervising the work of the financial management staff at the GPCUs.
- Undertake annual performance reviews of staff at the NPCU and develop skills development plans as required.
- Review and regularly update the financial section of the Project Implementation Manual
- Take responsibility for the implementation of IFAD mission recommendations related to financial matters.
- Act as key contact with the Ministry of Finance controller assigned to the NPCU for the purposes of ensuring timely reconciliation of the Projects accounting system with payments made via the treasury single account.
- Liaise with Ministry of Finance on matters pertaining to required customisations to the TSA ledger for the Project / accounting for Projects

transactions in the Treasury Ledger and other issues which impact the NPCU ability to account for transactions via the Government Payment System.

- Undertake any other activities assigned by the Project Director.

#### **Qualifications and Experience**

- ✓ An acceptable accounting and finance qualification. A Master's Degree is preferable.
- ✓ A minimum of 15 years professional experience with at least 10 years experience in financial management preferably in management position.
- ✓ Experience on donor financed Projects is required.
- ✓ The candidate would be expected to have a thorough understanding of accounting practices, finance and investment. Familiarity and experience in use of accounting software is a must.
- ✓ Candidates with previous experience in IFI-funded Projects in Egypt will be given preference.
- ✓ Good command of Arabic and English, both oral and written.
- ✓ Prior experience working with government of Egypt regulations and procedures – specifically Minister of Finance / Central Bank of Egypt / Egyptian Financial Regulatory Authority.
- ✓ Good knowledge of Microsoft Office.
- ✓ The ability to lead and to work as part of a team.
- ✓ Good communication skills.
- ✓ Ability to work with multi stakeholders, including government, private sector companies, civil society organizations, and community.
- ✓ Professional and personal endurance and commitment to complete complex assignments efficiently and effectively in a high demanding working environment.

The initial contract will be for one year with six-month probation, period, renewable every year on continued satisfactory performance.

## **Terms of reference: NPCU Senior Accountant**

*(can amend TORs for recruitment of GPCU accountants)*

**Post title:** Senior Accountant  
**Organisation:** STAR NPCU within MALR  
**Location:** Cairo, Egypt  
**Name of Project:** STAR  
**Duration:** One-year renewable  
**Type of contract:** short term  
**Closing date:** insert

### **Background**

MALR has established a Central Project Management Unit (NPCU) to coordinate the management and implementation of IFAD-funded Projects in Egypt.

#### **The Project Financial Management Unit**

The NPCU has a financial management function responsible for financial and accounting matters of IFAD-funded Projects which it manages. The NPCU accountant plays a key role in financial management and reports directly to the Financial Manager. The NPCU accountant has close contact with counterparts at a Governorate level for the purposes of centralized accounting of all Project activities.

#### **Job Description**

- Assist the Financial Manager with overall financial management activities of the Project.
- Support preparation of consolidated Annual Work Plan & Budget (AWPB).
- Review monthly transactions of the GPCUs.
- Review monthly reports received from implementing agencies and record related transactions in the accounting system, using appropriate cost categories /components /sources of finance.
- Work alongside the Financial Manager to ensure timely and accurate submission of withdrawal applications to IFAD;
- Assist the Financial Manager in Preparation and submission of all financial statements, budgets, financial Projections, cash flow forecasts and all other Projects reports as requested by the Project, IFAD and the Ministry of Finance.
- Prepare specific budgetary documentation, according to Egyptian legislation, issue payment requests and obtain the necessary approvals for finalizing payments to the suppliers/contractors;
- Review and validate Payment requests against approved AWPB and supporting documents;
- Submit payment vouchers to the MALR internal auditor / MoF Controller for the purposes of review and approval before submission to the MoF accounting unit for processing.
- Operate and maintain the financial management software system related to accounting and financial management by ensuring that all financial transactions are entered into the system; accurately on a regular basis;
- Ensure that all CPCU's financial transactions (hard and sot copies) are filled properly and on daily basis and easily accessible;

- Monitor actual expenditure and disbursements against allocations for each category;
- Ensure smooth and timely transfer of approved payments for eligible expenditure to Contractors in compliance with FM Manual and Legal Agreement (collaborate with MoF accounting unit who is responsible for processing payments).
- Maintain the master contract register for all contracts issued at central and governorate level.
- Maintain and update the fixed assets register for the entire Project;
- Maintain and update advance registers and ensure timely clearances;
- Prepare on monthly bank reconciliations.
- Follow up and maintain an up to date records on in-kind contributions;
- Occasional field visit to Governorates to support GPCU accountants if needed.
- Perform other duties, of financial nature which pertains to the implementation of the Project, as may be requested by the Project Director and Financial Manager.

### **Qualifications and Experience**

- ✓ *An acceptable accounting and finance qualification.*
- ✓ *A minimum of 10 years professional experience with at least 5 years experience in accounting and financial management.*
- ✓ *The candidate would be expected to have a thorough understanding of accounting practices, finance and investment. Familiarity and experience in use of accounting software is a must.*
- ✓ *Good command of Arabic and English, both oral and written*
- ✓ *Prior experience working with donor-funded Projects.*
- ✓ *Good knowledge of Microsoft Office.*
- ✓ *Ability to work in team and multi-tasking.*
- ✓ *Good communication skills.*
- ✓ *Ability to work with multi stakeholders, including government, private sector companies, civil society organizations, and community.*
- ✓ *Professional and personal endurance and commitment to complete complex assignments efficiently and effectively in a high demanding working environment.*

The initial contract will be for one year with six-month probation, period, renewable every year on continued satisfactory performance.

## **Terms of reference: NPCU Accountant**

*(can amend TORs for recruitment of GPCU accountants)*

**Post title:** Accountant  
**Organisation:** STAR NPCU within MALR  
**Location:** Cairo, Egypt  
**Name of Project:** STAR  
**Duration:** One-year renewable  
**Type of contract:** short term  
**Closing date:** insert

### **Background**

MALR has established a Central Project Management Unit (NPCU) to coordinate the management and implementation of IFAD-funded Projects in Egypt.

#### **The Project Financial Management Unit**

The NPCU has a financial management function responsible for financial and accounting matters of IFAD-funded Projects which it manages. The NPCU accountant plays a key role in financial management and reports directly to the Financial Manager.

#### **Job Description**

- Assist the NPCU Senior accountant with financial management activities of the Project.
- Support preparation of consolidated Annual Work Plan & Budget (AWPB).
- Review monthly transactions of the GPCUs.
- Review monthly reports received from implementing agencies and record related transactions in the accounting system, using appropriate cost categories /components /sources of finance.
- Work alongside the Senior Accountant and Financial Manager to ensure timely and accurate submission of withdrawal applications to IFAD;
- Review and validate Payment requests against approved AWPB and supporting documents;
- Submit payment vouchers to the MALR internal auditor / MoF Controller for the purposes of review and approval before submission to the MoF accounting unit for processing.
- Operate and maintain the financial management software system related to accounting and financial management by ensuring that all financial transactions are entered into the system; accurately on a regular basis;
- Ensure that all NPCU financial transactions (hard and sot copies) are filled properly and on daily basis and easily accessible;
- Monitor actual expenditure and disbursements against allocations for each category;
- Ensure smooth and timely transfer of approved payments for eligible expenditure to Contractors in compliance with FM Manual and Legal Agreement (collaborate with MoF accounting unit who is responsible for processing payments).
- Maintain the master contract register for all contracts issued at central and governorate level.

- Maintain and update the fixed assets register for the entire Project;
- Maintain and update advance registers and ensure timely clearances;
- Prepare monthly bank reconciliations.
- Follow up and maintain an up to date records on in-kind contributions;
- Perform other duties, of financial nature which pertains to the implementation of the Project, as may be requested by the Senior Accountant and Financial Manager.

### **Qualifications and Experience**

- ✓ *An acceptable accounting and finance qualification.*
- ✓ *A minimum of 5 years professional experience with at least 3 years experience in accounting and financial management.*
- ✓ *The candidate would be expected to have a thorough understanding of accounting practices, finance and investment. Familiarity and experience in use of accounting software is a must.*
- ✓ *Good command of Arabic and English, both oral and written*
- ✓ *Prior experience working with donor-funded Projects.*
- ✓ *Good knowledge of Microsoft Office.*
- ✓ *Ability to work in team and multi-tasking.*
- ✓ *Good communication skills.*
- ✓ *Ability to work with multi stakeholders, including government, private sector companies, civil society organizations, and community.*
- ✓ *Professional and personal endurance and commitment to complete complex assignments efficiently and effectively in a high demanding working environment.*

The initial contract will be for one year with six-month probation, period, renewable every year on continued satisfactory performance

## **Terms of reference: NPCU Procurement Specialists**

### **Terms of Reference Sustainable Transformation for Agricultural Resilience in Upper Egypt IFAD Funded Project**

#### **POSITION: NPCU Procurement Officer**

#### **1. Background**

The Upper Egypt region includes about 38% of Egypt's population and 67% of its poor, with 56% of the population unable to meet their basic needs, compared to 19% in the Nile Delta. High level of land fragmentation is a major cause of poverty with 77% of total land in Upper Egypt owned by extra smallholders (less than 1 feddan) and smallholder farmers (between 1-3 feddan). The pressure on agricultural land is expected to increase with the projected growth of the population from 95 million to 150 million by 2050. Smallholder farmers experience limited access to market and income generation due to low surplus, limited returns due to low prices, high production and transaction costs and low bargaining power.

Livelihood risks related to climate change and uncertain future Nile water flows. The program areas are affected by heat waves, restricted access to irrigation (at the end of the mesqas), high post-harvest losses, pest and diseases, and in some areas high levels of water salinity aggravated by the excessive use of fertilizer). Such incidences are expected to become more prevalent as the mean annual temperature in the country is expected to rise by 1.8 to 5.2°C by the end of the century. Inefficient irrigation water use is very common and the mean efficiency of field irrigation systems is estimated at 50%. Most farmers use surface irrigation systems instead of modern water-efficient irrigation techniques. Nile flows in Egypt are highly sensitive to climate change and water use in up-stream countries, with new hydroelectric projects underway. There is no consensus on whether the overall Nile flow will increase or decrease. However, significant increasing inter-year variability in flows is predicted due to inter-year variability in precipitation in upstream countries. As a result of climate change, by 2040, wheat yields are expected to decline by 12 per cent, vegetables by 28 per cent, maize by 47 per cent and rice by 26 to 47 per cent.

Limited presence of effective marketing institutions. The limited presence of effective marketing institutions has constrained the marketing potential of smallholder farmers' produce. Most smallholders sell their produce individually through village-based middlemen who broker deals between these producers and merchants for a commission. A limited number of smallholders sell their produce individually to merchants at the governorate and district levels who are often connected to retailers and other agribusinesses in larger cities. These smallholder farmers are price-takers and have the weakest position amongst other actors in the value chain. Consequently, farmers often receive only 10-35 % of the retail price of commodities. In order to overcome this challenge development initiatives (IFAD-PRIME, WFP, USAID, UNIDO) have supported market committees/associations (MA) under the umbrella of Community Development Associations (CDA). However, there is limited evidence of graduation of these MAs as independent platforms.

IFAD has long engagement with the government in supporting smallholders in addressing their production and marketing constraints in Upper Egypt. The IFAD

supported PRIME project (completion in 2020) has resulted in several success stories related to marketing and increasing productivity in the STAR programme area. PRIME has capacitated 126 marketing associations (FA) linked 50% of them (4,000 members) directly to buyers through contract farming linkages. These linkages increased the net income of the farmers by at least 15%. The IFAD supported OFIDO project has rehabilitated irrigation for 20,000 feddans by replacing numerous uncontrolled small lifting diesel pumps, located at multiple points along the branch canals, with single-lift electrically-powered collective pumping stations and earth open canals were replaced by low pressure buried pipelines distributing directly water to farmer plots through outlet hydrant valves. STAR will build on lessons learned and integrate and consolidate the achievements of these projects where relevant and expand the outreach of the benefits to other poverty pockets. IFAD is using its convening capacity to support the government in leveraging and coordinating partnerships with other developing agencies contributing to STAR to make it a comprehensive programme, supporting the government's strategy for investing in the development of the rural sector in Upper Egypt.

The Development Objective of the programme is to improve the income and resilience of families of smallholder farmers and landless poor through better marketing linkages, sustainable agricultural intensification, and small rural businesses. Improve the income, food security and resilience of smallholder farmers' livelihoods through climate-smart agriculture, better marketing linkages and diversified sources of income at household level building on women and youth potential

The activities of the Programme are organised in two mutually interdependent components:

- Component 1: Strengthening Rural Institutions, Enterprises and Markets.
- Component 2: Improvement of Smallholders Productivity and Resilience.

## **2. Objective**

The objective of the assignment is to increase the efficiency of the processing of procurement tasks under STAR and to ensure smooth and quality implementation of procurement processes for all Programme related activities.

## **3. Specific Tasks of Procurement Officer**

The Procurement Officer will be part of the Programme Team working on the implementation of the Programme's activities. Under the supervision and coordination of the Programme Manager, she/he would be responsible for the specific procurement activities needed for Programme implementation. The Procurement Officer will provide leadership and guidance to all NPCU and implementing partners staff on procurement issues for goods, services and construction contracts. Specific responsibilities include but are not limited to the following:

- Review and provide more detail, where required, on the procurement section of the draft PIM;
- In collaboration with other members of the NPCU/PIU, and implementing partners, and based on the AWPB update the rolling 18-month procurement plan for works, goods and services required by the Programme in accordance with IFAD PP Template and submit same for approval by the GOE and IFAD;

- Ensure the timely and transparent procurement of goods, works and services as identified in the procurement plan and in accordance with the applicable rules and procedures;
- Prepare bidding documents and coordinate the preparation of relevant inputs such as TORs, technical specifications and bills of quantities by technical staff or consultants;
- Lead the orientation events for all STAR Governorate PSUs and implementing agencies on the principles and application of procurement procedures and guidelines for STAR and use of the PIM guidelines;
- Prepare tender notices and advertisements in appropriate national and international papers and websites as required;
- Participate in relevant evaluation committee meetings and assist with the preparation of the committee reports;
- Review and advise on bid evaluation reports prepared by the IIS/PIU and other implementing agencies and make necessary follow-up;
- Notification of results of bids to all successful and unsuccessful bidders;
- Draft contracts for signature by Accounting Officers and Vendors;
- Manage the procurement monitoring database system; prepare periodic reports on the status of procurement for the Programme;
- Design, implement a database of providers and ensure the update, and develop management statistics that will allow IFAD to measure the level of Programme performance in terms of procurement;
- Handle all procurement-related correspondence with pertinent authorities;
- Compile and confidentially keep up-to-date procurement files containing high quality and readily available information, ensuring proper documentation, transparency and ease of reference;
- Monitor the administrative implementation of contracts in coordination with the Finance Unit. Ensure a sound contract administration of international contracts, including handling of contractual claims, arbitrations and termination of contracts;
- Report in writing to the Programme Manager on unethical behaviour, potential or actual violation of contractual terms by contractors and service providers and propose the appropriate remedial actions in accordance with the Contract General and Special Conditions;
- Maintain the contract register and regularly update the same with monitoring data on progress of all contracts;
- Constantly review procurement arrangements in relation to the procurement plan to ensure consistency with the financing agreement and identify weaknesses, if any, and measures that should be undertaken to mitigate the risks posed by any weaknesses;
- Train Programme and implementing partners staff on procurement issues;
- Maintain close liaison with IFAD on all issues pertaining to procurement;
- Participate in Programme management meetings and IFAD supervision missions, including the preparation of all information required, in particular the procurement records for facilitating post-procurement reviews; and
- Carry out any other activities that are assigned by the Programme Management.

#### **4. Qualifications and Experience**

The Procurement Officer will have the following qualifications and experience:

- A minimum of first degree in engineering or administration or law or any other relevant field. A post graduate qualification will be an added advantage;
- Minimum Ten (10) years relevant working experience, of which Seven (7) years' experience is in procurement management at Government/donor funded projects;
- A comprehensive knowledge of IFAD Procurement Guidelines and the National Public Procurement Regulations;
- Familiarity with the World Bank Procurement Guidelines and Templates as well as experience in working within the Ministry of Agriculture and Land Reclamation and Ministry of Water Resources and Irrigation will be an added advantage;
- Experience in training, capacity building and setting up procurement systems in a new organisation will be a distinct advantage;
- Computer literacy and competence, Microsoft Word, Excel, Access, Power Point;
- Proven ability to work and interact with people from diverse, professional, social and cultural backgrounds;
- Fluency in written and spoken English and Arabic languages;
- Excellent analytical skills and report writing.

## **5. Other Requirements**

- Strong management skills, particularly ability to provide strategic direction and technical supervision,
- Excellent communication skills and ease in interpersonal relationships;
- Reliable and responsible personality and capacity to work under demanding professional circumstances and in an international environment;
- Excellent coordination and negotiation skills;
- Excellent planning, organisation and recordkeeping skills;
- Experience in dealing with senior business executives and government officials;
- Good team player while being independent and able to work autonomously.

## **6. References**

Verifiable references and membership of professional organization(s). Previous work experience in Donors funded projects.

## **7. Performance criteria**

The performance of the Procurement Officer will be evaluated bi-annually. The criteria used to measure his/her performance will be:

- Timely processing of procurement requisitions;
- Ability to meet deadlines in terms of procurement;
- Compliance with procurement procedures foreseen in the Programme, measured by the number of rejected submissions for prior examination and post-review audit findings (technical and financial);
- Delivery of tendered supplies and services.

## **8. Work Station**

The position will be based at the Central Programme Coordination Unit office with frequent travel to the three Programme governorates.

## **9. Duration**

Two-year contract, with six months' probation period, renewable based on agreed performance targets and deliverables.

## **Key staff in the GPCU**

### **Social and community mobilisation specialist (GPCU):**

- Conduct and organize gender and youth workshops at governorate (PSU specialist) and village level (CDA specialist) for all the project staff as well as for institutions and local leaders to create awareness on the importance to have women and youth as part of the economic development of the cluster;
- Conduct an assessment of the implementers capacity in relation to cross cutting issues and organize workshops and capacity building trainings (gender, youth, nutrition) for interested staff and other relevant partners based on gaps identified (PSU specialists);
- Organize specific separate sessions for women and youth during the mobilisation process (CDAs specialists, following guidance from PSU specialist).
- Ensure that the project implementation teams (at all levels) are sensitized to gender and diversity issues that they should expect and explore in their interaction with the community through regular trainings and sensitization programmes (PSU and CDAs specialists);
- Interacting with women in communities to gain better understanding of women's' and youth perceptions and guiding implementers in approaches to better integrating women and youth into project activities as well as having them in leadership positions (CDAs specialist guided by PSU specialist);
- Organize women's leadership trainings and keep track of monitoring women in leadership positions (CDAs specialists);
- Reviewing (regularly) participation of women and youth in STAR activities and decision making processes and making recommendation to improve processes. (PSU specialists).
- Collect data (quantitative and qualitative) on women and youth participation to ensure a proper M&E data collection is sex and age disaggregated (first data collection CDAs specialist and consolidation done by PSU specialist).
- Collect success stories on women and youth empowerment to be included in the different project reports (PSU specialists with support of CDA specialists).

### **Job description of Financial services specialists (GPCU)**

There will be three FSS reporting to the STAR Technical specialist and coordinating among them.

#### **Role and Responsibilities**

- To have a clear understanding of STAR's financing priorities, objectives and strategy and a clear focus towards their achievement.
- To promote financial inclusion in the rural areas.

- To secure the seamless operation of the credit lines and make sure they are servicing beneficiary needs.
- To act as brokers between beneficiaries, financial institutions and CWs.
- To participate in cluster meetings and understand the dynamics, opportunities and setbacks beneficiaries are facing, and propose solutions relevant to accessing financial resources.
- To identify beneficiary financing needs and map them against the several offerings of the financial sector.
- To disseminate information on prevalent interest rates and other terms of available credit products, to the beneficiaries (dilute information asymmetries).
- To support clusters in presenting business plans to CFI and monitor their repayment schedules.
- To regularly liaise with CFIs and monitor their progress towards the achievement of project's intended objectives.
- To stimulate competition among CFIs to the benefit of the beneficiaries.
- To negotiate with PFIs better terms for the beneficiaries.
- To resolve any issues arising between the beneficiaries and the financial sector at local level and report any irregularities to other FSS and the technical specialist .
- To present success stories and good practices to relevant stakeholders.
- To instil principles of responsible financing among the target group.
- To identify capacity development needs of beneficiaries on entrepreneurship and responsible financing, and package relevant training propositions.
- To identify the resources to finance capacity development needs (project resources being the last resort).
- To negotiate with CFIs to include part of the beneficiary training on entrepreneurship and responsible financing in their pre-sales budget.
- To promote a mandatory savings culture among the beneficiaries (using savings accounts once they are available at central level). To bundle this training material with the rest of the training clusters received from the project.
- To ensure that CWs and CFIs communicate properly that credit lines are financed by IFAD.
- To prepare short bi-annual progress reports and action plans and contribute in drafting project reports.

#### Profile

The incumbent should be a young dynamic rural finance expert with good experience in advocacy work, with strong written and verbal communication skills in Arabic (and English). The candidate should have reasonable work experience the area of microfinance and an understanding of MFI operations. Experience of working with multiple stakeholders in civil society and the government at different levels is a plus.

#### Selection Criteria

The candidate should have good communication and presentation skills, and 5 years of demonstrated experience in development, including microfinance, in the region and a track-record of achievement in developing and implementing marketing driven approaches to address access to finance.

#### Term

This is intended as a 6-year term position with an initial contract of one year.

## Salary

Salary level will be established according to candidate's experience and as per industry standards.

Location:

The incumbent will be based at the relevant governorate.

Working hours:

The position is a full time position with annual leave rights.

Hiring process

Applicants should submit an application letter, with an expression of interest, up-to date CV, references related to recent experience, details of salary history and salary expectations, and certified copies of relevant certificates in a closed envelop, within 21 days after the first publication of the relevant notice.

The hiring process should start together with the selection process of CFIs and should be concluded within 60 days at the latest.

