IFAD
Investing in rural people

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Resilient Land & Resource Management Project

Final design report

Draft main report and appendices

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Currency equivalents

Currency Unit	= NIS (New Israeli Shekel)
USD 1	= NIS 3.74

Weights and measures

1 kilogram	=	1000 g
1 dunum	=	0.1 hectare
1 hectare	=	10 dunums

Abbreviations and acronyms

AFOLU	Agriculture, Forestry and Other Land Use
AMENCA	Australian Middle East NGO Cooperation Agreement
ANERA	American Near East Refugee Aid
AWPB	Annual Work Plans and Budgets
BDS	Business Development Services
CAC	Construction Advisory Committee
CCKP	Climate Change Portal
CPM	Country Programme Manager (IFAD)
DANIDA	Danish International Development Assistance
DFID	Department for International Development
DRM	Disaster Risk Management
EIRR	Economic Internal Rate of Return
EQA	Environment Quality Authority
ESD	Extension Service Department/MoA
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GCF	Green Climate Fund
GDI	Gender Development Index