## Annex 2: Logframe

### Annex 2: Logframe

Results Hierarchy	C.I	Indicators					Means of Verification			Assumptions
		Name	Unit	Base-line	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Outreach</b>	1.	Number of persons receiving services promoted or supported by the programme <sup>7</sup>	Persons	0	160,000	320,000	Programme reports	Annual	NPCU M&E unit and GPCU M&E focal points	Political stability Marco-economic conditions remain stable or improve. No major political shocks in the region
		- Men	Persons	0	99,200	198,400				
		- Women	Persons	0	60,800	121,600				
		- Youth	Persons	0	65,600	131,200				
	1.a	Corresponding number of households reached	HH	0	80,000	160,000				
	1.b	Estimated number of HH members	Persons	0	400,000	800,000				
	Men		0	200,000	400,000					
	Women		0	200,000	400,000					
<b>Goal:</b> contribute to improved living standards of smallholder farmers and poor and vulnerable women and youth in the rural areas in upper Egypt		Percentage reduction in the number of rural households living below the poverty line in the Programme supported Governorates	%	0	10%	20%	CAPMAS/ Baseline and completion surveys	Baseline, MTR and completion	NPCU M&E unit	

<sup>7</sup> Includes only direct beneficiaries as per the ORMS guidelines. However, the project will indirectly benefit 80,000 HHs (about 400,000 individuals)

<b>Development Objective:</b> to improve the income and resilience of smallholder and landless families through better marketing linkages, sustainable and climate change adapted agricultural intensification, small rural businesses and inclusive policies		Percentage increase in average HH income as a result of services provided by the programme	%	0	30%	50%	Baseline and completion surveys	Baseline, MTR and completion	NPCU M&E unit	
	2.2.1	Number of new jobs created	Number	0	4000	12,555	Baseline, mid-term and Completion survey, Annual outcome surveys	Baseline, MTR and completion	NPCU M&E unit	
<b>Outcome 1</b> Increased marketing of produce and profits to smallholder farmers	2.2.5	Percentage of rural producers' organizations reporting increase in sales	%		20%	50%	Baseline, midterm and Completion survey/ Annual outcome surveys	MTR and completion	NPCU M&E unit	Positive framework conditions for investment into agriculture and rural institutions
<b>Output 1.1</b> Marketing institutions strengthened	2.1.3	Number of Rural producers' organizations supported	No.	0	580	1160	M&E Data Component reports	Quarterly	GPCU M&E focal points	
	2.1.4	Number of supported households that are members of a farmers' organization	No.	0	75,000	150,000	M&E Data Component reports	Quarterly	GPCU M&E focal points	
			Men	0	46,500	93,000				
			Women	0	28,500	57,000				
	youth	0	30,750	61,500						
<b>Output 1.2</b> microenterprises developed	2.1.1	Number rural enterprises accessing business development services	No.		800	1,650	M&E Data Component reports	Quarterly	GPCU M&E focal points	Community leaders are willing

	2.1.2	Number of persons trained in income-generating activities or business management	Persons	0	20,000	40,000	M&E Data and Training reports	Quarterly	GPCU M&E focal points	to included women and youth in programme activities
			Men	0	5,000	10,000				
			Women	0	15,000	30,000				
			youth	0	10,000	20,000				
<b>Outcome 2</b> Improved resilience of smallholder crop producers	1.2.4	Percentage of households reporting an increase in production	%	0%	30%	60%	Baseline, mid-term and Completion survey/ Annual outcome survey	MTR and completion	NPCU M&E unit	Sufficient implementation capacity to develop infrastructure in Upper Egypt Substantial improvements in climate resilient production as foundations of growth.
	1.2.3	Percentage of households reporting reduced water shortage vis-à-vis production needs	%	0%	20%	60%	Baseline, mid-term and Completion survey/ Annual outcome survey	MTR and completion	NPCU M&E unit	
<b>Output 2.1</b> Improved irrigation infrastructure and management	1.1.2	Number of hectares of farmland under water-related infrastructure constructed/rehabilitated	Ha	0	6,000	12,600	M&E Data Component reports	Annually	GPCU M&E focal points	
	3.1.1	Number of groups supported to sustainably manage natural resources and climate related risks	No	0	190	320	M&E Data Component reports	Annually	GPCU M&E focal points	
<b>Output 2.2</b> Improved crop farming practices	1.1.4	Number of persons trained in production practices and/or technologies	No.	0	25,000	50,000	M&E Data and Training reports	Quarterly	GPCU M&E focal points	
			Men	0	15,500	31,000				
			Women	0	9,500	19,000				
			Youth	0	10,250	20,500				
	1.1.3	Number of rural producers accessing production inputs	No.	0	25,000	50,000	M&E Data Component reports	Annually	GPCU M&E focal points	
			Men	0	15,500	31,000				
Women			0	9,500	19,000					

		and/or technological packages	Youth	0	10,250	20,500				
<b>Output 3.1</b> Engagement in Policy dialogue and knowledge management	Policy 1	Number of policy-relevant knowledge products completed	No.	0	2	5	Knowledge products	Annually	NPCU KM and ICT specialist	

### **Annex 3: Background note on Markets and Value Chains**

#### **Export markets**

Government strategic crops (wheat (subject to market), sugar cane (fixed), maize, rice, sorghum, and later Lentils and beans (potential)

<https://map-expo.com/maps-black-stallion-increasing-agricultural-exports-2017/>

Egypt is the fifth largest producer of tomatoes worldwide, according to FAO statistics. Yet in 2010 and 2011 despite the huge volume of tomato production, a considerable amount of tomato was imported from neighbouring countries. The result was a huge rise in tomato prices causing panic among consumers who consider the red fruit a cheap yet essential component of Egyptian foods especially among the poor.

For smallholder farmers to benefit from marketing opportunities, farming must necessarily be seen as a business – one that is fully integrated into markets and value chains and responds to market incentives and signals. The target governorates enjoy excellent un-tapped marketing opportunities for the local, regional, and export markets of raw crops for fresh markets/exports and processing. The long-term advantages would enable smallholder farmers, through proper arrangements with other value chain actors e.g. exporters and processors, to penetrate and compete effectively in the lucrative local and export markets in the European Markets (EU), Gulf Cooperation Council (GCC), Russia, Far-East and Gulf Cooperation Council (CIS) markets. The target governorates have significant advantages and open market windows for a large number of fresh vegetables, fresh fruits, herbs and spices, frozen vegetables and dried vegetables. Target governorates enjoy several microclimates and optimum weather conditions for agriculture production for local, regional and export markets.

#### **Overview of the Agricultural Sector**

The agriculture sector is considered one of the key sectors of the Egyptian national economy. It provides livelihoods for around 55% of the population and direct employment to almost 30% of the labor force. During fiscal year 2017/2018, the agricultural sector share of GDP amounted to 11.5%. In addition, industries related to agriculture such as processing and marketing and input supplies account for 20% of GDP<sup>8, 9, 10</sup>.

In 2016, the total cultivated area was almost 9.1 million feddans, while the total cropped area accounted to approximately 16.1 million feddans. Around 6.2 million feddans of the cultivated area are located in the old lands, while 3 million feddans are in the new lands<sup>11, 12, 13</sup>.

The agricultural land in Egypt is mostly characterized by small landholdings, particularly in the old lands. A large portion of farmers can be also landless. Land is generally cultivated by its owners, tenants and/or sharecroppers; while casual labourers are also hired during peak periods. According to the Ministry of Agriculture and Land Reclamation Census of 2009/2010, almost 59.4% of landholders possess an area of one feddan or less. This accordingly implies high land fragmentation, which in turn lead to limited capacity of mass production, higher costs of farming

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<sup>8</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>9</sup> Ministry of Planning, Follow up and Administrative Reform. Retrieved from <http://www.eip.gov.eg/IDSC/DMS/View.aspx?id=624>. 27 June 2019.

<sup>10</sup> The Central Authority for Public Mobilization and Statistics (CAPMAS). (2018). *Statistical Yearbook*. Issue no. 109. Retrieved from [http://www.capmas.gov.eg/Pages/StaticPages.aspx?page\\_id=5034](http://www.capmas.gov.eg/Pages/StaticPages.aspx?page_id=5034). 25 June 2019.

<sup>11</sup> Ministry of Agriculture and Land Reclamation (MALR). Retrieved from <http://www.eip.gov.eg/IDSC/DMS/View.aspx?id=3524>. 27 June 2019.

<sup>12</sup> MALR. Retrieved from <http://www.eip.gov.eg/IDSC/DMS/View.aspx?id=619>. 27 June 2019.

<sup>13</sup> The Central Authority for Public Mobilization and Statistics (CAPMAS). (2018). *Statistical Yearbook*. Issue no. 109. Retrieved from [http://www.capmas.gov.eg/Pages/StaticPages.aspx?page\\_id=5034](http://www.capmas.gov.eg/Pages/StaticPages.aspx?page_id=5034). 25 June 2019.

in terms of time and of hire costs for equipment and lower economies of scale and yields. Farmers with small and dispersed landholdings in turn tend to face higher levels of poverty<sup>14, 15</sup>. In this regard, rural households would remain poor unless they would have one or more of the following options: cultivate enough of their area in high value crops such as vegetables and fruit trees; have an effective marketing mechanism that would allow benefiting from the prices these crops fetch on the market; increase their income from livestock products, milk and milk products and/or poultry and eggs; supplement their income with other on or off-farm activities; or have access to other resources, such as pensions, salaries, remittances, or micro/small enterprises<sup>16</sup>.

### Local Production, Import and Export Markets of Agricultural Commodities/ Supply-Demand Gap

The main summer crops in Egypt include maize, rice, vegetables, sorghum, sugar cane and cotton. On the other hand, winter crops consist of wheat, clover, vegetables, sugar beet and barley<sup>17</sup>. The table below depicts the top agricultural commodities production (in tons) in Egypt from 2015 to 2017. As noted, the top five commodities are sugar cane, sugar beet, wheat, tomatoes and maize.

**Top Agricultural Commodities Production in Egypt (in Tons)**

Item	2017	2016	2015
Sugar cane	15,260,597	15,557,508	15,903,336
Sugar beet	12,106,661	11,209,160	11,982,946
Wheat	8,800,000	9,342,538	9,607,736
Tomatoes	7,297,108	7,320,714	7,737,827
Maize	7,100,000	7,817,640	7,803,183
Rice, paddy	6,380,000	5,308,873	4,817,964
Potatoes	4,325,478	4,113,441	4,955,445
Oranges	3,013,758	2,939,084	3,351,307
Onions, dry	2,379,035	2,458,618	3,049,607
Watermelons	1,709,964	1,646,020	1,510,032
Grapes	1,703,394	1,691,194	1,686,706
Dates	1,590,414	1,549,260	1,684,917
Mangoes, mangosteens, guavas	1,351,316	1,305,134	1,214,242
Eggplants (aubergines)	1,307,793	1,300,265	1,200,971
Bananas	1,228,458	1,214,077	1,314,177
Melons, other (inc.cantaloupes)	1,102,599	1,066,817	1,026,877
Tangerines, mandarins, clementines, satsumas	1,038,753	1,021,231	983,821

Source: FAOSTAT. June 2019.

Although wheat and maize are among the top five commodities produced in Egypt, their national production does not cover the current local demand and imported amounts continue to increase each year. In the case of wheat for example almost 50% of total consumption is met through imported amounts<sup>18</sup>. The following table describes the self-sufficiency levels for some agricultural commodities.

<sup>14</sup> The Central Authority for Public Mobilization and Statistics (CAPMAS). (2018). *Statistical Yearbook*. Issue no. 109. Retrieved from [http://www.capmas.gov.eg/Pages/StaticPages.aspx?page\\_id=5034](http://www.capmas.gov.eg/Pages/StaticPages.aspx?page_id=5034). 25 June 2019.

<sup>15</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 3: Rural Poverty, Gender and the Target Group.

<sup>16</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 3: Rural Poverty, Gender and the Target Group.

<sup>17</sup> The Central Authority for Public Mobilization and Statistics (CAPMAS). (2018). *Statistical Yearbook*. Issue no. 109. Retrieved from [http://www.capmas.gov.eg/Pages/StaticPages.aspx?page\\_id=5034](http://www.capmas.gov.eg/Pages/StaticPages.aspx?page_id=5034). 25 June 2019.

<sup>18</sup> IFAD. (2014). *Sustainable Agriculture Investments and Livelihoods Project (SAIL)*. Design Completion Report. Appendix 1: Country and rural context background.

Regarding horticulture production, Egypt covers a wide range of products, including herbs and medicinal plants, due to favourable agro-climatic conditions and off-seasonal production capabilities. Egypt also enjoys a significant comparative advantage in the export of high value horticulture products due to the physical proximity to important markets such as the Gulf and EU countries. Horticulture accounts for 36% of the value of all crops produced. Horticultural crops are produced in sufficient quantities. Hence, they cover domestic demand and also provide some surplus for export.

As for vegetables, they are grown in about 1.3 million feddans. It is worth noting that smallholder farmers are responsible for producing almost 90% of the vegetables supply for the domestic market<sup>19</sup>. However, when it comes to the contribution of smallholder farmers share in the total Egyptian vegetables and fruit exports, it is estimated to be less than one third of the total exports<sup>20</sup>.

The following table specifies Egypt's production ranking on the global level. As seen, in 2017, Egypt was ranked first in the production of dates, second in the production of figs and third in the production of eggplants and artichokes. It is also ranked among the top ten producers for other agricultural commodities such as melons, strawberries and tomatoes. As will be noted later, many of these commodities also put Egypt among the top exporters to several European and U.S. markets, among others.

**Egypt's Production Ranking (2017)**

Product	Ranking	Quantity (tons)
Dates	1st	1,590,414
Figs	2nd	177,135
Eggplants (aubergines)	3rd	1,307,793
Artichokes	3rd	185,695
Melons, other (inc. cantaloupes)	4th	1,102,599
Strawberries	4th	407,240
Tomatoes	5th	7,297,108
Onions, dry	5th	2,379,035
Tangerines, mandarins, clementines, satsumas	5th	1,038,753
Peas, green	5th	189,539
Olives	6th	927,595
Green Beans	6th	283,520
Garlic	6th	274,668
Oranges	7th	3,013,758
Broad beans, horse beans, dry	7th	112,871
Sugar beet	8th	12,106,661
Watermelons	8th	1,709,964
Mangoes, mangosteens, guavas	9th	1,351,316
Chillies and peppers, green	8th	623,221
Peaches and nectarines	8th	360,723
Anise, badian, fennel, coriander	8th	26,882
Flax Fibre and Two	8th	8,123

Source: FAOSTAT. June 2019.

Egypt is a major importer of several agricultural commodities, including cereals, wheat, edible oil and sugar as it does not have the capacity to be self-sufficient in these commodities as previously

<sup>19</sup> IFAD. (2014). *Sustainable Agriculture Investments and Livelihoods Project (SAIL)*. Design Completion Report. Appendix 1: Country and rural context background.

<sup>20</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Main Report.

indicated<sup>21</sup>. Regarding the value of Egypt's imports from agricultural commodities, they amounted to 83.8 billion EGP in fiscal year 2017/2018 compared to almost 66 billion EGP in fiscal year 2016/2017<sup>22</sup>.

The following table highlights the main agricultural commodities that Egypt imports. In 2016, Egypt top imported commodities (in tons) included wheat, maize, sugar and beans. Egypt is also considered the top importer of dry broad beans and horse beans as well as the second and fourth major importer of wheat and maize oil respectively, as depicted in the subsequent table.

#### Top Agricultural Commodities, Import Quantity in Egypt (2016)

Item	Quantity (tons)
Wheat	8,731,431
Maize	5,932,617
Soybeans	933,912
Sugar Raw Centrifugal	842,356
Broad beans, horse beans, dry	549,167
Sugar refined	419,132
Oil, sunflower	294,591
Oil, palm	271,353
Oil, soybean	252,590
Apples	230,030
Potatoes	164,039
Lentils	110,019

Source: FAOSTAT. June 2019.

#### Egypt's Ranking, Imported Agricultural Commodities (2016)

Imported Agricultural Commodities	Ranking	Quantity (tons)
Broad beans, horse beans, dry	1st	549,167
Wheat	2nd	8,731,431
Oil, maize	4th	50,932
Maize	6th	5,932,617
Lentils	7th	110,019
Apples	9th	230,030
Oil, soybean	9th	252,590

Source: FAOSTAT. June 2019.

As seen, Egypt is a major producer of a number of agricultural commodities. This has put Egypt among the top exporter of some commodities on the global level as well. Regarding the value of Egypt's exports from agricultural commodities during fiscal year 2017/2018, they amounted to 51.7 billion EGP up from 43.4 billion EGP during fiscal year 2016/2017<sup>23</sup>.

As per the below tables, Egypt's top exports in 2016 (in tons) included oranges, beet pulp, dry onions, potatoes, refined sugar and molasses. As for its ranking, Egypt is considered the third top exporter of many commodities including beet pulp, maize bran and oranges and the fourth top exporter of flax fibre and tow and dry onions.

#### Top Agricultural Commodities, Export Quantity in Egypt (2016)

Item	Quantity (tons)
Oranges	748,711
Beet pulp	473,367

<sup>21</sup> The Central Authority for Public Mobilization and Statistics (CAPMAS). (2018). *Statistical Yearbook*. Issue no. 109. Retrieved from [http://www.capmas.gov.eg/Pages/StaticPages.aspx?page\\_id=5034](http://www.capmas.gov.eg/Pages/StaticPages.aspx?page_id=5034). 25 June 2019.

<sup>22</sup> The Central Authority for Public Mobilization and Statistics (CAPMAS). Retrieved from <http://www.eip.gov.eg/IDSC/DMS/View.aspx?id=4714>. 27 June 2019.

<sup>23</sup> CAPMAS. Retrieved from <http://www.eip.gov.eg/IDSC/DMS/View.aspx?id=1474>. 27 June 2019.

Onions, dry	457,328
Potatoes	407,974
Sugar refined	377,205
Molasses	354,439
Flour, wheat	198,415
Bran, maize	93,068
Grapes	86,235
Tomatoes	62,617
Olives preserved	60,983
Rice - total (Rice milled equivalent)	49,273
Vegetables, frozen	49,138
Potatoes, frozen	38,876
Maize	38,241
Tangerines, mandarins, clementines, satsumas	37,679
Oil, soybean	37,094

Source: FAOSTAT. June 2019.

#### Egypt's Ranking, Exported Agricultural Commodities (2016)

Exported Agricultural Commodities	Ranking	Quantity (tons)
Beet pulp	3rd	473,367
Bran, maize	3rd	93,068
Gooseberries	3rd	179
Hay (unspecified)	3rd	548
Oil, citronella	3rd	19
Oranges	3rd	748,711
Flax fibre and tow	4th	5,833
Onions, dry	4th	457,328
Artichokes	5th	2,291
Bambara beans	5th	140
Molasses	5th	354,439
Olives preserved	5th	60,983
Anise, badian, fennel, coriander	6th	18,643
Beans, green	7th	24,963
Flax fibre raw	7th	60
Pyrethrum, dried	7th	74
Alfalfa meal and pellets	8th	35,717
Dates	8th	34,561
Olives	8th	456
Potatoes	8th	407,974
Strawberries	8th	16,474
Broad beans, horse beans, dry	9th	15,706
Currants	9th	429
Garlic	9th	11,420
Sweet potatoes	9th	18,941

Source: FAOSTAT. June 2019.

#### The Different Markets Available and their Characteristics

Regarding the distribution and selling of the agricultural commodities and products, there are different types of markets available and they vary according to several factors including: location, farm size, type of tenure and cultivated crop. The following provides an overview of the main markets available and their principal features:

- Very small scale retail sales for perishable agricultural commodities such as vegetables, fruits, milk produce, eggs and poultry at proximate local markets. This is mainly the case of very smallholders, whether tenants or owners with less than 1 feddan. They would generally sell their products directly to the consumers in weekly or bi-weekly markets. This mechanism

provides small but regular cash amounts, which enables the household to purchase other basic commodities. It is also viewed as a fundamental survival strategy.

- Small scale sales for grain and other non-perishable crops in local markets. This is generally the case of very smallholders and smallholders who aim to sell their surplus of grains or in need of cash. Quantities are usually sold in small amounts to local traders who would resell either retail or to larger traders.
- Sales to traders of standing crops, where smallholders sell different types of crops (such as wheat, sorghum, maize, sugarcane, sugar beet, fruits and vegetables) to the traders either at harvesting time or in advance. This mechanism guarantees a fixed price income to the farmers based on contractual arrangements, yet, the agreed price may be lower than the expected or actual market price at the time of harvest.
- Sale to traders of harvested crops. This is generally the case of slightly larger producers of field and fruit crops. Producers may sell to different traders, based on the best price they would receive and they usually do not establish long-term deals with single traders.
- Sale at auctions, which is a mechanism used by small to medium holders/producers, mostly for fruits and vegetables. There are major auction sites, such as Al Obour on the eastern outskirts of Cairo, as well as auctions in smaller towns or in the producing areas themselves. This mechanism is primarily used for the national market. It is also used for some exports, mainly to other Arab countries, rather than European markets where quality requirements are much stricter. Large retailers and processors are the main buyers at these auctions.
- Sales of the strategic crops to the Government. Strategic crops are mainly wheat, maize and sugar cane. The government annually sets floor prices for purchasing these crops. Farmers prefer to sell to the government because the floor prices can be set above the world prices. However, the farmers are not guaranteed sales as the Government may stop purchases if it reached sufficient supplies or if funds are not enough. In turn, traders would buy these goods on the open market usually at lower prices.
- Contract sales with large national and international companies, for local processing and for export. In the case of small and medium holders/producers, intermediaries are the actual purchasers and act as agents for the companies. They generally agree with the processors or exporters to supply certain quantities and make subsidiary agreements with the farmers to provide certain quantities. Prices are generally set at the time of cultivating.

It is important to note that wholesalers have particular importance in the food processing value chain since that the processors and the distributors generally do not have access to remote rural areas in the Delta and Upper Egypt.

With regard to the retail stores, the traditional small grocery stores are the most common purchasing venues for low to middle income shoppers. Hypermarkets and supermarkets are still limited compared to the size of the market<sup>24, 25</sup>.

### **The Agricultural Sector and Food Processing Sector Value Chains: The Main Constraints**

There are a number of constraints and inefficiencies affecting the agricultural sector and food processing sector value chains. The following depicts some of these elements:

- With regard to agricultural production, the previously indicated fragmented landholding limits the possibility of setting quality control mechanism and restricts the potential of engaging in contract farming.
- Extension services provided to the farmers are weak. It is worth noting that extension services are mainly provided through government extension services. The majority of the staff employed do not have the technical capacities and are poorly informed. They are also

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<sup>24</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 3: Rural Poverty, Gender and the Target Group.

<sup>25</sup> Said, R. & Mamdouh. A. (2018). *Services Contribution to Value Chains: A Case Study of the Egyptian Food Processing Sector*. Working Paper 198. Egyptian Center for Economics Studies (ECES).

inefficiently organized and not well paid. These lead to poor quality of services provided to the farmers. Nevertheless, government extension services have the advantage of being spread all over Egypt.

- Access to Finance is particularly challenging in the agriculture sector. It is estimated that the agricultural sector acquires a very small share of total bank credit, amounting to only 1%. Access to finance is also hindered by informality in land ownership. In addition, the distortions that are present in the rural finance market cause the banks to be reluctant in financing agriculture activities. It is worth noting that the Agriculture Bank of Egypt (ABE) provides credit to the agricultural sector at low interest rate. Consequently, ABE became a main financial institution providing credit to the agricultural sector, especially that non-bank financial institutions are still not well developed. However, untargeted low interest rate and frequent government debt forgiveness had negative impacts on the Bank's performance. The Bank's recent restructuring is expected to enhance its capacity and performance. Still, it is necessary to further encourage commercial banks to finance agricultural activities as well promote other non-banking financial mechanisms<sup>26, 27</sup>.
- The supply chain management faces a number of deficiencies. Poor infrastructure and logistics are considered major constraints, where the lack of adequate roads, transportation, storage and warehousing highly impede the distribution process.
- Ineffective pre and post-harvest practices negatively affect the quality and consistency of the agricultural commodities supplied to the food processing industry and raise the waste rate of agricultural products. A well-known example is the case of tomatoes, where it is estimated that up to 60% of total tomato production is lost due to deficiencies in post-harvest practices, transportation, handling, packaging and cold storage.
- The food processing sector is dominated by microenterprises which are estimated to be around 94% of the total enterprises in the food and beverage sector. The value chain in this regard suffers from poor quality in the handling of the inputs used, the manual processing of food and the primitive packaging and shelving. Hence, there is deficiency in service provision in support of the food processing sector. This leads to raising the production cost and drive the large food processing companies to be vertically integrated, where they would have their own production land and carry out the transportation and logistics services in-house, including cold storage facilities. In addition, the large number of intermediaries prevents distributors from benefiting from the economies of scale and hence raises the price of the final product<sup>28</sup>.
- Poor marketing capacities at the post-harvest level represent a major constraint. Several factors influence the marketing capacities:
  - Local markets in the rural areas are underdeveloped and the marketing infrastructure (transport, storage and packing facilities) is poor as previously mentioned. This results in higher rate of losses and waste, which in turn affect the marketing of agricultural commodities.
  - Producers are not well organized into associations or cooperatives. This restricts their bargaining power and their capacity to benefit from the economies of scale and markets.
  - Weak marketing skills, limited marketing information for smallholders (in terms of prices and volumes as well as quality standards), inefficient marketing channels and power

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<sup>26</sup> Said, R. & Mamdouh. A. (2018). *Services Contribution to Value Chains: A Case Study of the Egyptian Food Processing Sector*. Working Paper 198. Egyptian Center for Economics Studies (ECES).

<sup>27</sup> World Bank. (2014). *Egypt - Principle Bank for Development and Agriculture Credit (PBDAC) Restructuring Program*. Retrieved from <http://documents.worldbank.org/curated/en/754571468247461535/Egypt-Principal-Bank-for-Development-and-Agriculture-Credit-PBDAC-Restructuring-Program>.

<sup>28</sup> Said, R. & Mamdouh. A. (2018). *Services Contribution to Value Chains: A Case Study of the Egyptian Food Processing Sector*. Working Paper 198. Egyptian Center for Economics Studies (ECES).

asymmetries between smallholder farmers and other value chain actors lead to poor marketing capacities<sup>29,30</sup>.

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<sup>29</sup> IFAD. (2014). *Sustainable Agriculture Investments and Livelihoods Project (SAIL)*. Design Completion Report. Appendix 1: Country and rural context background.  
<sup>30</sup> IFAD. (2011). *Promotion Of Rural Incomes Through Market Enhancement (PRIME) Project*. Final Project Design Report, Working Paper 4: Marketing Support Component.

## **Annex 4: Community Based Organisation in the STAR area**

### **Community-Based Organizations**

There are several types of community-based organizations in Egypt that provide the local communities with different services and support. These organizations have been supported by a number of IFAD projects as they are considered good channels that would help rural households and smallholder farmers. The following sections depict these organizations and highlight their main characteristics, strengths, future potentials as well as the challenges and limitations that they face.

#### **Agricultural Cooperatives**

The Agricultural Cooperatives are recognized organizations that mostly pertain to the rural community. They were established by the Egyptian government mainly to supply the farmers with the necessary agricultural inputs and purchase their crops as well as generally be of support to them. As per their current mandate, the Agricultural Cooperatives are defined as social and economic units with the objective of improving agriculture, providing recommendations for the crop choices and rotations and contributing to the rural development of the area in which they work<sup>31, 32</sup>.

Agricultural Cooperatives are formed under the Agricultural Cooperation Law and supervised by the Central Administration for Agricultural Cooperatives, a specific unit in the Ministry of Agriculture and Land Reclamation (MALR). They exist throughout Egypt nearly in every village, and have a membership of more than five million farmers, including tenants as well as landowners. Their work is highly interrelated as they are considered the link between MALR and the farmers and landowners. The role of the Cooperatives include: distributing inputs such as fertilizers; ensuring that farmers plant the government set quotas of particular crops, such as cotton and wheat; and acting on behalf of the government in the process of marketing of strategic crops. They are considered of great importance to the farmers due to the huge increase in the prices of inputs and their ability to procure such inputs in wholesale for their members at more favorable prices. They generally have some basic physical and administrative infrastructure, including staff, and they keep stocks of inputs, which they sell at lower price than the market price. They are the first point of reference for all agricultural staff and house the village level extension officers. They are also considered a source for data on landholdings and other basic information needed for the selection of command areas<sup>33, 34</sup>.

The main strengths areas of the Agricultural Cooperatives include the following: their widespread presence as they exist across the country; they have a large base of membership since almost all farmers register with the cooperatives; they are well known in the villages and highly embedded in the agricultural community; they have the capacity to distribute agricultural inputs to the large number of small farmers; and they have a mechanism for organizing and providing support to the smallholders.

There are other areas where the cooperatives can potentially support. These include: linking the farmers with markets; channelling financial services to small farmers and enabling them to have access to finance; organizing farmers and providing them with extension services and training. They have considerable potential as bases for the Farmers Marketing as well. They can become catalysts for reducing production costs through group purchasing and marketing to reach the necessary quantity to engage with the market in a more competitive manner. In addition, they can engage in economic activities such as packing, cooling, and processing which would further increase the small farmers marketing competitiveness.

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<sup>31</sup> The Agricultural Cooperation Law no. 122 of 1980.

<sup>32</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 4: Marketing Support Component.

<sup>33</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

<sup>34</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 4: Marketing Support Component.

Nevertheless, there are a number of limitations that would impede their role. Cooperatives have limited capacity to develop market links on their own and require technical assistance to enable them to do so and to raise their capacity in this regard. They would also require technical assistance and strengthening to develop a more demand-driven approach and to engage in new activities.

Another important matter to take into account is that present government policy allows cooperatives to be managed by elected members and also encourages them to be business oriented in support of their members. However, the cooperatives staff are mostly civil servants. Moreover, local departments of agriculture consider the cooperative staff are their subordinates and are consequently requested to act according to the instructions. Cooperatives are hence viewed as organizations controlled by the government and in turn most members/farmers are not convinced that the cooperatives are voluntary organizations representing their interest. This would hence require major efforts and support to change the perceptions from both cooperative staff and members/farmers<sup>35, 36, 37</sup>.

It is important to highlight that the Agricultural Cooperatives have further potential as bases for Marketing Associations/ Committees, where they can engage in collective marketing as well as for some Water User Organizations (WUOs), such as the Marwa Committees and the Water Users Groups (WUGs), where they can assist in the operation and maintenance of irrigation infrastructure. These marketing and water organizations have been supported by some recent IFAD projects and were embedded in the Agricultural Cooperatives in some cases<sup>38, 39, 40</sup>. Marketing Associations formation procedures are as follows: (1) holding a meeting between the farmers and the director of cooperatives to make an internal manual for the association; (2) the association presents a request to the Ministry of Agriculture through its supervision zone to finalize the registration procedures; (3) opening the bank account.

WUGs formation procedures are as follows: (1) holding a preparatory meeting at the level of mesqa; (2) holding a general assembly in the presence of irrigation engineer (under the Ministry of Irrigation) of the village; (3) the irrigation engineer invites the members to attend (50% + 1 member); (4) preparing and sending records to the management of irrigation; (5) selecting the members; (6) carrying out elections and identifying the members and the chairman; (7) carrying out an internal committee of the WUG; (8) registering the WUG in the Ministry of Irrigation; (9) opening the bank account<sup>41</sup>.

### **Community Development Associations (CDAs)**

Community Development Associations (CDAs) are considered Non-Governmental Organizations (NGOs) under the relevant legislation for non-profit organizations. They are registered with the Ministry of Social Solidarity (MoSS), governed by Law no. 84 of 2002. MoSS hence has records for all registered NGOs/CDAs. It is also important to note that microcredit provided by non-bank financiers is regulated by the Microfinance Law no. 141 of 2014 and supervised by the Egyptian Financial Supervisory Authority (EFSA). The Microfinance Law accordingly specifies the legal and administrative procedures that condition the work of financial intermediaries such as NGOs and CDAs in microfinance.<sup>42,43</sup>

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<sup>35</sup> FAD. (2018). Country Strategic Opportunities Programme 2019-2024. December.

<sup>36</sup> IFAD. (2009). On-Farm Irrigation Development Project In The Oldlands. Project Design Report, Main Report.

<sup>37</sup> IFAD. (2011). Promotion of Rural Incomes through Market Enhancement (PRIME) Project. Final Project Design Report. Working Paper 4: Marketing Support Component.

<sup>38</sup> FAD. (2018). Country Strategic Opportunities Programme 2019-2024. December.

<sup>39</sup> IFAD. (2009). On-Farm Irrigation Development Project In The Oldlands. Project Design Report, Main Report.

<sup>40</sup> IFAD. (2015). Sustainable Agriculture Investments and Livelihoods Project (SAIL). Project Implementation Manual (PIM).

<sup>41</sup> IFAD. (2015). Sustainable Agriculture Investments and Livelihoods Project (SAIL). Project Implementation Manual (PIM).

<sup>42</sup> IFAD. (2017). Arab Republic of Egypt Country Strategy and Programme Evaluation. Independent Office of Evaluation. Report No. 4526-EG. September.

<sup>43</sup> IFAD. (2018). Country Strategic Opportunities Programme 2019-2024. December.

CDAs exist in many villages and their mandate can vary from charity and social services (such as kindergartens, orphanages, medical clinics, etc...) to development, but their coverage is usually limited to a village or a neighborhood. CDAs can also provide economic services as they can play a vital role in offering microloans to end beneficiaries in the rural community. Overall membership of CDAs is relatively small, ranging between 50 and 400, indicating a limited level of interest on the part of villagers. However, individuals have access to the CDA services without being members. Although CDAs are often weak, many of them are real community based organisations, relying mainly on the initiative of community members who have a commitment to improving conditions in their villages. Many CDAs are also largely dependent on funding from MoSS and some are often supported by small donor grants and by larger NGOs. CDAs are also employed as microfinance intermediaries<sup>44, 45</sup>.

Several CDAs as well as NGOs are supported by the Micro, Small and Medium Enterprises Development Agency (MSMEDA). MSMEDA is a national entity that is concerned with the development of Micro, Small and Medium Enterprises (MSMEs) and entrepreneurship in Egypt. It offers funds to these enterprises either directly or through banks as mediators to finance their projects. The Agency has a strong network with local level CDAs as well as NGOs<sup>46, 47</sup>. CDAs are also the most common type of community organizations that was widely targeted by IFAD projects. They have been a principal channel for microfinance outreach in the projects, where most beneficiaries find the loan process to be easy and the loan requirements to be acceptable. In that respect, they have been considered a good mechanism of support to rural communities. IFAD also used this mechanism to reach rural women and help them with productive investments. The majority of loans under this scheme have been for the purchase of livestock, which is considered a popular investment for poor people and particularly for the landless<sup>48, 49, 50</sup>.

The main strengths areas of the CDAs include the following: they are considered a good mechanism for multi-purpose activities at the community level and for the provision of social sector services in rural communities; they can provide a supportive role in assisting rural households to undertake a wide range of activities at suitable loan requirements; they have the capacity to revolve funds; and they possess a reasonable degree of flexibility and are close to members of the community. Moreover, CDAs have good outreach to women especially poor women through social and charitable activities. They hence provide a good mechanism for inclusion of women.

CDAs have further potential for serving as a vehicle for the empowerment of the poorest and most vulnerable as well as encourage their growth in the enterprise sector.

On the other hand, CDAs face a number of weaknesses and challenges. These comprise: their limited capacity to raise funds through their own sources and enterprises; their reliance on external assistance for technical and managerial skill development; and their limited geographic and capacity outreach. Moreover, CDAs performance is uneven and they are generally dominated by a few active members. Their sustainability also depends upon their financing from donors and partially by Government. In that respect, CDAs require both technical and financial

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44 IFAD. (2017). Arab Republic of Egypt Country Strategy and Programme Evaluation. Independent Office of Evaluation. Report No. 4526-EG. September.

45 IFAD. (2009). On-Farm Irrigation Development Project in the Old lands. Project Design Report, Working paper 7.

46 Micro, Small and Medium Enterprises Development Agency (MSMEDA). <http://www.msmeda.org.eg/AboutUs.html>. Retrieved 21 May 2019.

47 MSMEDA. [http://www.msmeda.org.eg/partners\\_local.html](http://www.msmeda.org.eg/partners_local.html). Retrieved 21 May 2019.

48 IFAD. (2017). Arab Republic of Egypt Country Strategy and Programme Evaluation. Independent Office of Evaluation. Report No. 4526-EG. September.

49 IFAD. (2009). On-Farm Irrigation Development Project in the Old lands. Project Design Report, Working paper 7.

50 IFAD. (2011). Promotion of Rural Incomes through Market Enhancement (PRIME) Project. Final Project Design Report Working Paper 3: Rural Poverty, Gender And The Target Group.

support as well as monitoring capacity development with regard to enhancing their capacities and sustainability<sup>51, 52, 53</sup>.

Another major concern is the restrictive legal and regulatory environment for NGOs/CDAs. This is due to the fact that NGOs/CDAs are restricted from accepting deposits to raise capital and grant loans. Upon approval from MoSS, NGOs/CDAs can access grants and loans from development partners. It is important to note that in order for the development organizations, including IFAD to be able to expand the number of non-conventional institutions that provide financial services, the legal and regulatory environment according to which NGOs/CDAs operate need to be more flexible<sup>54, 55, 56</sup>.

In addition, management board membership of CDAs has to be cleared with the State Security Services as well as with MoSS, thus giving a perception to the community members that these organizations are government institutions. Still, they are considered the main recognised NGO community level institutions acceptable to the government and in turn they are primary candidates for working with projects<sup>57</sup>.

CDAs formation procedures are as follows: (1) selecting the headquarter of the association; (2) presenting a request to the nearest local council to register the CDA; (3) forming a General Assembly for its members; (4) starting the nomination; (5) electing the CDA board; (6) registering the CDA; (7) opening the bank account<sup>58</sup>.

### **Water Users Organizations (WUOs)**

Water Users Organizations (WUOs) are community-level organizations that are established to support the management of irrigation water and the operation and maintenance of canals. WUOs are specialized entities of water users that can be assigned to manage, operate and maintain, at their expense, parts of the irrigation and drainage system with full participatory independence in this respect. At the lowest level, Water Users Associations (WUAs) are formed at the mesqa level in the Old lands to be responsible for operation and maintenance of pumping stations (pumping water from the branch canal into the mesqa and to organize water scheduling from the mesqa into the marwas (quaternary canals) and from there to farmers fields. These WUOs are then represented, together with other water users (municipalities and industry) into Branch Canal Water Users Organizations (BCWUAs) and Water Boards that can express their demands with greater voice and interact with the authorities for the allocation and timely supply of water. IFAD have established WUOs at various levels, including WUAs, BCWUAs as well as Marwa Committees through a number of projects.

Law 213 for the year 1994 (modification of Law 12 for the year 1984) provides the legal base for formation of the WUAs in the improved irrigation projects in the old lands at the mesqa level and in the new lands. Article 71 of that law recognized and legalized WUAs as specialized associations performing functions related to water management. Through this legislation, the aim was to work towards optimum utilization of available water through an integrated participatory system that engages farmers in management decisions over water in their hydraulic boundary, leading to more efficient use of water. Other types of WUOs have been also established above the mesqa level by Ministerial Decrees, on a pilot basis, such as Water Boards and BCWUAs, using different concepts and approaches. BCWUAs and Water Boards

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<sup>51</sup> FAD. (2018). Country Strategic Opportunities Programme 2019-2024. December.

<sup>52</sup> IFAD. (2009). On-Farm Irrigation Development Project In The Oldlands. Project Design Report, Main Report.

<sup>53</sup> IFAD. (2011). Promotion of Rural Incomes through Market Enhancement (PRIME) Project. Final Project Design Report Working Paper 3: Rural Poverty, Gender And The Target Group.

<sup>54</sup> IFAD. (2017). Arab Republic of Egypt Country Strategy and Programme Evaluation. Independent Office of Evaluation. Report No. 4526-EG. September.

<sup>55</sup> IFAD. (2009). On-Farm Irrigation Development Project in the Old lands. Project Design Report, Working paper 7.

<sup>56</sup> The International Center for Not-for-Profit Law. Civic Freedom Monitor: Egypt. <http://www.icnl.org/research/monitor/egypt.html>. Retrieved 19 May 2019.

<sup>57</sup> IFAD. (2011). Promotion of Rural Incomes through Market Enhancement (PRIME) Project. Final Project Design Report Working Paper 3: Rural Poverty, Gender And The Target Group.

<sup>58</sup> IFAD. (2015). Sustainable Agriculture Investments and Livelihoods Project (SAIL). Project Implementation Manual (PIM).

are regulated by the Ministerial Decree 263 for the year 1997 and the Ministerial Decree 33 for the year 2001 respectively.

WUOs have a number of strength areas, such as: promoting the collective approach among farmers sharing the same canals; facilitating more efficient management of water resources; contributing to the operation and maintenance and cost recovery of irrigation water systems; and developing a more effective coordination system among the relevant stakeholders in the different water management functions<sup>59, 60, 61</sup>.

However, most of these WUOs are either not operating or functioning as intended due to a number of constraints including the limited legal status, poor access to finance and poor institutionalization. Their sustainability is subsequently a main concern. Regarding the legal status, it is important to note that even though WUAs are legally recognized, they are not well embedded within the local administration framework. As for the other WUOs, their decrees similarly do not provide a strong level of embeddedness in the system. Other limitations include the fact that Law 213/1994 does not support further scaling up of the WUOs as it mainly provides a legal status to the WUAs at the mesqa level only as previously discussed. As for the poor access to finance, WUOs have limited capacities to set fees, collect the necessary funds for operation and maintenance or to open a bank account. Moreover, their operation and hence their sustainability depend on their financing from donor funded projects. They are also highly reliant on external assistance for technical support<sup>62, 63</sup>.

Another main complexity facing the successful development of WUOs at the different canal levels is the poor coordination between the concerned ministries. Both MALR and the Ministry of Water Resources and Irrigation (MWRI) play a major role in Egypt's irrigated sector. MWRI is responsible for irrigation water conveyance system and irrigation improvements from mesqa level (tertiary canals) and above, covering branch, main and principal canals, while MALR on the other hand is responsible for on-farm irrigation and all services for agricultural production and on-farm irrigation improvements at marwas level (quaternary canals). These responsibilities are carried out through several departments and agencies at central and governorate level. Traditionally the relationship between these two organizations was one of the institutional challenges resulting in moderate coordination. However, there is now a conviction in both ministries that they need to coordinate and synchronize their efforts at both policy and operational levels in order to realize maximum benefits from the scarce water resources. Hence, there has been recent higher policy commitment to collaboration on irrigation improvement<sup>64</sup>.

### **Farmers Marketing Associations (FMAs)/ Marketing Associations (MAs)**

Farmers Marketing Associations (FMAs)/ Marketing Associations (MAs) have been promoted mainly in the context of donor-funded projects or by NGOs, which are concerned mainly with providing their members with the services they need to better market their products, particularly in linking them in contract farming arrangements with exporters. FMAs/MAs follow the Agricultural Cooperation Law no. 122 of 1980. They form themselves into groups, usually clustered around a single activity or a special interest. While some do play an advocacy role, they are mainly concerned with providing their members with the services they need. They market the products of numerous agricultural producers and in turn the farmers benefit through selling large volumes at a high price. Additionally, they can obtain needed supplies at wholesale/discounted rates, and better negotiate with traders for the sale of their products<sup>65</sup>.

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59 FAD. (2018). Country Strategic Opportunities Programme 2019-2024. December.

60 IFAD. (2009). On-Farm Irrigation Development Project In The Oldlands. Project Design Report, Main Report.

61 MWRI (2005). National Water Resources Plan (NWRP) 2017.

62 FAD. (2018). Country Strategic Opportunities Programme 2019-2024. December.

63 IFAD. (2009). On-Farm Irrigation Development Project In The Oldlands. Project Design Report, Main Report.

64 IFAD. (2009). On-Farm Irrigation Development Project in the Old lands. Project Design Report, Working paper 7.

65 IFAD. (2009). On-Farm Irrigation Development Project in the Old lands. Project Design Report, Working paper 7.

The main strengths areas of the FMAs/MAs are as follows: they are voluntary organizations in which only interested farmers participate; they are commodity specific and focused; they can be a good mechanism for linking the farmers with markets. Their role would in turn support small farmers to realize economies of scale, reduce transactions cost and enhance their bargaining power. FMAs/MAs can also have further potential to enable the farmers to have access to financial services.

On the other hand, FMAs/MAs face several challenges. Very few FMAs/MAs exist at the moment due to insufficient technical and financial resources and capacities to support their activities. They also have limited capacity to forge market links on their own and require technical assistance to enable them to do so. FMAs/MAs also have poor capacity with regard to opening bank accounts and having access to finance. In addition, FMAs/MAs do not possess a legal base. In turn, the lack of a legal status limit the effectiveness and operation of the associations. That is in addition to insufficient technical and financial capacities. These factors in addition to their poor level of institutionalization hinder their operation and sustainability<sup>66</sup>. There are other limitations that obstruct the successful operation of FMAs/MAs. For such, small-scale farmers generally have limited competitive capacities and products quality. This would in turn undermine FMAs/MAs abilities to connect to high-end markets. Moreover, the limited marketing facilities and weak linkages between farmers and value chains is a major obstruction.

In addition to the above, the private sector may prefer to deal with a few large farmers instead of the FMAs/MAs due to their higher level of competitiveness and standardized product quality. Another external factors that hinders the capacities of FMAs/MAs are the market price fluctuations and rising agriculture input prices. These factors may also have an effect on contractual arrangements<sup>67, 68</sup>.

As previously explained, Marketing Associations formation procedures are as follows: (1) holding a meeting between the farmers and the director of cooperatives to make an internal manual for the association; (2) the association presents a request to the Ministry of Agriculture through its supervision zone to finalize the registration procedures; (3) opening the bank account<sup>69</sup>.

### **Producer Associations**

Producers are not well organized into associations or cooperatives. Nevertheless, the government has given considerable importance to establishing small producer organizations in its new Agriculture Strategy.

The absence of Producer Associations limits their bargaining power and their ability to capture the benefits of economies of scale and markets. Hence, IFAD highlighted in one of its recent projects the need to: strengthen producer associations to better market smallholder production; enhance access to market information; enact and enforce laws and regulations that concern product standards; and develop the extension role of the private sector. This would in turn promote the development of Producer Associations and raise their capacities in the market<sup>70</sup>.

### **Informal Youth and Women Groups**

As observed in a number of IFAD projects, youth and women groups were supported through funds and technical support provided by NGOs/CDAs.

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<sup>66</sup> IFAD. (2017). *Arab Republic of Egypt Country Strategy and Programme Evaluation*. Independent Office of Evaluation. Report No. 4526-EG. September.

<sup>67</sup> FAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>68</sup> IFAD. (2009). *On-Farm Irrigation Development Project In The Oldlands*. Project Design Report, Main Report.

<sup>69</sup> IFAD. (2015). *Sustainable Agriculture Investments and Livelihoods Project (SAILPIM)*.

<sup>70</sup> IFAD. (2014). *Sustainable Agriculture Investments and Livelihoods Design completion report*. Main report and appendices.

## **Annex 5: Profile of potential Service Providers**

### **Service Providers**

The following sections present a number of services providers, which include private and government agencies as well as Non-Governmental Organizations (NGOs) and the main activities and services that they offer in the area of agribusiness and agricultural practices.

#### **Blue Moon**

Blue Moon is a private Egyptian company that provides a number of services across a wide range of management systems and product areas to the fresh produce supply chain. The company works in standards of good agricultural practices. It provides capacity building services, compliance consultancy, monitoring services and assurance solutions to conform to food safety and sustainable standards across the fruit and vegetable sector.

The company also offers project management of funded socio-economic development projects in the fruits and vegetables sector. It manages projects that works in collaboration with the agricultural cooperatives and associations to comply with agricultural best practices.

One of the company's objectives is to enable small growers to gain access to the fairtrade market. It aims at supporting the small producer organizations to gain access to premium prices and providing trading services that facilitate the marketing procedures for the producers<sup>71</sup>.

It is worth noting that Blue Moon received GlobalGAP training and can provide public training. The company has been used by a number of donors supporting the agribusiness sector and its capacity is well established<sup>72</sup>.

#### **Bashaer**

Bashaer is an agribusiness marketing platform that aims at directly linking the small farmers' communities, the cooperatives and the agribusiness Small and Medium Enterprises (SMEs) and NGOs to the market buyers and input suppliers in the different value chains, including horticulture, fish and dairy.

The company offers a number of services through its platform. Its online marketing network publishes and seeks to match buyers and sellers for different types of deals, input supplies and contract farming. The platform also provides updated market prices and information as well as digital extension services fruit, vegetables, medicinal and aromatic plants. that can be accessed through the web as well as through the mobile.

Bashaer launched "Agrirowad", which is an agribusiness SMEs and Startups incubator. The main objective of Agrirowad is to address the gaps in Egypt's agribusiness value chains and leverage their related SMEs opportunities<sup>73</sup>.

#### **ACDI/VOCA**

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<sup>71</sup> [www.bluemoon-eg.com/](http://www.bluemoon-eg.com/)

<sup>72</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 4: Marketing Support Component.

<sup>73</sup> <http://bashaier.net/landing/english.html>

ACDI/VOCA develops and adapts tools to support smallholder farmers and agribusinesses. These tools include access to improved seeds, new planting and harvesting technologies and post-harvest handling techniques. It aims to promote effective technical approaches that develop institutions in agriculture, enterprise development, finance, and food security. Its technical practices are in the areas of catalyzing investment, climate-smart agriculture, empowerment and resilience, institutional strengthening and market systems. ACDI/VOCA is particularly known for its capacity to strengthen organizations and expand markets for smallholder farmers.

In Egypt, ACDI/VOCA implemented the Advanced Marketing and Agribusiness Logistics (AMAL) project. The project provides technical assistance to the farmers. It focuses on integrating smallholder farmers into Egypt's export market to improve livelihoods in Upper Egypt<sup>74</sup>. ACDI/VOCA participated in previous donor funded projects in Egypt. It has a successful record and has good potential as a training service provider. It expressed its willingness and ensured that it has the capacity to offer services on demand and through a competitive process<sup>75</sup>.

### **PlaNet Finance**

PlaNet Finance implements projects that focus on financial inclusion, entrepreneurship, financial education and the organization of value chains. Its main objectives include improving people's access to education, health, food security, housing, drinking water, sanitation, clean energy and the financing of entrepreneurial projects<sup>76</sup>. PlaNet Finance worked with previous donor funded projects in Egypt. It ensured its capacity and willingness to provide services on demand and through a competitive process<sup>77</sup>.

### **Nile Angel Investors**

Nile Angels is the first network in Upper Egypt that focuses on angel investment. It aims at investing in local start-ups and supporting entrepreneurs. It concentrates on developing an investment community that would improve the capacity of the investors in entering new markets and investing in innovative start-ups. Nile Angels provides startups with consulting and mentoring services as well as access to knowledge and networking opportunities. It works as a catalyst between investors and entrepreneurs where angel investors participate in supporting

### **Upper Egypt's entrepreneurs.**

Regarding the mentoring services, Nile Angels provides technical and business mentoring for startups through trainings and workshops. The main partner of Nile Angel Investors is the German Corporation for International Cooperation (GIZ)<sup>78</sup>.

### **The Coptic Evangelical Organization for Social Services (CEOSS)**

CEOSS is an Egyptian development organization that is committed to social and cultural development. CEOSS implements a Marketing Agricultural Products Program that aims at supporting the economic potentials of farmers, particularly the smallholders. The program focuses on developing agricultural development opportunities for marketing and export of agricultural products; and promoting the role of associations, agricultural agencies and relevant stakeholders in the area of agricultural marketing.

The program seeks to increase income of small farmers by providing technical support as well as services to the farmers through partnership with the private sector. These services include: managing marketing process of agricultural products, providing production requirements,

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<sup>74</sup> <https://www.acdivoca.org/about/vision-mission/>; <https://www.acdivoca.org/practices/>

<sup>75</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 4: Marketing Support Component.

<sup>76</sup> <https://arab.org/directory/planet-finance-egypt/>

<sup>77</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 4: Marketing Support Component.

<sup>78</sup> <http://www.nileangels.com/en>

managing refrigerated transportation services and promoting marketing opportunities that would further support the farmers to sell their agricultural products for higher value<sup>79</sup>. CEOSS has projects in the Governorates of Minya, Beni Suef and Qalyoubeya.

### **CARE**

CARE is an organization that focuses mainly on development programs in Upper Egypt to improve livelihoods on a sustainable basis. CARE has an Agriculture and Natural Resources Management Program that works on enhancing access to natural resources and services in rural communities as well as on supporting the socio-economic conditions of smallholder farmers through enhancing their productivity and creating economic opportunities, with particular emphasis on empowering women.

Through the program, CARE supports the small farmers in adopting best practices, increasing their resilience to climate change and in enabling them to have better access to global markets and more effective water management. The program also works on building the capacities of smallholder farmers, developing agriculture services to meet the farmer's needs in various value chains, enhancing the conditions of the agribusinesses and cooperatives, creating employment opportunities, with particular focus on female-headed households, and creating linkages between farmers and larger markets. It collaborates with different ministries and stakeholders, including Civil Society Organizations (CSOs), and promotes partnerships with the private sector to support the development of the agriculture sector.

A successful project that CARE implemented was the development of **Milk Collection Communities (MCCs)** that adopts the value chain approach. CARE created a model for inclusive value chains with Danone Ecosystem. The project worked on empowering the rural community through dairy value chain. The project involved all relevant stakeholders including milk collectors, MCCs, traders, wholesalers and agricultural cooperatives.

CARE has also been supporting the farmers capacities to adopt better farming practices that would increase their productivity. Activities include providing technical trainings in various governorates on different types of crops.

CARE has been also supporting local governance mechanisms through improving the institutional capacities of cooperatives and Community Development Associations (CDAs) and providing technical trainings. It also provided training to agriculture extension workers in light of enhancing access to agriculture extension services<sup>80</sup>.

It is worth noting that CARE has participated in several donor funded projects and has a strong willingness and capacity to provide services on demand and through a competitive process.<sup>81</sup>

### **Horticultural Export Improvement Association (HEIA)**

HEIA is an industry-driven association supporting the Egyptian horticultural community, including producers, exporters and suppliers. It aims at increasing exports of fresh produce through improving quality production, marketing capacities, providing training, policy advocacy and management assistance.

It focuses on providing the horticultural sector with the necessary technical, technological, marketing and exporting information and production inputs to comply with the international standards.

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<sup>79</sup> <http://en.ceoss-eg.org/marketing-of-agricultural-products-2/>

<sup>80</sup> <https://care.org.eg/agriculture-and-natural-resources/>

<sup>81</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (PRIME) Project*. Final Project Design Report. Working Paper 4: Marketing Support Component.

A well acknowledged service provided by HEIA is the Cold Storing Services in Upper Egypt, through the new terminal at Luxor. This service supports the promotion of horticultural crops exports by charter flights in Upper Egypt. HEIA also has a liaison office in Luxor to help promote Egyptian exports in Upper Egypt. It supported the establishment of the perishables cold-storage terminal at Cairo airport as well.

HEIA also provides training services to farmers, with special focus on small farmers to ensure better compliance of the agricultural operations with the export requirements and the Good Agricultural Practices Standards<sup>82</sup>.

### **Union of Producers and Exporters of Horticultural Crops (UPEHC)**

UPEHC provides marketing and technical services to members and non-member producers. It also provides all certificates and guarantees of quality and safety required by the importer in accordance with international standards.

The Union offers training courses and seminars for farmers and producers in all governorates. These trainings provide information and guidance on new and better agricultural practices to help them improve their agricultural efficiency and in turn increase their production. UPEHC also provides technical assistance and guidance along the different agriculture production stages and to prepare and mobilize products for export<sup>83</sup>.

### **Micro, Small and Medium Enterprises Development Agency (MSMEDA)**

MSMEDA is a national entity that is concerned with the development of Micro, Small and Medium Enterprises (MSMEs) and entrepreneurship and responsible for MSMEs projects in Egypt. It supports CDAs as well as NGOs through offering funds to these enterprises either directly or through banks as mediators to finance their projects. The Agency has a strong network with local level CDAs as well as NGOs.

In addition to the financial services that MSMEDA offers, it provides marketing and technical support services. One of the Agency's pillars also focuses on human development and the main activities under this pillar include providing technical training, development of general knowledge skills, and entrepreneurship training<sup>84, 85</sup>.

### **The Agricultural Research Centre (ARC)**

ARC is one of the largest research organizations in the Middle East dedicated to research and development of agricultural sciences. ARC is the principal organization responsible for technology generation and transfer for agriculture growth and development. It focuses its research on the development of new varieties, improved agronomic practices, livestock development and better food processing techniques. ARC's major responsibilities include conducting applied and basic research to generate a continuous flow of technologies that help increase productivity and reduce production costs and transferring new technologies to the farming community through extension service<sup>86, 87</sup>.

### **University of Sohag, Faculty of Agriculture**

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<sup>82</sup> <http://heiaegypt.org/wp-content/uploads/2015/11/HEIA-Presentation-English.pdf>

<sup>83</sup> [http://www.upehc.org/UPEHC\\_Goals.aspx](http://www.upehc.org/UPEHC_Goals.aspx)

<sup>84</sup> Micro, Small and Medium Enterprises Development Agency (MSMEDA). <http://www.msmeda.org.eg/AboutUs.html>. Retrieved 21 May 2019.

<sup>85</sup> MSMEDA. [http://www.msmeda.org.eg/partners\\_local.html](http://www.msmeda.org.eg/partners_local.html). Retrieved 21 May 2019.

<sup>86</sup> ARC. <http://www.arc.sci.eg/AboutARC.aspx?TabId=&NavId=&lang=en>. Retrieved 23 May 2019.

<sup>87</sup> IFAD. (2017). *Promoting Resilience in Desert Environments (PRIDE)*. Final Project Design Report. August.

The Faculty of Agriculture in the University of Sohag has a Training and Extension Unit. The unit aims to provide training services and programs to target groups and agencies working in the agriculture sector and related fields. It also coordinates and cooperates with research centres and governmental and non-governmental organizations that work in the fields of agricultural and rural development<sup>88</sup>.

#### **University of Assiut, Faculty of Agriculture**

The Faculty of Agriculture in the University of Assiut has an Agricultural Extension and Rural Development Centre. Its main objective is to contribute to increasing agricultural production in Assiut Governorate and neighbouring governorates. The centre provides extension education for farmers on modern technological methods. It also offers technical advisory services for soil, water and vegetation matters<sup>89</sup>.

#### **University of Minya, Faculty of Agriculture**

The Faculty of Agriculture in the University of Assiut has activities that focus on community participation and environmental development. It participates in training campaigns in cooperation with the Agriculture Directorate and Agricultural Administration in Minya Governorate and conducts seminars and workshops that would support the farmers' needs. The faculty also aims at increasing the capacity for community participation in agricultural literacy<sup>90</sup>.

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<sup>88</sup> [http://www.sohag-univ.edu.eg/facaqr\\_en/](http://www.sohag-univ.edu.eg/facaqr_en/)

<sup>89</sup> [http://www.aun.edu.eg/faculty\\_agriculture/](http://www.aun.edu.eg/faculty_agriculture/)

<sup>90</sup> <https://www.minia.edu.eg/agr/EHome.aspx>

## **Annex 6: Background note on rural finance sector**

### Overview of the Rural Financial Sector

Financial inclusion is a concept that has recently attracted major attention among Egypt's policy makers and the Central Bank (CBE). Financial inclusion is a critical enabler for poverty reduction and inclusive growth. Access to transaction accounts opens up a pathway to broader financial inclusion, whereby people and firms can make financial transactions more efficiently and safely, access funds (whether payments, credit, savings, or other), invest in the future, and cope with economic shocks. Access to transaction accounts also enables participation in the digital economy, and is a critical building block for digital development. According to the World Bank, Egypt has the potential to bring a large number of people into the formal financial sector (more than 44 million adults)<sup>91</sup>.

The CBE participates in several regional and global initiatives to improve financial inclusion. At an international level, CBE is a member of the international Alliance for Financial Inclusion (AFI) since 2013, in an effort to exchange technical and practical experiences among member states in the field of financial inclusion between 95 developing countries. In 2017, Egypt was chosen, along with China and Mexico, as a model country for the Financial Inclusion Global Initiative (FIGI)<sup>92</sup>. FIGI is a three-year initiative supporting access to financial services to the unbanked and underbanked; and developing policy recommendations in digital finance. At a regional level, CBE directs banks to participate in the activities of the Arab Financial Inclusion Week by approaching remote areas, clubs, and universities and present their products.

Financial Inclusion data<sup>93</sup> place the Arab Republic of Egypt in the low end of neighboring MENA countries. The small financial penetration is attributed to the presence of a sizable informal sector and the high poverty and unemployment rates. Additionally, Egypt is broadly a cash based economy, with cash transactions dominating most of its activities. The banking system consists of 40 banks categorized as commercial, non-commercial public and private sector. ATM services are offered at all bank branches as well as many point-of-sale locations. In practice, the vast majority of these banks operate as commercial banks, although there are a few specialized banks (i.e. agriculture and real estate). The National Bank of Egypt, Bank Misr and Banque Du Caire are large public-sector banks which control 40% of the banking sector. All banks in Egypt are subject to supervision by the CBE; however the Arab International Bank, Nasr Social Bank and the National Investment Bank are exempted due to special provisions in law and treaty.

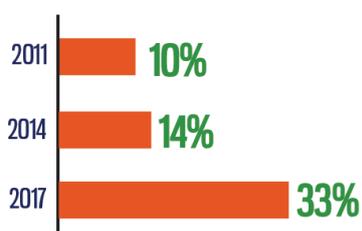
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<sup>91</sup> FIGI initiative for Egypt.

<sup>92</sup> The Financial Inclusion Global Initiative (FIGI) is a three-year program implemented in partnership by the World Bank Group (WBG), the Committee on Payments and Market Infrastructure (CPMI), and the International Telecommunications Union (ITU) funded by the Bill & Melinda Gates Foundation (BMGF) to support and accelerate the implementation of country-led reform actions to meet national financial inclusion targets, and ultimately the global 'Universal Financial Access 2020' goal.

<sup>93</sup> FINDEX 2014.2017 see Annex 1

### Account Penetration:



Total Number of Banks in Egypt  
**40**



Total Number of Branches  
**4K**



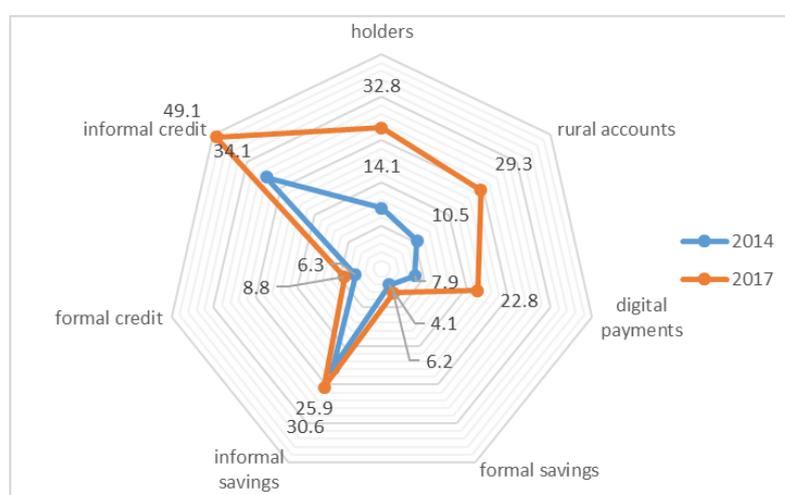
Number of Debit Cards  
**17.6M**



Number of Subscribers to the Mobile Financial Service  
**7.9M**

SOURCE: FINDEX, CBE MONTHLY STATISTICAL BULLETING 5/19, INFOGRAPHIC ALEXBANK EDITED.

**Figure 6: Financial Inclusion map Egypt**



SOURCE: ANNEX 1

There is a noticeable improvement in account penetration in the past few years; not only among urban but also among rural population, (rural account penetration in 2014 was 10.5% and 29.3% in 2017). A similarly significant increase is perceived in informal credit and digital payments (informal credit increased from 34.1% to 49.1% between 2014 and 2017, while digital payments from 7.9% to 22.8% in the same

period. Noteworthy is also the substantial divide between formal and informal savings and credit (formal credit 8.8% compared to 49.1% total credit and 6.2% formal savings compared to 30.6% total savings), indicating inadequate bankability and poor savings culture. To corroborate these findings, a relevant perception survey<sup>94</sup> suggests that respondents consider as main reasons for not having an account a) the absence of adequate financial resources (inability to save); b) they do not see the need to have an account; c) if needed, they would use another family member's account.

The noticeable improvements in account penetration and digital payments are largely the result of the GoE's and CBE's continuous efforts to improve financial inclusion in the country. In fact, the National Council for Payments was established in 2017, chaired by the President himself, with the aim to stimulate the use of electronic payments, and develop a national payments system. The CBE approved a new version of the regulations for "Mobile Payment Services Regulations" that boosted penetration by 110% in a year. The GoE has signed a MoU with Visa, to enable digital payment of government subsidies. Similarly, the Ministry of Communications and Information Technology and MasterCard signed an MoU aiming to extend financial services to 54 million Egyptians.

Despite efforts, the crucial challenge facing rural MSMEs and smallholders in promoting their investment plans remains access to financing. In Egypt, only 6% of rural MSMEs have access to bank loans, compared to 18% of large firms. Other important constraints include cumbersome regulations

<sup>94</sup> Conducted under FINDEX – see Annex 1 for details.



established to support all institutions operating under the Micro Finance Law (and are de jure members of the EMFF) with institutional capacity and training.

Apart from the 10 banks, the Micro Finance ecosystem (which is essentially serving rural and agricultural micro-investors), comprises 10 MFI companies (Reefy, Tanmeyah, Tassahil, Vitas, Aman, Sanda, Fawry, First Microfinance Foundation, Tamweely and the MSME Development Agency - MSMEDA) and 901 NGOs which operate as credit cooperatives (without the savings component) offering micro-loans to their members. As NGOs are not permitted to accept deposits, they have to borrow from wholesalers (such as MSMEDA) for on lending. Given their large number and wide geographic coverage, NGOs are the most common point for the smallholder and the micro-entrepreneur to reach financing means for micro-investments. NGOs account for the largest share of the total MFI client base (twice than this of MFI companies and 6 times this of MFI banks). Yet, In terms of active portfolio, banks,-MFI companies and NGOs all share the market quasi-equally. The average ticket size for the banks is match larger than this of other players at around 18.000 EGP. For the MFI companies the average loan size is around 6,300 EGP and for the NGOs 3,500 EGP.

The MFI Law sets three categories for NGOs as per their portfolio size. Category A, are NGOs with portfolio of EGP 50 million or more; Category B, are NGOs with a portfolio between EGP 10 million to 50 million; and Category C, NGOs with a portfolio smaller than EGP 10 million. Category C, NGOs are surpassing category A and B by almost five times in number, yet the size of their total portfolio is almost ten times smaller than this of Category A. Category A NGOs are also serving almost ten times the number of clients than Category B or C. The EMFF is trying to capacitate Category B and C NGOs to graduate to a higher level, which will allow them to expand their client base and portfolio size.

Table 2: The MFI ecosystem in numbers

EMFF members	Number	Portfolio (million EGP)	Active Clients (thousands)	Avg. loan size
Banks	9	6,940	383	18,120
MFI Companies	9	6,078	961	6,325
NGOs	901	6,571	1,890	3,477
Cat A	14	5,300	1,530	3,464
Cat B	18	643	197	3,264
Cat C	869	628	163	3,853
<b>Total</b>	<b>919</b>	<b>19,589</b>	<b>3,234</b>	<b>6,057</b>

SOURCE: EMFF DATA

### Agricultural Credit Cooperatives

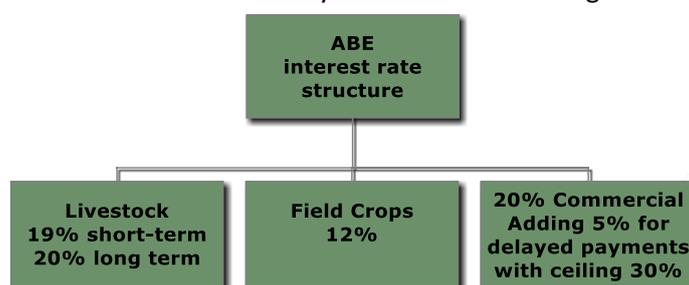
Another source of financing for rural farmers are the Agricultural Cooperatives that operate under the Law 122/1982 as credit NGOs. There are more than 5,000 Agricultural Cooperatives for credit (accounting for 85% of the total number of coops – other focusing on land reclamation etc.). They operate under the auspices of the MinAgri at village level (5029); district level (139); governorate level (92) and national level (14). They can borrow from ADP or MSMEDA for on-lending to their members.

### The Agricultural Bank of Egypt (ABE)

The Agricultural Bank of Egypt is one of the largest banks of Egypt but also of the Arab world and the Middle East. It has more than 1210 branches and a village bank and a deposit portfolio of 50 billion EGP. ABE's client base exceeds 3 million customers while its client database exceeds 10 million. ABE covers 30% of the active population. 50% of its portfolio is rural (30% agri) and 80% is directed to

smallholders with an average loan size between 25,000 to 50,000 EGP. Animal production projects receive 25% of portfolio, 20% for mechanization projects, 25% consumer loans.

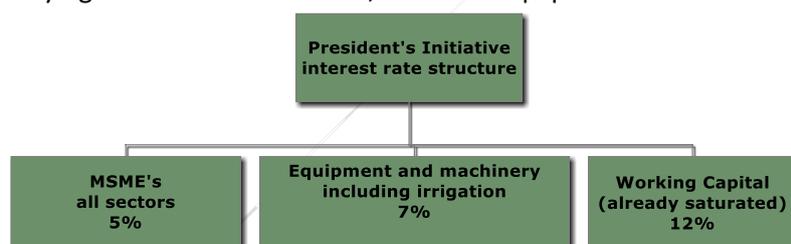
Until 2016, the bank was reporting to MinAgric as a public bank. Since 2016 onwards ABE is restructuring with the assistance from the. RABO bank, Zanat bank and Ernst and Young and demonstrates 15% growth rate since. ABE transforms to become a full service rural development bank. ABE's PAR before restructuring was more than 20%, but is currently gradually reducing to 12%. Most loans offered by ABE do not require collateral and the offered interest rate varies from 12% for crops to 20% for livestock. ABE also offers livestock and crop insurance but does not cover widespread calamities. Among ABE's assets is E-CARD, a company with a capital of 31 billion EGP, 700 employees and 22 branches offering inputs and machinery (including irrigation) at prices subsidized by the GoE. The bank was traditionally in deficit as the MnAgri was directing subsidies



through ABE's finance

#### The CBE's Initiative to Support MSMEs (President's Initiative).

In January 2016, President Al-Sisi launched an initiative to finance MSME's worth EGP 200 billion. The CBE embraced this initiative and accelerated the implementation by requesting banks operating in the Egyptian market, to direct a mandatory 20% of their total loan portfolio towards MSME's, within four years from the date of launching the initiative. Additionally, each bank should establish specialized units for providing the financial services to these enterprises. Since the launch of the initiative, a total of more than 90 billion EGP was injected to finance MSMEs with interest rates varying from 5% for all sectors, to 7% for equipment and machinery and 12% for working capital.



Through this window ABE was allowed to finance agricultural cooperatives, IDB (Industrial Bank of Egypt) to finance fruits and vegetables collection centers, and all other banks to finance modern irrigation projects. Many banks that do not have (or cannot establish) a network to reach MSMEs and/or the relevant credit risk assessment mechanism, partner with MFI companies or agriculture credit cooperatives. Banks lend the required 20% to the micro-financiers who in turn on-lend to MSMEs. Banque du Caire established a longer-term partnership with MFIs, whereby they act as micro-branches of the bank, thus extending the bank's network. Other banks are embedding similar approaches in their expansion strategies and target the micro-retail market, forging cooperation with MFIs or cooperatives. Suez Canal Bank (for instance) has recently established of a specialized

department to finance MSME projects with a portfolio of EGP 1 billion, in collaboration with MSMEDA.

## Wholesale financing

### Article I. ADP

Agricultural Development Program (ADP) is a revolving fund aimed to improve productivity and yields, to raise the level of self-sufficiency and to expand crop exports for increasing income and job opportunities in the agricultural sector. It has national coverage and operates under the MinAgri. It started in 1993 with funds from the EU Food Sector Development Program (a credit line that would provide soft loans to livestock and dairy investments); and was scaled up in 1996 with funds from the Multi Sector Support Program to support poultry, aquaculture, horticulture, on farm irrigation, drainage and farm machinery; and in 2004 with funds from the Financial and Investment Sector Cooperation project.

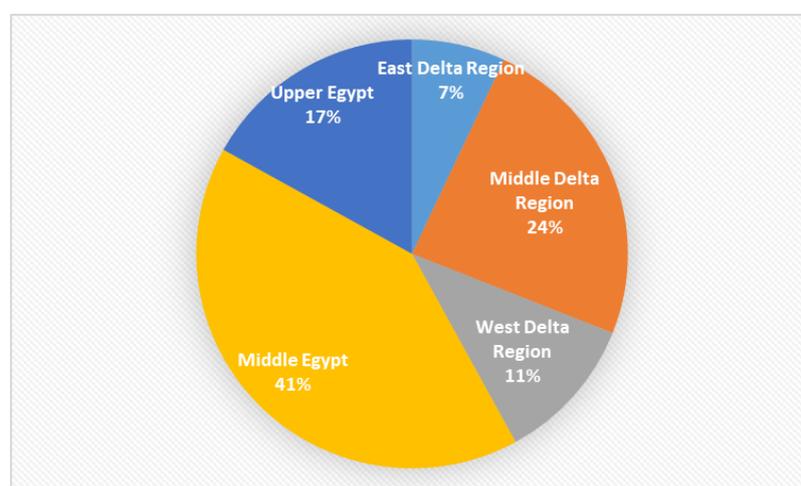
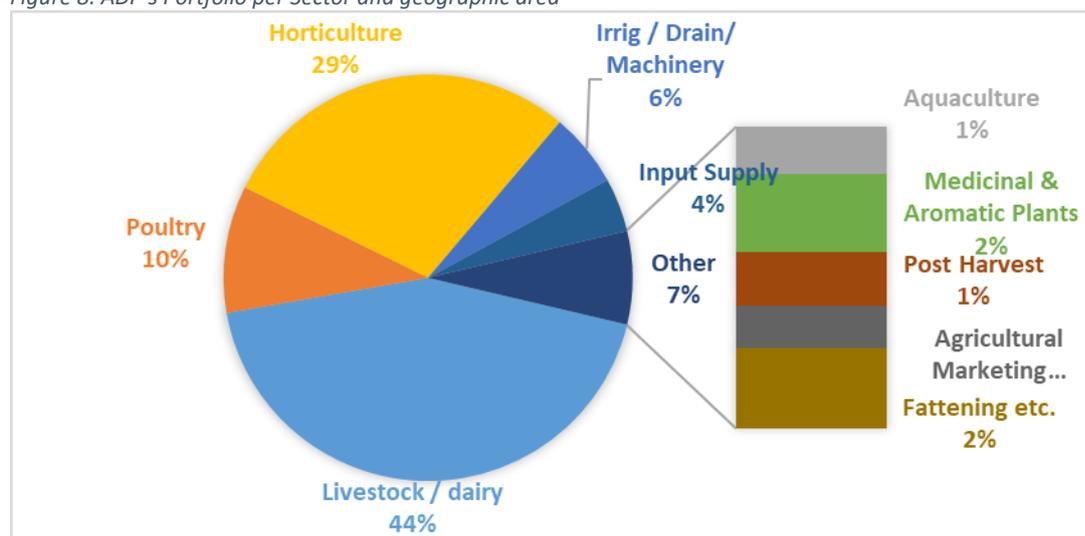
In 2009, the MinAgri grouped together all three revolving credit lines under one national umbrella (the ADP), in order to streamline their operation. In 2012, the MinAgri solicited additional funds for the revolving credit line and IFAD responded positively with USD 70 million from RPIME (later reduced to USD 32.7 million with a current utilization rate of 86%). The Support to SMEs project (SuSME) contributed an additional EUR 22.5 million loan from AFD and EUR 1.9 million grant from EU. In 2016, IFAD committed another EUR 9.13 million for the SAIL project, which reportedly faces bottlenecks due to inability of the target group to meet collateral requirements in the target areas. ADP received another two credit lines from the MinAgri: a) EGP 100 million for buffalo fattening and EGP 50 million for the veterinary services project.

ADP is a wholesaler offering credit to the 12 'Participating Banks' (PBs) for on-lending to beneficiaries under stipulated eligibility and selection criteria. ADP is assisted by the Agent Bank (the Commercial International Bank – CIB - that was selected on a competitive basis) for monitoring its portfolio. The PBs are responsible for credit risk assessment of the investment proposals and for the repayment of the loans. ADP is submitting selected proposal to the Board of Trustees via the Technical Committee (TC) for approval. CIB has developed a management information system to monitor this whole process.

ADP's total portfolio amounts to EGP 2.6 billion. It has approved loans amounting to a total of EGP 7.8 billion for 264,000 beneficiaries. ADP has revolved its resources more than 7 times already. ADP's operating cost is low (0.02% per annum) and its operation profitable. It has 0 default rate and PAR smaller than 1%. Its only downside are the delays of the selection process due to its cumbersome procedure (3-4 months).

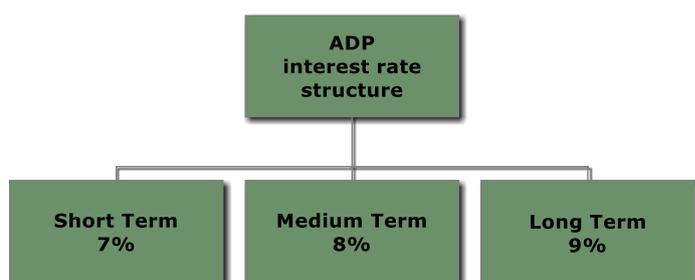
The larger amount of loans are offered to agricultural companies (52%) , while the rest is equi-distributed between Credit Cooperatives (24%) and Individuals (24%). The largest amount of loans are directed towards livestock and dairy production (44%), followed by horticulture (29%) and poultry (10%). Geographically the largest part of credit goes to Middle-Egypt (41%), followed by Middle Delta Region (24%) and Upper Egypt (17%).

Figure 8: ADP's Portfolio per Sector and geographic area



SOURCE: ADP

ADP loans are provided for individuals up to EGP 1.5M with the maximum exposure of EGP3M; and for registered sole proprietors, Associations, Companies, Cooperatives, Business Associations and NGOs up to EGP8.0M with the maximum exposure of EGP 16M. Average ADP loans size is EGP 30.000. The ADP loans are short-term (up to one year); medium-term (from 2 to 3 years) with one year grace period; and long-term (from 4 to 5 years) with up to 2 years grace period. The ADP interest rates charged to the final beneficiary are set below the prevailing commercial bank rates and are preferential, computed on a simple basis, and subject to the monthly review by the Board of Trustees. ADP interest rates are fixed for the lifetime of the loan. The current ADP applied interest rates 7 %, 8% and 9% respectively for short, medium and long-term loans. Most of ADP loans fall into the short-term category (65%), followed by medium-term (20%) and long-term (15%).



The PBs receive their compensation (3.5%) from interest collected from the clients. No further deductions whatsoever on the interest, penalty interest or the additional interest on rescheduled loans, or of the principal due to the fund. A penalty interest rate charged at commercial loan interest rate is applied if the loan has not been used by the borrower for the intended purpose or where there are any delays by the client or the PB. Additional interest of 2% may be approved by BOT for rescheduling the payment periods for outstanding loans (once in the lifetime of the loan) with a maximum of two years beyond the remaining period of the original loan as previously approved by the BOT to be promptly credited to ARDF Fund accounts

The repayment schedule has the following pattern: a) loan principal and interest are paid semiannually to the lending PB; b) the effective dates of repayment are determined by the repayment schedule prepared by CIB; c) short-term loans may be repaid semi-annually or in a single amount in a maximum period of 12 months; d) medium-term loans are repaid in a maximum period of 36 months; in semi-annual instalments starting not later than 12 months after the loan effective date; e) long-term loans are repaid in a maximum of 60 months, in semi-annual instalments starting not later than 24 months after the effective date of the loan.

#### *Article II. MSMEDA*

The MSME Development Agency was established in April 2017 by the Decree 947 of the Prime Minister. With the decree 2370 of 2018 - an amendment decision by the Prime Minister - MSMEDA came under the direct supervision of the Prime Minister MSMEDA. MSMEDA is a successor body of the Social Fund for Development (SFD), which was set up in 1991 to channel aid to people that would be affected by the GoE's market-oriented reforms. SFD raised USD 800 million in capital, 60% in grants, the remainder in concessionary loans. Donors included the World Bank, the EU, Arab aid agencies, bilateral aid organizations and lately IFAD. Some of the funds are allocated by donors for specific infrastructure schemes, but most were addressed to SMES.

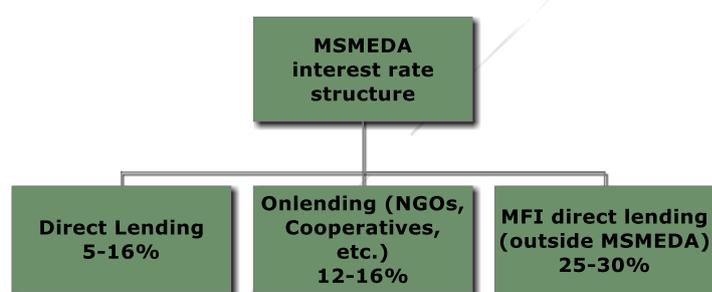
MSMEDA today offers a wide range of services, including policy and strategy development, legislative and regulatory overview, monitoring and evaluation of sector performance as well as development, implementation and coordination of programs aiming at improving MSMEs, including direct provision of financial and non-financial services. Apart from the Cairo headquarters, MSMEDA has an office at each governorate with more than 20 staff members at each branch. It is a heavy vehicle with significant operating cost and institutional complexities.

MSMEDA's is operating as a wholesaler and retailer of credit for MSME's with a nationwide coverage. It provides its financial services directly through its regional offices and through a large network of intermediary agencies. MSMEDA partners with 15 commercial banks, 7 MFI companies and about 400 microfinance institutions (mainly Category B and C NGOs and credit cooperatives). Around 90% of the MSMEDA funds are on-lent through these mentioned financial institutions and

10% is direct lending. MSMEDA’s total outstanding portfolio is EGP 18 billion with 3.2 million active borrowers, putting the average size of loans to 5.600 EGP. Agriculture including trade represents about 17% of MSMEDA’s portfolio. Portfolio quality involves arrears but no defaults. Direct lending is also offered with amounts ranging from EGP 10,000 to EGP 3 million for commercial and service projects, agricultural production projects, livestock, poultry and fisheries, real estate projects and logistics and transport (taxi and microbus) related activities. MSMEDA’s direct lending cumulative portfolio has reached EGP 1.1 billion, while its outstanding portfolio is EGP 160 million with around 6,000 clients.

MSMEDA’s target is to reach a portfolio of EGP 30 billion by 2021 with 5 million active borrowers. MSMEDA estimates the actual unmet demand to be much higher at EGP 60 billion and 11 million active borrowers. It also points out that a demand side impediment is that prospective clients have difficulty to meet documentation requirements (licenses etc.) and most importantly they lack capacity to structure mature project proposals. To assist on improving the quality of demand for credit MSMEDA organizes outreach programs at local level and short training courses addressed to NGOs (training for trainers) and the micro private sector. Training curricula include: How to start your business; Action plan for any project; Business idea development; Sales; Human resources and labor; Production cost, investment and financing; Legal and licensing requirements.

MSMEDA offers EGP 300,000 to 1 million loan to the intermediary NGOs (higher to banks and MFIs) with a bi-annual installment payment schedule, 8 months grace period and 9.5% interest rate. It sets a quota per NGO according to its size and population coverage. The NGOs on-lend to individuals and micro-enterprises either formal legal entities (60%) or informal (40%). The size of loans vary from EGP 1,000 to 10,000 from NGO’s and can go as high EGP 1 million from banks or EGP 10 million for renewable energy projects. Interest rates vary from 12% to 16% and collateral requirements are met through pre-signed checks and/or communal guarantees. Demand for agribusiness credit is mainly for input purchases, followed by land rehabilitation/cultivation, poultry, livestock.



### CBEs Strategy to promote smallholder agriculture

CBE identified that agricultural development (or lack thereof) adversely affects inflation, trade deficit and employment. In fact (according to CBE data), CBE’s agri-basket consisting of 11 commodities and crops increase by 40% in price between 2006 and 2016. In addition, the largest percentage of agricultural inputs come from imports along with a variety of foods. CBE, therefore came developed a clear strategy for unlocking the agriculture sector’s potential and relieve the macro-economy from the inflationary and deficitary pushes it receives from this sector.

CBE’s strategy for the agricultural sector tackles a number of challenges at different levels of the value chain, with a wide range of integrated initiatives. The strategy aims at reducing the trade

balance gap and increase entrepreneurship and financial inclusion (agriculture contributes only 5.5% to the President's initiative) and is set around four pillars:

- A) Improve access to finance. It will do so through the structural improvement of ABE to become a full service rural development bank; some targeted interventions like incentivized funding specific to agricultural sector to help enhance the local banks' input towards this sector; to finance specific and identified gaps in value chain development (CBE is currently working on consolidating local and international studies on value chain mapping to identify the high potential value chains and relevant funding gaps); to leverage funding through credit guarantees (CBE owns 20% of CGC and intends to streamline existing guarantees and direct them towards the agri-sector).
- B) Support agribusiness development. That would include developing sustainable and profitable anchor leading companies in the agricultural sector that will fill sector gaps, complement local and international efforts and pull smallholder farmers higher to the value chain through trade activities; consolidate efforts of local government and the Council of Minister's Committee for SMEs (a Prime Minister's decision has put CBE as the head of the committee which supports SME development including agriculture) to identify the main obstacles of the agricultural export cycle and propose solutions; establish 9 fruit and vegetables collection centers – IDB has already financed the first center in Beheira and has signed the protocol for another 8. The aim of the centers is to cut out the middlemen, control prices and prevent monopolistic practices and reduce losses.
- C) Develop relevant capacity. Under the SuSME project the Egyptian Banking Institute (EBI) and AFD signed an agreement for a EUR 1.8 million grant to enhance capacity of bankers, CGC and NGOs through training and technical assistance in product development, credit rating, risk management, credit guarantees; the Nilepreneurs initiative for Value Chain Development Excellence is a national initiative sponsored and financed by the CBE and implemented by the Nile University, which seeks to support entrepreneurship, innovation and enhancement of the local production.
- D) Capitalize on technology and innovation. CBE aims at building a virtual market place for agri-products in cooperation with ABE and Mastercard. An independent company will be formed to own and operate the platform. The strawberry and livestock value chains are currently being thoroughly studied as pilots for the platform. Launch data is being planned for last quarter 2019. CBE also intends to develop an agricultural investment map, showing available resources per governorate (natural, human, infrastructure), that will be used as an investment guide for investments in agriculture. Similarly, a fertilizer/seeds and soil matching map will be a knowledge repository for farmers. CBE intends to put incentives for the development of virtual cooperatives that will alleviate geographic barriers to offered services. Finally, CBE intends to replicate the Nilepreneurs initiative and establish agri-labs in universities in cooperation with governmental entities.

CBE seeks financial support for targeted interventions, technical assistance, and international expertise.

#### Other services

##### *Article III. Insurance*

FRA has endeavored to activate the role of the insurance sector and increase its contribution to GDP by updating relevant legislation. In 2018 the contribution of the insurance sector to GDP reached 0.91%. The total insurance premiums amounted EGP 30 billion and compensations reached EGP 15.4

billion. There are 37 insurance companies operating in the sector most of which offer health, life and other types of policies. It is only the ABE, Suez Canal Bank and a few others who offer agriculture specific products. They offer limited crop and livestock insurance products that do not cover widespread calamities and cost about 2% a year. FRA is promoting electronic transformation of the insurance sector and has allowed 60 % of the insurance companies to issue insurance policies in electronic form. Insurance sector is growing at a more than 20% rate a year for the past few years.

Micro-insurance is newer in Egypt and is governed by the resolution No. 902 of 2016 that defined the conditions for issuing and distributing micro-insurance products. This resolution was a milestone for the development of this industry, which can, since then, take more substantive action to offer products for low-income market segments. There is already at least one micro-insurance company and a lot of activity for encouraging more. Yet products are limited to life and health and agriculture specific offerings are very limited. GIZ, JICA and other bilateral aid organizations contribute to the development of micro-insurance.

Some hindrances for the development of this industry include: lack of data for clients, limited number of actuaries and a large number of unqualified intermediaries, lack of relevant products, lack of awareness regarding the importance of insurance etc.

#### *Article IV. Leasing*

In 2018, FRA launched a draft law that combines financial leasing and factoring activities and was approved both by the parliament and the Cabinet of Ministers. The new Law is expected to enhance financial inclusion and ensure access to non-banking financing tools to segments of society that currently do not benefit from a number of financial services. The said Law allows companies, associations and NGOs licensed to practice microfinance activities to provide financial leasing services. It is too early to expect any effects on the market that will slowly

#### *Article V. Secured transactions*

Movable assets are usually not accepted as collateral by financial institutions, due to the inadequate legal and regulatory framework that does not guarantee recovery in case of default. Movable assets, which usually account for the largest part of the capital stock of MSMEs, become therefore dead capital.

The Moveable Security Law 115 was passed already in 2015 and regulates the securitization of movable assets. Under the Movables Security Law a variety of movables, whether existing or future physical assets or moral rights can be used as collateral. This includes receivables and credit notes, bank deposits or accounts, equipment, tools, stock, trees, agriculture produce, farm animals, birds, and metals, as well as intellectual property rights. The FRA is registering electronically movable collaterals to notify parties about the existence of an existing security interest in movable property and to establish the priority of creditors with regard to third parties. Its application is not however widespread.<sup>99</sup>

#### *Article VI. The Credit Guarantee Company (CGC)*

The Credit Guarantee Co SAE (CGC) is a private joint stock company with banks presenting more than 90% of its shareholders. It has 2 subsidiaries and operates across Egypt. CGC started operation in 1991 with the clear mission of strengthening the competency of the MSMEs through the

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<sup>99</sup> Reforming secured transactions, IFLR. 2017

application of effective guarantee products capable of encouraging the financial institutions (banks and NBFIs) to respond to the financial needs of this sector. CGC was able to reach a Cumulative Guarantee Issued Amount of EGP 19 billion by 2016 and served more than 27,000 SME clients and more than a million micro-clients.

CBE who owns 20% of CGC has setup an EGP 2 billion trust fund for MSMEs that offers portfolio guarantees and leverages 17 times the guarantee amount in loans. CGC's outstanding guarantee leveraged portfolio is EGP 12.8 billion, 27% of which is directed to the agricultural sector. CGC and the MInAgri received a EUR 9 million grant from the EU for agricultural SMEs. The outstanding guarantee leveraged portfolio has reached EGP 400 million to date.

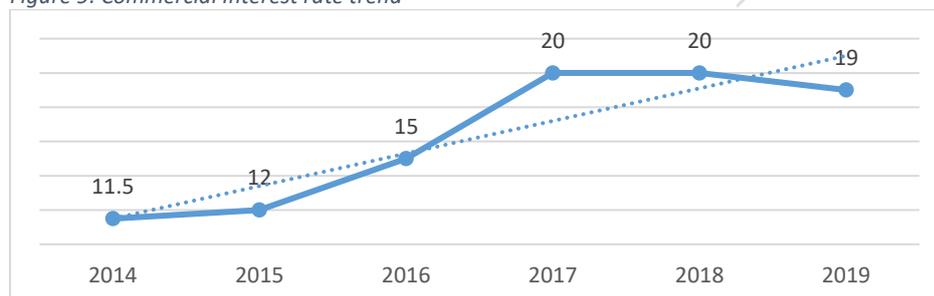
The CGC and the Egyptian EMFF have signed a cooperation protocol under the sponsorship of the CBE and the FRA with the aim of qualifying 25 NGOs from category C to B.

#### *Article VII. The Credit bureau*

The Egyptian Credit Bureau S.A.E. provides information to credit providers including banks, NBFIs, and goods and service suppliers on the creditworthiness of businesses and individuals. It maintains a database of credit information for SMEs and consumers and enables authorized users (I-Score members) to access I-Score database to carry out creditworthiness checks on consumers. The company was founded in 2005 and is based in Cairo.

#### Information Asymmetries

Figure 9: Commercial Interest rate trend



SOURCE: CBE

While the commercial interest rate currently fluctuates around 19 to 20% on commercial loans, there are many variations on the offered rates by the banks and the NBFIs. Moreover, there is a wide range of financing options for different farming activities. Credit terms and collateral requirements vary across the board, as already described in previous sections. Farmers are not well aware of the many possibilities and how to use them according to their needs. Additionally, banks and NBFIs are not well informed on each other's offerings thus creating an environment of sub perfect competition. The information asymmetries established skewed perceptions on the affordability and accessibility of credit among rural micro-entrepreneurs.

Another factor affecting perceptions is the limited capacity of NGO's to serve quickly the needs of their clientele. As most of them are Category C they have very limited resources to revolve and are more often than not unable to meet increasing credit requirements. Farmers often opt to get non-preferential credit from MFIs at 25% to 30% interest rate to bypass long waiting lists of NGO's that would offer interest rates of 12% to 16%.

Perceptions are not well grounded on collateral requirements either. Despite an array of options to access credit with soft guarantees, farmers often express concerns that finance is restricted because of their inability to display collateral. There are obviously cases where lack of collateral is hindering access to finance, which become exaggerated by word of mouth.

### *Demand for Credit - Market Potential*

Despite the fact that all stakeholders agree that financing needs of the MSMEs are not met, there is no clear understanding or quantification of these needs. Credit wholesalers estimate that they would need 5 times the amount of their current portfolio to meet potential demand. Yet they acknowledge that this demand would first need to be nurtured to become actual. Nevertheless, respondents of perception studies, identify access to finance as one of the main impediments for their development.

CBE is making efforts to study the metrics and composition of the demand side for credit, but to date relevant strategies are only based on speculations. The CBE has assigned the EBI to prepare the National Strategy for Financial Education. The CBE and the FRA have signed an agreement to enhance cooperation between the two sides to support financial inclusion in Egypt. A study is being conducted to measure the level of financial inclusion to identify the supply and demand on financial services and to improve the availability of such services. The results of the study will be the base for the preparation of future plans to enhance the financial inclusion of all segments of the society and to adopt the necessary reform policies in cooperation with the parties concerned.

In terms of credit usage, the gender distribution of MFI clientele is heavily leaning towards women, who account for 66.54% of the total number of active clients. On portfolio size, the distribution is more equitable (men 50.54% and women 49.46% of the total MFI portfolio). This leads to the conclusion that women are seeking (or are offered) smaller credit amounts than men.

### *Past Experience and Lessons*

Past IFAD projects in Egypt were occasionally plagued with low absorption rates of their revolving facilities. A thorough analysis of impediments faced in the past revealed the following:

PRIME assigned equal capital support to MSMEDA and ADP, yet it requested unequal amounts of own contribution from ADP (10 times). ADP could not respond positively to this flaw. As a result, implementation started with a delay of four years.

SAIL supported projects for youth who could not meet collateral requirements (reportedly to be 15-20%) and therefore absorption rates were low. PIU did not confirm however this assumption with the rural financial sector. ABE for instance offers loans with minimal collateral requirements. PIU did not envisage to collaborate with CGC to overcome this issue.

The size of loans offered was rather small for the needs of the beneficiaries. Both beneficiaries and credit wholesalers concur that targeting assumes that micro-investors served by the NGOs, belong to the low end of poverty. This is however not the case. Category C NGO's serve already a clientele that is economically active. To catch the lower segments projects should adopt a more engaged approach involving social mobilization and handholding. Projects should be able to review and revise credit size envelopes at regular intervals.

Past projects did not investigate the possibility to use existing or develop new insurance products (micro-insurance, crop and livestock insurance). MSMEDA is currently working with AfDB on the possibilities to develop indexed crop insurance (indexed to temperature) to cover risks related to the

production of tomato and potato. Similarly, JICA in cooperation with FRA are working on identifying new micro-insurance products and services to support the micro-entrepreneurs.

Farmers complain that aggregators often delay payments for goods as much as 100 days. This creates a cash flow constraint for the smallholder who does not have a mechanism to anticipate such delays and often opts to accept much lower prices paid in cash on delivery instead of waiting for a higher price with a delayed payment. This is of course a cash flow issue as much as a mentality issue. Projects should envisage methods to instruct farmers on how to develop buffer mechanisms through savings and financial institutions to offer overdraft accounts that would allow farmers to mitigate for delayed payments and enjoy higher prices.

Credit wholesalers need to streamline their operation and adopt self-financed development strategies that will secure their longer-term sustainability. Credit wholesalers have been receiving substantial amounts for revolving credit lines to channel to the financial sector for the development of MSMEs. Some have become less effective in specific areas. They have been receiving grants for their development for many years. It is probably the time for international cooperation agencies to see how these organizations can become self-sustainable and adopt strategies that will allow them to constantly improve their operations, products and services. Instead of relying for their development activities simply on grant money, they should be compelled to incorporate their self-development cost into their operating expenses. The international community could provide technical assistance but not in the form of a grant. Credit wholesalers should become the agents for the development of the NBF sector instead for just being revolving fund managers.

ABE will not borrow from credit wholesalers because ADP is taking too long to approve loans (3-4 months) and has had bad experiences working with MSMEDA.

Commercial banks favor industrial, service and commercial investments compared to agricultural because they are not well aware on how to assess the risk involved. Agro-enterprises, in turn, are not able to provide traditional guarantees to obtain the necessary funding. In collaboration with CGC projects could envisage credit guarantee facilities that would entice the banks to look closer into the agribusiness sector and leverage private sector funding.

## SWOT Analysis

### WEAKNESSES

- Financial resources of the Apex/Wholesalers are reported to be insufficient.
- Apex organizations need institutional capacity building at various levels
- Information asymmetries on credit offerings and relevant demand hinder access to finance
- Weak business acumen lead to weak business plans
- Weak financial literacy of the beneficiary group
- CGC is underutilized
- The secured transactions system and moveable assets registry is underperforming
- The insurance sector is underdeveloped
- Savings culture is weak

### STRENGTHS

- The banking sector is liquid and fairly well capitalized (CAR 15.6% and LAR 33.8%)
- There is a large number of NBFIs that can provide financial services at local level
- There are two APEX/Wholesale organizations with long term experience that can provide capital to the NBFIs
- CGC operating for more than 20 years can leverage bank capital and ease collateral requirements.
- The GoE offers several financing facilities at preferential rates for MSMEs including agriculture.

### OPPORTUNITIES

- GoE and CBE committed to financial inclusion and agricultural development
- CBE's new strategy to promote smallholder agriculture is wide and compatible with IFAD's priorities
- ABE's transformation will increase opportunities for the target group
- Leasing Law was signed in 2018 and allows NGOs to develop leasing products
- There are several initiatives that promote financial inclusion.
- Preferential credit schemes can be used to crowd in instead of crowding out the private sector

### THREATS

- The financing needs of the rural microentrepreneurs have not been quantified
- There is no common understanding and consensus of the needs for institutional capacity building and training of the stakeholders
- Foreign exchange risk burdens the wholesalers

*Annex 1: Table of Select Financial Inclusion Indicators 2014, 2017*

<b>Egypt, Arab Rep.</b>			
<b>Middle East</b>		<b>Lower middle income</b>	
Population, age 15+ (millions)	<b>56.5</b>	GNI per capita (\$)	<b>3,140</b>
	<b>Country data</b>	<b>Middle East</b>	<b>Lower middle income</b>
<b>Account (% age 15+)</b>			
All adults	14.1	14.2	42.7
Women	9.3	9.2	36.3
Adults belonging to the poorest 40%	5.6	7.3	33.2
Young adults (% ages 15–24)	7.3	7.6	34.7
Adults living in rural areas	10.5	10.7	40.0
<b>Financial Institution Account (% age 15+)</b>			
All adults	13.7	14.0	41.8
All adults, 2011	9.7	10.9	28.7
<b>Mobile Account (% age 15+)</b>			
All adults	1.1	0.7	2.5
<b>Access to Financial Institution Account (% age 15+)</b>			
Has debit card	9.6	8.5	21.2
Has debit card, 2011	5.1	5.5	10.1
ATM is the main mode of withdrawal (% with an account)	51.3	44.9	42.4
ATM is the main mode of withdrawal (% with an account), 2011	..	42.4	28.1
<b>Use of Account in the Past Year (% age 15+)</b>			
Used an account to receive wages	2.9	3.3	5.6
Used an account to receive government transfers	0.3	0.9	3.3
Used a financial institution account to pay utility bills	0.1	0.2	3.1
<b>Other Digital Payments in the Past Year (% age 15+)</b>			
Used a debit card to make payments	3.5	3.3	9.6
Used a credit card to make payments	1.4	1.5	2.8
Used the Internet to pay bills or make purchases	1.4	2.1	2.6
<b>Domestic Remittances in the Past Year (% age 15+)</b>			
Sent remittances	5.4	9.3	14.2
Sent remittances via a financial institution (% senders)	..	..	30.9
Sent remittances via a mobile phone (% senders)	..	..	7.7
Sent remittances via a money transfer operator (% senders)	..	..	18.3
Received remittances	8.1	11.3	17.8
Received remittances via a financial institution (% recipients)	..	9.8	26.0
Received remittances via a mobile phone (% recipients)	..	0.2	5.7
Received remittances via a money transfer operator (% recipients)	..	15.6	16.6
<b>Savings in the Past Year (% age 15+)</b>			
Saved at a financial institution	4.1	4.0	14.8
Saved at a financial institution, 2011	0.7	2.7	11.1
Saved using a savings club or person outside the family	11.8	11.5	12.4
Saved any money	25.9	30.5	45.6
Saved for old age	2.1	5.0	12.6
Saved for a farm or business	2.7	5.1	11.8
Saved for education or school fees	8.0	9.1	20.0
<b>Credit in the Past Year (% age 15+)</b>			
Borrowed from a financial institution	6.3	5.6	7.5
Borrowed from a financial institution, 2011	3.7	4.4	7.3
Borrowed from family or friends	21.5	30.7	33.1
Borrowed from a private informal lender	2.5	7.9	8.5
Borrowed any money	34.1	45.7	47.4
Borrowed for a farm or business	2.4	4.2	9.2
Borrowed for education or school fees	9.2	8.2	10.1
Outstanding mortgage at a financial institution	6.2	6.2	4.7

Source: World Bank FINDEX database 2014

<b>Middle East &amp; North Africa</b>		<b>Lower middle income</b>		
Population, age 15+ (millions)	<b>63.7</b>	GNI per capita (\$)		<b>3,410</b>
		Country data	Middle East & North Africa	Lower middle income
<b>Account (% age 15+)</b>				
All adults		32.8	43.5	57.8
All adults, 2014		14.1	--	41.9
All adults, 2011		9.7	32.9	28.9
<b>Financial institution account (% age 15+)</b>				
All adults		32.1	43.0	56.1
All adults, 2014		13.7	--	40.6
All adults, 2011		9.7	32.9	28.9
<b>Mobile money account (% age 15+)</b>				
All adults		1.8	5.8	5.3
All adults, 2014		1.1	--	3.2
<b>Account, by individual characteristics (% age 15+)</b>				
Women		27.0	35.0	53.0
Adults belonging to the poorest 40%		20.3	35.3	50.7
Adults out of the labor force		28.5	35.0	50.8
Adults living in rural areas		29.3	36.9	57.6
<b>Digital payments in the past year (% age 15+)</b>				
Made or received digital payments		22.8	33.3	29.2
Made or received digital payments, 2014		7.9	--	19.7
Used an account to pay utility bills		0.1	9.8	7.5
Used an account to receive private sector wages		3.0	5.9	5.5
Used an account to receive government payments		17.1	19.5	8.3
Used the internet to pay bills or to buy something online		3.5	12.2	6.8
Used a mobile phone or the internet to access an account		2.2	10.4	8.3
Used a debit or credit card to make a purchase		3.8	16.2	10.0
<b>Inactive account in the past year (% age 15+)</b>				
No deposit and no withdrawal from an account		6.8	7.1	21.6
No deposit and no withdrawal from a financial institution account		7.0	7.2	22.0
<b>Domestic remittances in the past year (% age 15+)</b>				
Sent or received domestic remittances through an account		2.8	5.0	10.1
Sent or received domestic remittances through an OTC service		2.4	4.9	4.7
Sent or received domestic remittances through cash only		13.3	11.1	8.8
<b>Saving in the past year (% age 15+)</b>				
Saved at a financial institution		6.2	10.8	15.9
Saved at a financial institution, 2014		4.1	--	14.4
Saved using a savings club or person outside the family		16.2	8.0	13.0
Saved any money		30.6	31.3	39.7
Saved for old age		4.2	8.1	13.2
<b>Credit in the past year (% age 15+)</b>				
Borrowed from a financial institution or used a credit card		8.8	9.6	9.8
Borrowed from a financial institution or used a credit card, 2014		7.7	--	10.0
Borrowed from family or friends		38.0	31.1	30.4
Borrowed any money		49.1	42.6	42.9
Outstanding housing loan		3.9	8.2	5.0

Source: World Bank FINDEX database 2017

### Self-reported barriers to use of an account at a financial institution

Adults without an account reporting barrier as a reason for not having one (%), 2014



Note: Respondents could choose more than one reason.

## **Annex 7: STAR Institutional Framework**

### **Key Ministries**

#### **1. Ministry of Agriculture and Land Reclamation (MALR)**

The Ministry of Agriculture and Land Reclamation (MALR) is the government agency responsible for formulating and implementing agricultural sector policies for promoting and upgrading Egyptian agriculture and implementing relevant programs and projects in the country. It is in charge of land reclamation and agricultural, fisheries and livestock development. MALR has jurisdiction for providing a variety of agricultural services and regulate and supervise the activities of public and private entities involved in production and processing of agricultural products. The responsibilities of MALR for services and regulation are carried out at the Governorate level through the Governorates Directorate of Agriculture (GDA) and Governorate Directorate of Veterinary Services (GDVS), which are administratively responsible to the Governor but technically responsible to MALR.

MALR also has the responsibilities of overseeing irrigation and water management at farm level and on farm improvements. MALR has been an important partner for IFAD that has in the past assumed the responsibility for project oversight and providing strategic guidance and facilitation in the implementation of strategic policy decisions<sup>100</sup>,<sup>101</sup>. There are several institutions that are affiliated to MALR, such as the Agricultural Bank of Egypt (ABE) and the Agriculture Research Centre (ARC)<sup>102</sup>.

#### **2. Ministry of Water Resources and Irrigation (MWRI)**

The Ministry of Water Resources and Irrigation (MWRI) is the principal government body that is responsible for managing the water resources of Egypt so as to guarantee adequate supplies for municipal, agricultural, industrial, navigational and power generation use. MWRI has sole responsibility for planning and execution of regulations and policies as well as for the development, distribution and management of water resources in all the Egyptian districts. It is responsible for regulation, distribution and quality management of water resources of which the agricultural sector is the greatest recipient. It is committed to ensure reaching the highest benefits from the existing limited water resources in terms of the provision of water.

MWRI authorizes water use and manages water supply, irrigation and drainage systems and associated pumping stations. These responsibilities are carried out through several departments and agencies<sup>103</sup>, <sup>104</sup>. The development and operation and maintenance of water infrastructure is largely funded by the Government and carried out by MWRI. MWRI is also responsible for irrigation improvements from mesqa level (tertiary canals) and above, covering branch, main and principal canals as well as the River Nile, while MALR on the other hand is responsible for on-farm irrigation improvements including

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<sup>100</sup> IFAD. (2017). *Promoting Resilience in Desert Environments (PRIDE)*. Final Project Design Report. August.

<sup>101</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

<sup>102</sup> Further details about these institutions are provided in the following section.

<sup>103</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

<sup>104</sup> MWRI. *Ministry's Responsibilities*. <https://www.mwri.gov.eg/index.php/ministry/ministry-14>. Retrieved 21 May 2019.

marwas (quaternary canals) and other on-farm improvements. These responsibilities are carried out through several departments and agencies at central and governorate level.

MWRI is also responsible for irrigation extension and for promoting participatory irrigation management (PIM) and has a fully-fledged Irrigation Advisory Service (IAS) at the central level with General Directorates throughout the country. In an effort to decentralize and coordinate activities, all MWRI departments and agencies are now operating under Integrated Water Management Districts (IWMDs) in each Governorate, headed by an undersecretary of MWRI at the Governorate level. In addition, as part of the ongoing reform programs and under the rising call to rationalize the use of water, better cooperation and coordination between MWRI and MALR is increasingly taking place at central and governorate level<sup>105</sup>. It is worth noting the importance of collaboration between MWRI and MALR that has been challenging as will be later depicted in the Organizations Matrix (Annex 1).

### 3. **Ministry of Social Solidarity (MoSS)**

The Ministry of Social Solidarity (MoSS) aims to provide social protection, integrated care and economic empowerment to the citizens who are in need. It also seeks to develop its services throughout the country and calls for coordination of efforts with the private sector and civil society to invest in joint work for the development of citizens and society. MoSS is responsible for the development of the social safety net for the citizens by supporting and assisting poor families, and through providing the necessary care to low-income households, raising their standard of living, improving the quality of services provided to them, and encouraging the civil society to participate in achieving real development for the society<sup>106, 107</sup>.

It is important to note that Non-Governmental Organizations (NGOs)/ Community Development Associations (CDAs) are registered with the Ministry of Social Solidarity (MoSS), governed by Law no. 84 of 2002/2004<sup>108</sup>. This law restricts them from accepting deposits to raise capital and grant loans. Upon approval from MoSS, NGOs can access grants and loans from development partners. It is important to note that in order for the development organization, including IFAD to be able to expand the number of non-conventional institutions that provide financial services, the legal and regulatory environment according to which NGOs operate need to be less restrictive<sup>108</sup>.

### 4. **Ministry of Local Development (MoLD)**

The Ministry for Local Development (MoLD) is the government institution appointed to carry out development projects across all Egyptian governorates in order to raise the social and economic standards of living of the citizens. The Ministry's development program is based on three main aspects, namely: empowerment of local authorities, development of human resources and community development. MoLD is a central body that is involved in rural development. It coordinates the various efforts with all the different institutions, ministries and organizations that work in the field of developing local communities and local administration units in all governorates. It also

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<sup>105</sup> IFAD. (2009). On-Farm Irrigation Development Project in the Old lands. Project Design Report, Working paper 7.

<sup>106</sup> MoSS. Vision of the Ministry. <http://www.moss.gov.eg/ar-eg/Pages/vision-mission.aspx>. Retrieved 19 May 2019.

<sup>107</sup> MoSS. Objectives and Policies of the Ministry. <http://www.moss.gov.eg/ar-eg/Pages/strategic-plan.aspx>. Retrieved 19 May 2019.

<sup>108</sup> The International Center for Not-for-Profit Law. Civic Freedom Monitor: Egypt. <http://www.icnl.org/research/monitor/egypt.html>. Retrieved 19 May 2019.

cooperates with the governorates to develop the necessary projects to improve the level of services in a number of areas (such as: drinking water, sanitation, electricity, roads, schools, health units, etc.)<sup>109</sup>

## 5. **Ministry of Investment and International Cooperation (MIIC)**

The Ministry of Investment and International Cooperation (MIIC) is responsible for integrating and harmonizing available funds to contribute to national development and for fostering private investments and private sector engagement through promoting a more conducive environment for investment and entrepreneurship. It is also responsible for mobilizing Official Development Assistance (ODA) in order to complement the national efforts and support the national priorities and needs. It works on managing and strengthening Egypt's cooperation with other countries as well as regional and international financial institutions to receive loans and grants that would support the country in its socio-economic plan objectives. The Ministry is also responsible for advising on the State's external borrowing by negotiating terms to reduce impact on foreign reserves and diversifying funding to effectively manage financial resources and follows-up matters of usage and repayment with the relevant counterparts benefiting from loans and grants.<sup>110</sup> MIIC is the government representative in respect of IFAD financing. It leads the financing negotiations and the ratification process and it is the focal point with IFAD in all matters concerned with amendments to the financing agreement<sup>111</sup>.

## 6. **Ministry of Finance (MoF)**

The Ministry of Finance (MoF) is responsible for planning, preparing and managing the Government budget and public debt. Its responsibilities include the preparation of legislation, planning revenues and expenditures, managing and supervising the budgetary spending process and preparing a framework for economic policy and development in order to achieve the country's socio-economic development goals. The Ministry works on developing the necessary policies on domestic and international finance and on monitoring the macroeconomic, macro-fiscal and financial developments in the country in order to provide necessary policy advice on a wide range of economic matters<sup>112</sup>. The Ministry of Finance is the entity which budgets for project expenditures and employs counterpart fund contributions of the government towards project implementation<sup>113</sup>.

## 7. **Ministry of Environment**

The Ministry of Environment with its executive agency, EEAA, is the government entity responsible for the definition of environmental policies and the setting of environmental priorities, as well as designing, actively supporting and implementing initiatives within the context of sustainable development. It has the role of monitoring the pollution levels and setting the environmental standards that would contribute to improving the quality

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<sup>109</sup> MoLD. *About the Ministry*. <http://www.mld.gov.eg/en/p/3/about-us/>. Retrieved 20 May 2019.

<sup>110</sup> MIIC. (2017). *Annual Report 2017. Investment in Development*.

<sup>111</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

<sup>112</sup> MoF. *Functions*. <http://www.mof.gov.eg/English/About%20MOF/Pages/MinistryGoals.aspx>. Retrieved 19 May 2019.

<sup>113</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

of the environment. This is carried out with a focus on the reduction of pollution and the conservation of the country's natural resources through environmental management<sup>114</sup>.

In particular, EEAA is responsible for the establishment of necessary norms and standards to assure compliance with the permissible limits of pollutants and to ensure that these norms and standards are followed. It also carries out monitoring and follow-up of the compliance to norms and conditions to be followed by agencies and establishments and undertakes the necessary procedures against violators. EEAA also sets of principles and measures for environmental impact assessment of projects, and follows-up implementation of the international and regional conventions related to the environment<sup>115</sup>.

## 8. Ministry of Youth and Sports

The Ministry of Youth and Sports is the government entity responsible for enhancing the quality of life of Egyptian youth and supporting the development of their skills and abilities. The Ministry's mission includes: launching a national policy for youth and sport in which all segments of the society take part; providing decent work opportunities for the young people through small and medium enterprises; and adopting youth initiatives and expanding community partnership with civil society organizations<sup>116</sup>.

## 9. Other Key Institutions and Organizations

### 10. Micro, Small and Medium Enterprises Development Agency (MSMEDA)

The Micro, Small and Medium Enterprises Development Agency (MSMEDA) is a national entity that is concerned with the development of Micro, Small and Medium Enterprises (MSMEs) and entrepreneurship and responsible for MSMEs projects in Egypt. It offers funds to these enterprises either directly or through banks as mediators to finance their projects. The Agency was established by the Prime Minister decree 947/2017. The Agency replaced the Social Fund for Development (SFD), which was established in 1991. It aims at supporting the government efforts in implementing community development programs and labor-intensive projects, creating employment opportunities, providing a more enabling environment for micro and small enterprises, and promoting entrepreneurship, which would in turn contribute to improving the living standards of citizens and reducing poverty rates<sup>117</sup>. In 2018, MSMEDA provided loans amounting to a total of 5.4 billion EGP to around 251 thousand micro and small projects. It is estimated that these projects provided 407 thousand job opportunities<sup>118</sup>.

The Agency has been following a geographic poverty targeting approach and has a strong network of implementing agencies at local levels: namely the governorates, NGOs, CDAs, and banks. MSMEDA is supported by both national and international development partners. The national partners include banks (such as: the National Bank of Egypt (NBE), Bank Misr, Agricultural Bank of Egypt (ABE)), leasing companies, NGOs

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<sup>114</sup> Ministry of Environment. *Environmental Policies and Objectives*. <http://www.eeaa.gov.eg/en-us/aboutus/aboutministry/policies.aspx>. Retrieved 19 May 2019.

<sup>115</sup> Ministry of Environment. *EEAA Mission*. <http://www.eeaa.gov.eg/en-us/aboutus/aboutagency/mission.aspx>. Retrieved 19 May 2019.

<sup>116</sup> Ministry of Youth and Sports. <http://www.emys.gov.eg/The-message>. Retrieved 10 June 2019.

<sup>117</sup> Micro, Small and Medium Enterprises Development Agency (MSMEDA). <http://www.msmeda.org.eg/AboutUs.html>. Retrieved 21 May 2019.

<sup>118</sup> MSMEDA. (2018). *Achievements Report of the Micro, Small and Medium Enterprises Development Agency 2018*.

and ministries<sup>119</sup>. The international partners include the World Bank Group, OPEC Fund for International Development, Islamic Development Bank (IsDB), European Bank for Reconstruction and Development (EBRD), United Nations organizations such as the United Nations Development Program (UNDP), the International Labor Organization (ILO) and IFAD<sup>120</sup>.

### 11. **Agricultural Bank of Egypt (ABE)**

The Agricultural Bank of Egypt (ABE) is the former Principal Bank for Development and Agriculture Credit (PBDAC). ABE aims to provide the necessary funding for various types of agricultural and rural development activities. The Bank underwent a comprehensive institutional reform, which is regarded as the cornerstone of achieving major institutional changes to the organizational structure, internal policies and operations, in efforts to improve the Bank's accountability, efficiency and sustainability. It is worth noting that PBDAC institutional challenges affected its performance throughout previous IFAD's projects. The poor performance was as a result of the high default rates and the absence of a reliable system for credit monitoring and follow-ups of overdue loans<sup>121</sup>.

### 12. **Agriculture Development Program (ADP)**

The Agriculture Development Program (ADP) has been established under MALR to provide financial services to rural areas and the agriculture sector through special directed credit lines. It is of a revolving nature and provides financing to SMEs through commercial banks. ADP has been lending funds to the Commercial International Bank (CIB), which acts as fund manager for on-lending to 12 selected participating financial institutions. During previous IFAD projects, ADP has provided credit mainly to the SMEs. However, the limited management capacity of ADP is highlighted as an important challenge for implementation<sup>122</sup>.

### 13. **Agricultural Research Centre (ARC)**

The Agricultural Research Centre (ARC) is one of the largest research organizations in the Middle East dedicated to research and development of agricultural sciences. Under MALR, ARC is the principal organization responsible for technology generation and transfer for agriculture growth and development. It focuses its research on the development of new varieties, improved agronomic practices, livestock development and better food processing techniques. ARC's major responsibilities include conducting applied and basic research to generate a continuous flow of technologies that help increase productivity and reduce production costs and transferring new technologies to the farming community through an effective extension service. Its achievements include new high yielding and early maturing varieties of crops such as wheat, maize, and rice; improved agronomic and livestock management practices; and better food processing

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<sup>119</sup> MSMEDA. [http://www.msmeda.org.eg/partners\\_local.html](http://www.msmeda.org.eg/partners_local.html). Retrieved 21 May 2019.

<sup>120</sup> MSMEDA. [http://www.msmeda.org.eg/partners\\_global.html](http://www.msmeda.org.eg/partners_global.html). Retrieved 21 May 2019.

<sup>121</sup> IFAD. (2017). *Arab Republic of Egypt Country Strategy and Programme Evaluation*. Independent Office of Evaluation. Report No. 4526-EG. September.

<sup>122</sup> IFAD. (2017). *Arab Republic of Egypt Country Strategy and Programme Evaluation*. Independent Office of Evaluation. Report No. 4526-EG. September.

techniques. Research has been dedicated to solving problems within the overarching goal of maximizing the economic returns per unit of land and water<sup>123</sup>, <sup>124</sup>.

#### 14. **National Council for Women (NCW)**

The National Council for Women (NCW) is a government body that focuses on enhancing the socioeconomic conditions of Egyptian women and supporting women's participation in the development of their local communities and the society. The council addresses women's economic empowerment; raising the standard of living of poor and marginalized women; and promoting the principle of gender equality and the integration of a gender perspective into all policies. Its mission is to have an effective partnership and role in formulating policies and programs related to women's advancement and the sustainability of their development, as well as defining their active roles and participation in their society at all levels<sup>125</sup>.

#### 15. **Community-based Organizations**

There are several types of community-based/local organizations that provide the local communities with different types of services and that have been supported by IFAD projects. These include the following:

- **Agricultural Cooperatives**

The Agricultural Cooperatives are recognized organizations that mostly pertain to the local community. They were established by the Egyptian government mainly to supply the farmers with the necessary agricultural inputs and purchase their crops as well as generally be of support to them. As per their current mandate, the Agricultural Cooperatives are defined as social and economic units with the objective of improving agriculture, providing recommendations for the crop choices and rotations and contributing to the rural development of the area in which they work<sup>126</sup>.

Agricultural Cooperatives are formed under the Cooperative Law and supervised by the Central Administration for Agricultural Cooperatives, a specific unit in MALR. They exist throughout Egypt, with nearly one in every administrative village, and have a membership of over five million farmers, including tenants as well as landowners. Their work is highly interrelated as they are considered the link between the Ministry and the farmers and landowners. They distribute inputs such as fertilizers, ensure that farmers plant the government set quotas of particular crops, such as cotton and wheat; and act on behalf of government in the process of marketing of strategic crops. They are considered of great importance to the farmers due to the huge increase in the price of inputs and their ability to procure inputs in bulk for their members at more favorable prices. They invariably have some kind of building infrastructure and keep stocks of inputs, which they sell at lower price than the market price. They are the first point of reference for all agricultural staff and house the village level extension officers. They are

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<sup>123</sup> ARC. <http://www.arc.sci.eg/AboutARC.aspx?TabId=&NavId=&lang=en>. Retrieved 23 May 2019.

<sup>124</sup> IFAD. (2017). *Promoting Resilience in Desert Environments (PRIDE)*. Final Project Design Report. August.

<sup>125</sup> National Council for Women. *Council Action Plan*. <http://ncw.gov.eg/ar/%D8%AE%D8%B7%D8%A9-%D8%B9%D9%85%D9%84-%D8%A7%D9%84%D9%85%D8%AC%D9%84%D8%B3/>. Retrieved 10 June 2019.

<sup>126</sup> The Agricultural Cooperatives Law.

considered a source for data on landholdings and other basic information needed for the selection of command areas<sup>127</sup>.

## 16. Community Development Associations (CDAs)

Community Development Associations (CDAs) are considered NGOs under the relevant legislation for non-profit organizations. They are governed by Law 84 of 2002/2004?? and are registered with and supervised by the Ministry of Social Solidarity (MoSS). They currently operate under the supervision of the Egyptian Financial Supervisory Authority (EFSA), according to the microfinance law no. 141 of 2014??. CDAs exist in many villages and their mandate can vary from charity and social services (such as kindergartens, orphanages, medical clinics) to development, but their coverage is usually limited to a village or a neighborhood. CDAs can also provide economic services as they can play a vital role in offer microloans to end beneficiaries in the rural community. Overall membership of CDAs is relatively small, ranging between 50 and 400. However individuals have access to the CDA services without being members. Many CDAs are largely dependent on funding from MoSS and also on wealthy individuals of the community. Some are often supported by small donor grants and by larger NGOs. CDAs are also employed as microfinance intermediaries. They are the most common type of community organizations which was widely targeted by IFAD projects. They have been the principal channel for microfinance outreach in the projects, where most beneficiaries find the loan process to be easy and the loan requirements to be acceptable. Nevertheless, CDAs require further assistance with regard to enhancing their technical and capacities and sustainability. Moreover, it is important to note that the microcredit law poses restrictions on CDAs<sup>128, 129</sup>.

## 17. Water Users Organizations (WUOs)

Water Users Organizations (WUOs) are community-level organizations that are established to support the management of irrigation water and the operation and maintenance of canals. WUOs are specialized entities of water users that can be assigned to manage, operate and maintain, at their expense, parts of the irrigation and drainage system with full participatory independence in this respect. At the lowest level, Water Users Associations (WUAs) are formed at the mesqa level in the Old lands to be responsible for operation and maintenance of pumping stations (pumping water from the branch canal into the mesqa and to organize water scheduling from the mesqa into the marwas (quaternary canals) and from there to farmers fields. These WUOs are then represented, together with other water users (municipalities and industry) into Branch Canal Water Users Organizations (BCWUAs) and Water Boards that can express their demands with greater voice and interact with the authorities for the allocation and timely supply of water. IFAD have established WUOs at various levels, including WUAs, BCWUAs as well as Marwa Committees through a number of projects.

Law 213 for the year 1994 (modification of Law 12 for the year 1984) provides the legal base for formation of the WUAs in the improved irrigation projects in the old lands at the mesqa level and in the new lands. Article 71 of that law recognized and legalized WUAs as specialized associations performing functions related to water management. Through

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<sup>127</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

<sup>128</sup> IFAD. (2017). *Arab Republic of Egypt Country Strategy and Programme Evaluation*. Independent Office of Evaluation. Report No. 4526-EG. September.

<sup>129</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

this legislation, the aim was to work towards optimum utilization of available water through an integrated participatory system that engages farmers in management decisions over water in their hydraulic boundary, leading to more efficient use of water<sup>130</sup>.

Other types of WUOs have been also established above the mesqa level by Ministerial Decrees, on a pilot basis, such as Water Boards and BCWUAs<sup>131</sup>, using different concepts and approaches. BCWUAs and Water Boards are regulated by the Ministerial Decree 263 for the year 1997 and the Ministerial Decree 33 for the year 2001 respectively (Sources). These organizations show potential in coordinating local water management, in resolving water use conflicts, in planning for irrigation and drainage improvement and in enhancing service delivery efficiency. Most of these WUOs, however, are not functioning as intended because of the poor legal base<sup>131, 132</sup>.

## 18. Farmers Marketing Associations (FMAs)/ Marketing Associations (MAs)

Farmers Marketing Associations (FMAs)/ Marketing Associations (MAs) have been promoted mainly in the context of donor-funded projects or by NGOs, which are concerned mainly with providing their members with the services they need to better market their products, particularly in linking them in contract farming arrangements with exporters.

FMAs/MAs form themselves into groups, usually clustered around a single activity, or a special interest. While some do play an advocacy role, they are mainly concerned with providing their members with the services they need. They market the products of numerous agricultural producers and in turn the farmers benefit through selling large volumes at a high price. Additionally, they can garner the necessary economies of scale to obtain needed supplies at bulk discount rates, and better negotiate with traders for the sale of their produce<sup>133</sup>. Based on the findings of a number of IFAD project, FMAs/MAs do not possess a legal base. In turn, the lack of a legal status limit the effectiveness and operation of the associations. That is in addition to insufficient technical and financial capacities<sup>134</sup>.

## 19. Legal Framework and Major Strategies and Policies for Rural and Agricultural development

According to Article 79 of Egypt's Constitution of 2014, food security is a key policy goal for Egypt. The article specifies that "Each citizen has the right to healthy, sufficient amounts of food and clean water. The state shall provide food resources to all citizens. It also ensures food sovereignty in a sustainable manner..."<sup>135</sup>

In addition, Article 29 of the Constitution highlights that the State commits to agriculture and rural development. It indicates that: "Agriculture is a basic component of the national economy... It [the State] works on developing the countryside, raising the

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<sup>130</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>131</sup> IFAD. (2013). *On-Farm Irrigation Development Project In The Oldlands*. Supervision Report.

<sup>132</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

<sup>133</sup> IFAD. (2009). *On-Farm Irrigation Development Project in the Old lands*. Project Design Report, Working paper 7.

<sup>134</sup> IFAD. (2017). *Arab Republic of Egypt Country Strategy and Programme Evaluation*. Independent Office of Evaluation. Report No. 4526-EG. September.

<sup>135</sup> International IDEA (Trans.). (2018). *Egypt's Constitution of 2014*.

standard of living of its inhabitants and protecting it from agricultural risks, and works on developing agricultural and animal production, and encouraging industries based thereon. The state commits to providing the requirements of agricultural and animal production and buying basic agricultural crops at appropriate prices to achieve a profit margin for farmers in agreement with agricultural unions, syndicates and agricultural associations. The state also commits to the allocation of a percentage of reclaimed lands to small farmers and youth graduates..." 136

In this context, the main strategies and policies that are related to agriculture and rural development emphasize the establishment and promotion of the physical base of agricultural activities in both old and new lands to respond to the growing and changing population and export food needs. It also focuses on: maximizing productive efficiency from the limited resources available specially water; providing expansion to redistribute population; establishing new rural settlements in the new reclaimed lands; and developing capacities of rural communities<sup>137</sup>.

## 20. Sustainable Development Strategy 2030 (SDS)

The Sustainable Development Strategy (SDS), Egypt Vision 2030, presents Egypt's overall development strategy until 2030. It has followed the sustainable development principles as a general framework for improving livelihood and welfare. The strategy is based on three dimensions: economic, social and environmental. In addition, the SDS stresses on inclusive sustainable development and balanced regional development; emphasizing the full participation in development, ensuring its yields accrue to all parties. The strategy considers equal opportunities for all, closing development gaps, and efficient use of resources to ensure the rights of future generations. It aims at aligning the national development objectives with those of the United Nations Sustainable Development Goals (SDGs) and the Sustainable Development Strategy for Africa 2063 138, 139.

For the agricultural sector, the SDS places emphasis on agricultural development. It aims to reduce income disparities between rural and urban populations from 31% to 10% by 2030. Additionally, it highlights major development initiatives that are underway to modernize agriculture and achieve inclusive rural development. Within the economic dimension, the SDS sets the strategic objectives for agricultural development. It targets agricultural modernization to realize large gains in terms of employment, productivity and sustainable resource management. The strategy adopts both Vertical development, which focuses on improving water management and enhancing irrigation systems in the old lands to raise their productivity; and Horizontal expansion, which aims to reclaim new agricultural land in eastern and western desert regions. That is in addition to focusing on the rationalization and enhancement of water use efficiency, the rehabilitation of the irrigation and drainage canals and networks and the strengthening of the institutional and legislative frameworks of the water resources management through the promotion of a more integrated management approach.

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<sup>136</sup> International IDEA (Trans.). (2018). *Egypt's Constitution of 2014*.

<sup>137</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>138</sup> Ministry of Planning, Monitoring and Administrative Reform. (2016). *Sustainable Development Strategy: Egypt's Vision 2030*.

<sup>139</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

In addition to increasing the size and productivity of agricultural land, the SDS targets the promotion of the agri-business environment through creating strategically located storage facilities, developing agro-industrial hubs, and overcoming agricultural supply chain inefficiencies. The aim is to create a network of collection centers and centralized hubs to store various types of crops. Finally, the SDS promotes legislative reforms and the expansion of agricultural research spending to support production and resource management<sup>140</sup>.

On the other hand, the rural financial services policy which is under the economic dimension of the SDS, and as part of the monetary policy reform emphasizes the importance of increasing the effectiveness of financial intermediaries and achieving financial inclusion through supporting the private sector and SMEs and enhancing the rural banking system<sup>141</sup>.

## 21. Sustainable Agricultural Development Strategy 2030 (SADS)

The Sustainable Agricultural Development Strategy 2030 (SADS) is a strategic planning approach that is aligned with the SDS and that sets ways and means to support the development of the agricultural sector in Egypt. The need to incorporate socioeconomic issues, in particular those related to the improvement of farmers and rural household livelihoods, is high among the SADS priorities. The Government has hence formulated the strategy in recognition of the fact that transformation of the agriculture sector is key for economic growth and development<sup>142</sup>.

SADS was developed to address the challenges that face the agricultural sector through a holistic approach. The main aspects of the strategy are: the sustainable use of agricultural resources; improving productivity; enhancing the competitiveness of agricultural products in local and foreign markets; and achieving higher rates of food security. With regard to the sustainable use of agricultural resources, SADS targets the enhancement of water management to reduce the losses in water conveyance and field irrigation that can be utilized in new lands reclamation. Improving agricultural productivity is targeted through the promotion of crops with a resistance to drought, salinity and pests, while also planting crops with early maturing periods. Moreover, greater attention is allocated to improving traditional agricultural practices among farmers.

As for enhancing the competitiveness of agricultural products, SADS aims to improve market chain linkages, tackle the problem of pre-harvest and post-harvest losses, apply modern techniques to analyze marketing risks and develop risk mitigation measures, which will lead to increased competitiveness in local and foreign markets. The enhancement of agricultural productivity and competitiveness will also serve to enhance food security. As outlined in SADS, the Government focuses on attaining partial self-sufficiency for strategic agricultural products such as wheat. Furthermore, SADS targets promoting investment in the agricultural sector<sup>143</sup>.

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<sup>140</sup> Ministry of Planning, Monitoring and Administrative Reform. (2016). *Sustainable Development Strategy: Egypt's Vision 2030*.

<sup>141</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>142</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>143</sup> Arab Republic of Egypt. (2009). *Sustainable Agriculture Development Strategy Towards 2030*.

The strategy also identifies other aspects including the promotion of the private sector, better involvement of rural women in the development process, and reforms that make agricultural institutions more responsive to the needs of farmers. It identifies the need to strengthen producer associations to better market small farmer production and to make market information more freely available; enact and enforce laws and regulations that concern product standards and develop the extension role of the private sector<sup>144</sup>. SADS 2030 also links rural development to the improvement of credit facilitation services through village-level banks<sup>145</sup>.

## 22. Microfinance Policies

The Government has developed strategies and laws to promote and strengthen the microfinance sector, regulate its activities and expand its outreach to enhance financial inclusion. These are namely the National Strategy for Microfinance (2005-2009) and the Microfinance Law no. 141 of 2014.

The National Strategy for Microfinance (2005-2009) was developed with the aim of improving financial inclusion and diversifying the range of microfinance services accessible to the poor. The strategy identifies the primary areas for intervention at the micro, meso and macro levels for the provision of a variety of services to underserved market segments, including women, youth, start-ups and the rural poor. It emphasizes the role of non-conventional financial institutions, such as banks, NGOs, Cooperatives and credit-only financial institutions, as well as the adoption of a multi-tiered financial system to facilitate access to microfinance.

With regard to the Microfinance Law no. 141 of 2014, it aims to regulate microfinance activities in Egypt and allows new stakeholders, including the private sector, to be actively involved in this field. Under the supervision of Egyptian Financial Supervisory Authority (EFSA), the law specifies the legal and administrative procedures that condition the work of financial intermediaries such as NGOs and CDAs in microfinance<sup>146</sup>.

## 23. Water and Irrigation Water Policies

Water conservation and increasing efficiency in agricultural are major objectives to the Government. Given that the amount of arable land available in Egypt is almost fixed, with limited capacity to expand it, the strategy has focused on the sustainable use of existing agricultural land, reclaiming desert areas and increasing productivity through improved irrigation and cultivation methods. The two principal sector development policies addressing water and irrigation in Egypt are the National Water Resources Plan for Egypt 2017-2037 (NWRP 2017-2037) and the National Strategy for Development and Management of Water Resources 2050.

NWRP 2017-2037 aims at improving overall water use efficiency in agriculture, improving water allocation and distribution of Nile water, preventing or reducing emissions and treatment of wastewater<sup>147</sup>.

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<sup>144</sup> IFAD. (2011). *Promotion of Rural Incomes through Market Enhancement (Prime) Project*. Final Project Design Report, Vol. I. Main Report and Working papers.

<sup>145</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>146</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

<sup>147</sup> IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

Similarly, the NWRP 2017 (replaced by NWRP 2017-2037?) seeks to limit water use through demand management measures, water supply optimization and reduction of water pollution levels. The measures followed include horizontal expansion programs, where the government aims to increase the reclaimed land areas, improvement of the irrigation and drainage systems and setting a more equitable water allocation and distribution system. The Integrated Water Resources Management (IWRM) is a main approach in the NWRP that aims at promoting the participation of all relevant stakeholders in the different water management functions. The plan thus emphasizes the importance of having an institutional setup that includes Water Users Organizations (WUOs), in addition to developing a more effective coordination system among relevant stakeholders<sup>148</sup>.

As for the National Strategy for Development and Management of Water Resources 2050, its main objectives are water resources development, better rationalization of water use, development and rehabilitation of the water resource systems, limiting pollution levels, adapting to climate change and promoting the IWRM mechanism. The national strategy also stresses on the importance of the participation of all users and particularly specifies the need for having a cooperation mechanism with the WUOs, agricultural cooperatives and the private sector<sup>149</sup>.

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<sup>148</sup> MWRI (2005). *National Water Resources Plan (NWRP) 2017*.

<sup>149</sup> MWRI. (2010). *Summary of the Strategy for Development and Management of Water Resources in Egypt until 2050*. Cairo.

## Organizations Matrix, Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

The following matrix depicts the main strengths, weaknesses, opportunities and threats of the relevant institutions and organizations.

	Strengths	Weaknesses	Opportunities	Threats
<b>Ministry of Agriculture and Land Reclamation (MALR)</b>	<ul style="list-style-type: none"> <li>Comprehensive Department structure.</li> <li>Large and extensive field presence.</li> <li>Stronger policy commitment to on-farm irrigation improvement, and higher water use efficiency.</li> <li>Considerable experience of working with IFAD financed projects.</li> <li>Policy advocacy on behalf of smallholders.</li> <li>Further potential to intensify present agricultural production.</li> <li>Further potential to orient the smallholder towards commercial production.</li> <li>Potential to assist smallholders in increasing production on new lands.</li> <li>Potential for expansion of agricultural areas based on water savings in the old lands.</li> </ul>	<ul style="list-style-type: none"> <li>Limited cadre of competent officers.</li> <li>Limited staff incentives and operational support and budgets and overstaffing.</li> <li>Limited capacity to assist the small farmers.</li> <li>Limited supported efforts for comprehensive institutional reform.</li> <li>Limited view of social development aims.</li> <li>Inability to influence PBDAC conditions.</li> <li>Reluctance of Ministry to work with NGOs and CDAs.</li> <li>Limited coordination with MWRI<sup>150</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>A well-developed agriculture strategy towards 2030 (SADS), which fully recognizes the critical issues in agriculture and on-farm irrigation.</li> <li>Stronger linkages forged between extension and research.</li> <li>Extension of Farming Systems Research (FSR) approach.</li> <li>Scope for Micro and Small Enterprise (MSE) development, especially agro-processing and services.</li> <li>Recent drive to coordination with MWRI.</li> </ul>	<ul style="list-style-type: none"> <li>Agriculture prices are highly variable.</li> <li>Market conditions for agricultural commodities are not stable.</li> <li>Reluctance of farmers to change traditional farming techniques.</li> <li>Limited water resources and rising water scarcity,</li> </ul>
<b>Ministry of Water Resources and Irrigation (MWRI)</b>	<ul style="list-style-type: none"> <li>High level policy commitment to modernize the irrigation sector.</li> <li>Experience with participatory irrigation management and formation of WUOs.</li> <li>Highly qualified technical staff.</li> <li>Willingness to experiment with innovative schemes for improved and efficient water management.</li> </ul>	<ul style="list-style-type: none"> <li>Highly centralized departments and agencies.</li> <li>Limited integration of responsibilities with other stakeholders at the district level;</li> <li>Limited coordination of activities at local level between various departments and affiliated agencies.</li> </ul>	<ul style="list-style-type: none"> <li>Water law under review by the Peoples' Assembly to transfer irrigation management to water users at branch level.</li> <li>Recent drive to coordination by MALR and harmonization between extension and irrigation services department.</li> </ul>	<ul style="list-style-type: none"> <li>Limited water availability to expand to new areas.</li> <li>High energy costs for pumping water.</li> <li>Limited capacity of the private sector to engage in modernizing the system.</li> </ul>

<sup>150</sup> Both MALR and MWRI play a major role in Egypt's irrigated agricultural sector. MWRI is responsible for the irrigation water conveyance system up to the farm gate, while MALR is responsible for the on-farm irrigation and all services for agricultural production. Traditionally the relationship between these two organizations was one of institutional rivalry resulting in moderate coordination. However, there is now a conviction in both ministries that they need to coordinate and synchronize their actions at both policy and operational levels in order to realize maximum benefits from the scarce water resources. Hence, there has been recent higher policy commitment to collaboration with MALR on irrigation improvement (Source: IFAD. (2009). *On-Farm Irrigation Development Project In The Oldlands. Project Design Document, Working paper 7*).

		<ul style="list-style-type: none"> <li>Reluctance of field level staff to work in a participatory framework with farmers and MALR extension staff.</li> <li>The use of inappropriate technical choices in modernizing the irrigation system.</li> <li>Limited capacity to organize water user associations effectively. Limited coordination with MALR.</li> </ul>	<ul style="list-style-type: none"> <li>Strong donor support for irrigation, water use improvement and institutional reform in the water sector.</li> <li>Potential extension of the continuous flow concept to other governorates.</li> </ul>	
<b>Ministry of Social Solidarity (Moss)</b>	<ul style="list-style-type: none"> <li>Good outreach to poorer citizens throughout the country.</li> <li>Database available for the poor families covered by the social safety net as well as for the registered NGOs/CDAs.</li> </ul>	<ul style="list-style-type: none"> <li>Limited coordination of efforts with the private sector and civil society.</li> </ul>		
<b>Ministry of Local Development (MoLD)</b>	<ul style="list-style-type: none"> <li>Further potential to empowering local authorities</li> <li>Further potential to supporting community development.</li> </ul>			
<b>Ministry of Investment and International Cooperation (MIIC)</b>	<ul style="list-style-type: none"> <li>Strong policy commitment toward integrating and harmonizing available Official Development Assistance (ODA) funds to complement the national efforts.</li> <li>Strong commitment to private sector engagement, promoting investment and entrepreneurship and supporting SMEs.</li> <li>Capacity to foster private investment.</li> </ul>	<ul style="list-style-type: none"> <li>Limited coordination with other concerned ministries in supporting entrepreneurship and SMEs.</li> </ul>		
<b>Ministry of Finance</b>				
<b>Ministry of Environment</b>	<ul style="list-style-type: none"> <li>Strong policy commitment and political will for improving environmental conditions and climate change.</li> <li>Potential capacity to coordinate with the different ministries and authorities on cross-cutting environmental matters.</li> </ul>	<ul style="list-style-type: none"> <li>Limited enforcement of environmental policies and regulations.</li> <li>Limited budget and capacities and high reliance on ODA for technical and financial assistance.</li> </ul>	<ul style="list-style-type: none"> <li>Climate finance has safeguard requirements that would encourage government, private sector and concerned stakeholders to mainstream environmental concerns.</li> </ul>	<ul style="list-style-type: none"> <li>Absence of a clear vision and unified strategy for environmental and climate change matters.</li> <li>Absence of an integrated environmental assessment for the different sectors.</li> <li>Limited coordination between concerned ministries and stakeholders on environmental and climate change matters.</li> </ul>
<b>Ministry of Youth and Sports</b>				

<p><b>Micro, Small and Medium Enterprises Development Agency (MSMEDA)</b></p>	<ul style="list-style-type: none"> <li>• A clear poverty reduction, employment generation and gender mainstreaming strategy.</li> <li>• Lending policy ensures more effective loan granting and repayment.</li> <li>• Implementation of good practices in microfinance and MSE lending.</li> <li>• Permanent organization including section for small business startups and promotion.</li> <li>• Established network and offices in all governorates with qualified staff.</li> <li>• Good outreach to poorer villages.</li> <li>• Balanced emphasis on credit and capacity building for Microfinance institutions (MFIs) and final borrowers.</li> <li>• Familiarity and partnership with local level organizations, NGOS and CDAs.</li> <li>• Partnership with commercial banks.</li> <li>• Comparative advantage in working with non-bank financial institutions.</li> <li>• Strong system of financial management and audit.</li> <li>• Considerable experience of working with IFAD in the agricultural and rural development sectors through partnership with IFAD in different projects.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Poor record of working an integral part of a project team and integrate lending with other project components.</b></li> <li>• <b>Absence of a comprehensive strategy for provision to rural areas.</b></li> <li>• Rapid growth in organizational size and demand for its services risks bureaucratization and delivery delays.</li> <li>• Limited focus in working with non-bank microfinance institutions.</li> <li>• <b>Limited relations with technical agencies (MALR and MIWR). However, experience is building up.</b></li> <li>• <b>Increasingly conservative in its approach to lending to the poor and a growing aversion to risk and lending to the IFAD target group in rural areas and the agriculture sector.</b></li> <li>• Limited willingness to lend to new organizations.</li> </ul>	<ul style="list-style-type: none"> <li>• New microfinance law expected to enhance accessibility to microfinance due to the involvement of the private sector.</li> <li>• Extended donors and government support and trust and availability of adequate resources.</li> </ul>	<ul style="list-style-type: none"> <li>• New law affects the implementation of financial activities due to the difficulties encountered in obtaining new licenses.</li> </ul>
<p><b>Agricultural Bank of Egypt (ABE)</b></p>	<ul style="list-style-type: none"> <li>• Extensive network of branches and village banks with a mandate to provide financial services to rural areas.</li> <li>• Extended experience in rural businesses.</li> <li>• <b>Innovative approaches for delivery of financial services to farmers.</b></li> <li>• Restructuring of ABE is expected to improve efficiency and sustainability of services.</li> <li>• <b>Senior management is keen to meet the smallholders need for microfinance.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Poor history of adaptation of lending terms to poor rural borrowers.</li> <li>• Limited orientation of staff to deal with microfinance clients.</li> <li>• <b>Reluctance to take further risks in the microfinance sector at the moment.</b></li> <li>• <b>Current policies and procedures do not support farmers in new lands.</b></li> <li>• <b>The plans for making the bank commercially viable are likely to make its lending more conservative.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Government pressure mounting to address rural poverty in through credit.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Senior management interested in providing agriculture value chain finance.</li> </ul>			
<b>Agriculture Development Program (ADP)</b>	<ul style="list-style-type: none"> <li>• Capacity to provide dedicated financial services to the agriculture sector.</li> <li>• ADP encourages banks' engagement in rural finance and strong management arrangements through the use of commercial banks (Commercial Investment Bank (CIB)).</li> <li>• Established operating links with 11 affiliated commercial banks, which in turn, provide both individual and collective loans directly or through Agriculture Cooperatives and selected associations.</li> <li>• Provision for investment income to provide technical assistance for research and development for the agriculture sector.</li> </ul>	<ul style="list-style-type: none"> <li>• Low utilization of available funds (The utilization rate of ARDF is only 53%).</li> <li>• Limited leveraging of commercial bank resources for the agriculture sector.</li> <li>• Loan applications are repeatedly scrutinized.</li> <li>• Increasing centralization with the appointment of the Minister of agriculture as the Chairman of the Board of Trustees.</li> </ul>	<ul style="list-style-type: none"> <li>• Future potential of raising the capacity of participating commercial banks to understand agriculture value chain finance.</li> <li>• Leverage IFAD funds for attracting the risk appetite of the commercial sector for agriculture lending.</li> </ul>	<ul style="list-style-type: none"> <li>• Low commercial bank appetite to provide funds to the smallholder farmer.</li> </ul>
<b>Agricultural Research Center (ARC)</b>	<ul style="list-style-type: none"> <li>• Good national agriculture research</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>National Council for Women (NCW)</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>Agricultural Cooperatives</b>	<ul style="list-style-type: none"> <li>• Exist across the country and all farmers are required to register with the cooperatives.</li> <li>• Capacity to distribute agricultural inputs to the large number of small farmers.</li> <li>• Available mechanism for organizing and providing support to the smallholder farmer.</li> <li>• Capacity to link farmers with markets and enable them to access financial services.</li> <li>• Good performance in several IFAD financed projects.</li> <li>• Further potential to be used to channel financial services to small farmers.</li> <li>• Further potential to be used to organize farmers for extension services and training.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited capacity to develop market links on their own and require technical assistance to enable them to do so.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to organize farmers through the Agriculture Cooperatives.</li> <li>• Potential for enabling small farmers to realize economies of scale, reduce transactions cost and enhance their bargaining power.</li> </ul>	<ul style="list-style-type: none"> <li>• The private sector may prefer to deal with a few large farmers and ignore the smallholder farmers.</li> </ul>
<b>Community Development Associations (CDAs)</b>	<ul style="list-style-type: none"> <li>• Good mechanism for multi-purpose activities at the community level and for</li> </ul>	<ul style="list-style-type: none"> <li>• Generally dominated by a few active members.</li> </ul>	<ul style="list-style-type: none"> <li>• The new law on rural finance provides them with an opportunity to register as profit</li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive legal and regulatory environment for NGOs/CDAs.</li> </ul>

	<p>provision of social sector services in new communities.</p> <ul style="list-style-type: none"> <li>• Supportive role in assisting rural households to undertake a wide range of activities.</li> <li>• Possess a reasonable degree of flexibility and are close to members of community.</li> <li>• Capacity to revolve funds.</li> <li>• Good outreach to women especially poor women through social and charitable activities. They hence provide a good mechanism for inclusion of women.</li> <li>• Good mechanism of support to rural communities in several IFAD financed projects.</li> <li>• <b>Further potential</b> for serving as a vehicle for the empowerment of the poorest and most vulnerable.</li> <li>• <b>Further potential</b> to encourage their growth in the enterprise sector.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited capacity to raise funds through their own sources and enterprises.</li> <li>• Limited geographic outreach and capacity.</li> <li>• Require technical support and monitoring capacity development.</li> <li>• Sustainability depends upon their financing from donors and partially by Government.</li> <li>• Reliance on external assistance for technical and managerial skill development.</li> </ul>	<p><b>oriented companies for provision of financial services.</b></p>	
<b>Water Users Organizations (WUOs)</b>	<ul style="list-style-type: none"> <li>• Capacity to promote the collective approach among farmers sharing the same canals.</li> <li>• Capacity to facilitate more efficient management of water resources and contribute to the operation and maintenance and cost recovery of irrigation water systems.</li> <li>• <b>Further potential</b> for Marwa Committees and the Water Users Groups (WUGs), which are embedded in the agricultural cooperatives.</li> </ul>	<ul style="list-style-type: none"> <li>• Number of operating WUOs is limited due to the limited legal status, poor access to finance and poor institutionalization. Their sustainability is subsequently a main concern.</li> <li>• Even though WUAs are legally recognized, they are not well embedded within the local administration framework.</li> <li>• Limited capacities to set fees, collect the necessary funds for operation and maintenance or to open a bank account.</li> <li>• Sustainability depends upon their financing from donor funded projects.</li> <li>• Reliance on external assistance for technical skill development.</li> </ul>	<ul style="list-style-type: none"> <li>• Higher policy commitment to collaboration between the concerned ministries on irrigation improvement.</li> </ul>	<ul style="list-style-type: none"> <li>• Law 213/1994 does not support further scaling up of the WUOs as it mainly provides a legal status to the WUAs at the mesqa level only.</li> <li>• Coordination complexities between the concerned ministries affect the development of WUOs.</li> <li>• Rising water shortage, poor allocation and distribution of water at farm level would lead to more conflicts among the water users.</li> </ul>
<b>Farmer Marketing Associations (FMAs)</b>	<ul style="list-style-type: none"> <li>• Voluntary organization in which only interested farmers participate.</li> <li>• Commodity specific and focused.</li> </ul>	<ul style="list-style-type: none"> <li>• Very few FMAs exist at the moment due to insufficient technical and financial resources to support activities.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Existing regulation enables them to organize and work within the existing policy framework.</b></li> </ul>	<ul style="list-style-type: none"> <li>• No law to support contractual relationship between the private sector and the markets.</li> </ul>

	<ul style="list-style-type: none"> <li>• Capacity to link farmers with markets and enable them to access financial services.</li> <li>• Capacity to support small farmers to realize economies of scale, reduce transactions cost and enhance their bargaining power.</li> <li>• Further potential for Marketing Committees within existing Agricultural Cooperatives.</li> </ul>	<ul style="list-style-type: none"> <li>• Poor access to finance and poor level of institutionalization hinder their sustainability.</li> <li>• Limited capacity to forge market links on their own and require technical assistance to enable them to do so.</li> </ul>	<ul style="list-style-type: none"> <li>• Private sector may prefer to deal with a few large farmers and disregard the FMAs.</li> <li>• Small-scale farmers have limited competitive capacities and products quality, which undermine FMAs abilities to connect to high-end markets.</li> <li>• Limited marketing facilities and weak linkages between farmers and value chains.</li> <li>• Market price fluctuations and rising agriculture input prices.</li> </ul>
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*Sources:*

- IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024. December.*
- IFAD. (2009). *On-Farm Irrigation Development Project In The Oldlands. Project Design Report, Main Report.*

### Complementary Development Partner Initiatives/Partnership Potential

Agency	Project/Programme	Location	Status	Complementarity/ Synergy Potential
AfDB	Use of renewable energy for pumping irrigation  FARM Level Irrigation Project	Governorates of Minia and Matrouh  Governorate of Beheira	On-going, closing in 2019 Pipeline	The AFDB assessment on the use of renewable energies in agriculture and its work around the sustainability of natural resources will feed into the interventions designed under the IFAD program, and allow potential co-financing of sustainable solutions.  Very relevant to OFIDO Project. Potential for WB/AFDB/KFW/IFAD/AFD to intensify engagement in policy dialogue, especially with respect to modernization irrigation systems in old lands.
EU and Italian MFAIC	The European Union-Joint Rural Development Programme	Governorates of Minia, Fayoum and Matrouh	On-going, closing in 2022	The Programme supports the adoption of climate change mitigation and adaptation practices through proper water usage activities and the adoption of Good Agricultural Practices (GAPs) which is closely supporting IFAD interventions in Minia.  The Programme investment for Irrigation infrastructures and efficiency improved assists and supports IFAD investment in irrigation infrastructure.  Knowledge sharing on rehabilitation and/or construction of Water harvesting schemes.
FAO	Support sustainable water management and irrigation modernization for newly reclaimed areas.  Water harvesting and Good Agriculture Practices for Improved Livelihood and Increased and Sustained Production in Matrouh Rain-fed Agricultural areas.  Good Agricultural Practices (GAPs) for sustainable improvement of quality and quantity of horticultural production of small-scale farmers in Fayoum	Egypt – New lands  Matrouh Governorate  Fayoum Governorate	On-going, closing in 2019  On-going, closing in 2019  On-going, closing in 2019	Knowledge sharing on irrigation modernization for newly reclaimed areas.  Knowledge sharing on water harvesting interventions that will facilitate the implementation of the new IFAD funded project in Matrouh.  Knowledge sharing on Good Agricultural Practices (GAPs) that will contribute significantly to the implementation of similar activities under SAIL project.

AFD	Supporting agricultural SMES in order to promote rural employment.  Modernizing plot irrigation in the Nile Delta	Egypt  Kafr El-Shiek Governorate	On-going, closing in 2019  On-going, closing in 2018	Knowledge sharing on credit facilities for agricultural industries.  Very relevant to OFIDO Project.
GCF	Enhancing Climate Change Adaptation in the North Coast and Nile Delta Regions in Egypt.	Northern Coast Governorates	Approved for funding with 7 years implementation period	Providing coastal defence soft structures and integrated coastal management to adapt to coastal flooding from sea level rise and increased frequency of storms. This will reduce the vulnerability of coastal infrastructure, protecting surrounding villages, agricultural.
GEF	Sustainable Management of Kharga Oasis Agro-Ecosystems in the Egyptian Western Desert.	New Valley	On-going, closing in 2018	The Programme supports the sustainable food production systems that help maintain and progressively improve land and soil quality and agrobiodiversity in oasis agro-ecosystems of the Egyptian Western Desert which will be a platform for any future IFAD intervention in the same area.
GIZ	Water Management Reform Programme  Promotion of access to financial services for small and medium enterprises.	Governorates of Kafr el Sheikh and Beheira.  Egypt	On-going, closing in 2018  On-going, closing in 2021	The existing partnership with GiZ on agricultural marketing support will be strengthened. Complementarities with marketing initiatives being financed through the German cooperation agency. Communities supported through IFAD-financed programs will learn from and access marketing and standard-setting activities under GIZ-financed programs.  Potential cooperation between IFAD and GIZ in implementing SAIL project activities with respect to FFSS is currently negotiated.  Knowledge sharing and Potential for IFAD/GIZ to intensify engagement in policy dialogue, especially with respect to financial services offered to SMEs by non-bank financial institutions.
UNICEF	Nutrition Stakeholder and Action Mapping Report	Egypt	2017	Recognising the need to address this issue with greater urgency, the Ministry of Health and Population (MoHP) with UNICEF have developed a Nutrition Agenda for Action framework document (2017) to serve as a road map to address the nutrition

				challenges that the country faces.
USAID	<p>Feed the Future Egypt Food Security and Agribusiness Support is USAID/Egypt's core agriculture activity, supported by the U.S. government's Feed the Future initiative. Using a market-driven approach, USAID is increasing agriculture-related incomes of 14,000 farmers through strengthening sustainable fruit and vegetable value chains for domestic and export markets.</p> <p>Feed the Future Egypt Food Security and Agribusiness Support is USAID/Egypt's core agriculture activity, and supports agricultural value chain development in Upper Egypt.</p>	<p>Governorates of Beheira and Luxor</p> <p>Upper Egypt governorates of Beni-Suef, Menia, Assiut, Sohag, Qena, Luxor, and Aswan.</p>	On-going, closing in 2020	<p>Knowledge sharing on post-harvest processes and marketing that will support the implementation of SAIL and PRIME.</p> <p>Alignment with USAID Upper Egypt intervention through STAR.</p>
WFP	Scale up and complement activities on nutrition sensitive activities in the target areas	National	On-going	
World Bank	The WB portfolio in Egypt includes 20 active projects of which six directly or indirectly impact on the agricultural/rural sectors: IFAD is closely coordinating its interventions with the WB.	<p>Second Integrated Sanitation and Sewerage Project (approved June 2011, USD 300 million): In Menoufia, Sharkeya, Assiut, and Sohag Governorates, providing increased access to improved sanitation and sewerage services.</p> <p>Sustainable Rural Sanitation Services Program for Results Project (\$550 mn, July 2015): To strengthen institutions and policies for increasing access and improving rural sanitation services in the Governorates of Beheira, Dakahliya, and Sharkiya</p> <p>Local Development Program-for-Results Project (\$500 mn, Sep 2016): To improve the business environment for private sector development and strengthen local government capacity for</p>	All the highlighted projects are on-going.	<p>IFAD country team in touch with WB country team specifically about aligning STAR with the Local Development Program-for-Results Project (\$500 mn, Sep 2016), that focuses on Sohag and Qena governorates in Upper Egypt.</p> <p>Potential for WB/IFAD to intensify engagement in policy dialogue, especially with respect to microfinance.</p> <p>WB supports for sanitation is relevant given the problems of rural sanitation, especially in the Nile Delta.</p> <p>WB investment for local infrastructure assists and supports IFAD investment in irrigation infrastructure.</p> <p>WB support for agriculture now under preparation.</p>

		<p>quality infrastructure and service delivery in select governorates in Upper Egypt.</p> <p>Strengthening Social Safety Net Project (\$400 mn, April 2015): The Takaful and Karama program is being developed as a national targeted social safety net (SSN) program aimed at protecting the poor through income support.</p> <p>Inclusive Regulations for Microfinance Project (\$4.5 mn, July 2014). To strengthen the regulatory and institutional framework of the microfinance sector.</p> <p>Promoting Innovation for Inclusive Financial Access Project (\$300 mn, April 2014): To expand access to finance for micro and small enterprises using innovative financing mechanisms, with a special focus on youth and women, as well as underserved regions.</p>		
KFW	Integrated Water Resource Management (IWRM)	Governorates of Beheira and Kafr el Sheikh	On-going, closing in 2018	Very relevant to OFIDO Project.

Source: IFAD. (2018). *Country Strategic Opportunities Programme 2019-2024*. December.

## **Egypt**

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### **Sustainable Transformation for Agricultural Resilience in Upper Egypt Project Design Report**

#### **Annex 9: Integrated Risk Framework (IRF)**

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Near East, North Africa and Europe Division  
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Risk categories	Risk Probability	Risk Impact	Mitigations/comments
1. Political and governance	Low	Medium	There have been political stability over the past five years.
2. Macroeconomic	Medium	Medium	According to the latest IMF report on Egypt's macroeconomic outlook, the picture remains favorable, supported by strong policy implementation. Robust growth and a narrowing of the current account deficit reflect a rebound in tourism and strong remittances, while unemployment has declined to its lowest level since 2011. However, Egypt debt is causing some risks. Moody's last review for Egypt have highlighted the high debt burden, low debt affordability and very large annual financing needs. In spite of this, IFAD has received a request from the GoE to borrow in IFAD 11.
3. Sector strategies and policies	Medium	Medium	The government is implementing its nation-wide programme which is called the sustainable development strategy (Egypt 2030). However, the governance strategies and policies have weaknesses. The programme will work on policy dialogue to inform policy/decision makers in addressing some of the sector related policy gaps. Together with FAO, IFAD will contribute to the revision of the Agriculture Development Strategy due in 2020.
4. Technical aspects of project or program	Medium	Low	IFAD and GoE have experience with similar projects/programmes. STAR will be implemented in a relatively smaller area (3 contiguous governorates). Joint village implementation plans will be developed participatory by different implementation partners responsible for different components. This will harmonize actions and mitigate the risk. CFIs will be selected by the credit wholesaler from a shortlist already prepared by STAR based on assessment of the suitability of the CFIs in the programme area.
5. Institutional capacity for implementation and sustainability	Medium	Medium	The programme will be implemented in 3 governorates building on the lessons learned from previous project and recommendations by CPE and COSOP. There is lack of coordination between key institutions serving the agricultural sector in particular, MALR and Min. of Irrigation and Water Resources. Based on recent experience gained through OFIDO, there is an opportunity for the programme to coordinate between different institutions and stakeholders through the innovation platforms to have an established basis for continuous dialogue and coordination.
6. Financial management	High	Medium	Specific anti-corruption, good governance measures beside audit arrangements to be incorporated into project design. Strong linkages between financial and M&E reports can play an important mitigating factor.

Risk categories	Risk Probability	Risk Impact	Mitigations/comments
7. Procurement	Medium	Low	The central management unit will be capacitated with a dedicated procurement team and technical support will be provided by IFAD to overcome any bottlenecks in the procurement procedures and accelerate the procurement process
8. Stakeholders	Low	Low	
9. Environment and social	Medium	Medium	Extreme weather events mainly heat waves can have an impact on agriculture productivity. The programme will have mitigation measures in place as highlighted under the SECAP review note section (see annex 5)
Overall	Medium	Medium	



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**Annex 10: Exit Strategy**

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Programme Management Department



## **Annex 10: Exit Strategy**

1. STAR's exit strategy is built on i) the improved capacity of MALR to continue the implementation of relevant parts of STAR on programmatic basis; ii) the successful engagement of financial institutions to support the pro-poor business opportunities unlocked through STAR interventions; iii) strengthened community level institutions and human capacities iv) successful linkages of community level institutions to external resources; and v) increasing the presence of a network of technical service providers to continue strengthening STAR's achievements.

2. **Improved capacity of MALR:** IFAD support during the first six years will enable STAR to reach 160 or around 20% of the 850 villages in the programme area. STAR's implementation is designed according to a programmatic approach to capacitate the government to gradually increase the outreach of the STAR benefits to the other villages in the governorates after the six years by launching new STAR phases. To following aspects in STAR design will support MALR capacity building,

- establish a separate NPCU for IFAD projects in Cairo;
- Competitively recruit full time technical staff in the NPCU from the open job market
- develop a dedicated STAR GPCU within the directorate of agriculture in each governorate;
- deploy full time seconded staff in the GPCUs
- establish clearly documented, unambiguous and streamlined technical guidelines and administrative systems to continue the implementation of the STAR interventions in subsequent phases; and
- operate a "programme support" initiative within the NPCU and GPCUs whereby the government will depute young officers from different departments to these Units for 6 to 12 months on a rotational basis for orientation and hands-on experience of STAR implementation

3. The NPCU and the GPCUs will be led by Directors seconded by the MALR resulting in the full government involvement and ownership of the technical achievements and progress of these STAR implementation units. Simultaneously, the engagement of the seconded staff with the technical experts recruited from the open market will help the seconded staff to upgrade their skills, orientation and approach to STAR implementation and will develop their ability to lead the implementation of star activities in future phases. The establishment of clearly documented and streamlined technical and administrative procedures in the implementation units will assist the newcomers to these units to readily orient themselves, settle down and deliver according to the expectations from their positions.

#### **4. Successful engagement of financial institutions to support the pro poor business opportunities unlocked by STAR**

5. A range of financial institutions will partner with STAR to provide financial support the pro-poor business opportunities that are unlocked through STAR interventions. When these business ventures are successful the financial institutions will automatically become financing partners for supporting the future growth and development of these business initiatives. Thus, the successful engagement of the financial institutions will develop the pathway for STAR to make a smooth exit. Further, from the beginning the financial institutions will finance the STAR supported business initiatives using a combination of IFAD loans and other resources leveraged by the IFAD loans. Consequently, from the onset, the financial institutions will develop their interest and engagement in the STAR supported pro poor business initiatives driven by commercial interests and not merely to fulfil development objectives fuelled by the access to IFAD loan funds. The success of the pro-poor businesses in the STAR clusters will motivate the financial institutions to tap this latent business segment even outside the STAR

supported villages. Consequently, the financial institutions will automatically engage themselves in the scaling up of the STAR supported pro poor business models in other clusters and other governorates in the future as a part of a programmatic approach.

## 6. **Strengthening community level institutions and human capacities**

7. STAR will strengthen community level institutions, mainly CDAs (including sometimes cooperatives where relevant) by

- i. focusing on their institutional development;
- ii. enabling their financial sustainability; and
- iii. developing their technical capacity to ensure that they can continue providing services to target households even after STAR.

8. *Institutional development of the CDAs:* This will involve strengthening the governance and management roles in the CDAs and ensuring transparent financial management practices within them. STAR will also develop the pro-poor orientation of the CDAs and enhance their focus on increasing their membership to include at least 60% members from very poor and poor categories, women and youth. Clear protocols for consultative decision-making and conflict resolutions will be established. These inputs will provide a strong platform for pro-poor focus and institutional continuity of the CDA's even after STAR.

9. Additionally, STAR will strengthen the CDAs to ensure transparent management and accounting of the income earned directly or indirectly by the CDAs from STAR supported businesses. STAR will support the CDAs to develop necessary foundation documents, members rules and regulations and framework for activities and resource generation. Where relevant, STAR will support the registration of these institutions and the opening of their bank accounts. Capacity building and training will be supported focusing on governance, management and leadership aspects, project management areas, book keeping and financial management areas and a range of other technical areas to develop the human capacities necessary for their transparent and robust management.

10. *Financial sustainability of the CDA:* The financial sustainability of CDAs will enable them to continue nurturing and guiding the STAR supported activities in the villages and will set the stage for STAR to make a smooth exit. STAR will assist the CDAs to develop their financial sustainability plans which will outline how they can meet the future costs of their developmental services to the target households even after STAR. Broadly, the CDA's will be encouraged to meet these costs through three streams of financial flows,

- earning commissions on the volume of business brokered by the CDAs between the marketing actors and the supported PMAs: This will build on current practices followed in many CDAs which collect a small fee for helping the marketing associations supported by them to develop sales contracts with buyers. STAR will facilitate the development of transparent norms for the CDAs for the collection and utilisation of such financial revenue;
- earning slender financial margins by intermediating and credit support from financial institutions to the target households (detail in the next section);
- serving as village level apexes of savings groups developed at the village level, with the mandate to invest this capital in revenue generating activities. STAR will promote savings culture within all institutional levels, particularly in the income generation enterprise groups developed in the villages. Experiences with such savings in many countries show that that the volume of savings by these smaller groups can sometime grow to a stage when they exceed the capacity of the group to utilize this capital fully. In this situation the surplus savings funds can be utilised by a village apex, which can be a CDA, to invest in profitable businesses with transparent profit sharing mechanisms agreed between the CDA and the savings group; and

- collecting fees for training, technical assistance and capacity building inputs to PMAs and individual households.

11. **Linking community level institutions to external resources**

12. STAR will link the CDAs to three categories of external resources in order to build their capacity to continue providing village level services after STAR; These categories are

- linkages to financial institutions;
- linkages to marketing and production development actors; and
- linkages to technical service providers.

13. **Linkages to financial institutions:** The strong engagement of the CDA's with financial institutions will enable STAR to make a smooth exit. CDAs will be linked to financial institutions in both capacities, i.e. facilitating credit from banks and MFIs to target households as well as serving as financial intermediaries that borrow from the financial institutions and lend to the target households. In both scenarios, the CDAs will develop a strong understanding of the financial products, eligibility criteria and training needs of target households to access credit. This knowledge will enable the CDAs to continue guiding the target households to successfully maintain their relationships with financial institutions even after STAR.

14. Further, when engaged as an intermediary to supply credit to the target households, the CDAs can earn slender margins to contribute to their financial sustainability and meet the cost of their delivering their services to the target households.

15. **Linkages to marketing and production development actors:** Strong connection of the CDA's to marketing and production development actors will facilitate STAR to make a smooth exit. During STAR implementation the CDAs will be at the centre stage of business plan development, negotiations and the contractual arrangements to solidify partnerships between the marketing actors and PMAs. These marketing actors will comprise both export oriented agribusinesses as well as actors catering to the domestic market such as processors, wholesalers and retail marketing chains. Similarly, the CDA's will play a central role in developing production focused partnerships between PMAs and production support actors such as quality input suppliers, suppliers of machinery services and advisory services (private sector, agriculture universities and research centres) for supporting production improvement by PMAs. The involvement of the CDAs in developing marketing and production support linkages to the target households will develop their capacity to continue with these functions even after the first six years and will enable STAR to make a smooth exit.

16. **Linkages with technical service providers:** STAR will link the CDAs to technical service providers which are active in delivering technical support related to institutional, community and business development areas. The technical service providers will be drawn from private consultancy firms, government agencies as well as large NGOs active in the area. STAR will capacitate the CDAs to establish direct lines of communication with these service providers. This will empower the CDAs to engage these service providers even after STAR completion based on requirement.

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#### **Annex 12: List of eligible activities to be financed by FIPS**

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**Annex 11: List of eligible activities to be financed by FIPS (if applicable)**

*This annex should present the list of activities to be financed by the FIPS, along with a justification for the requests of the funds based on lessons learnt from supervision of ongoing projects on implementation challenges (e.g. start-up delays, disbursement delays, project management recurrent issues), describing how this project will overcome the challenges or replicate good practices.*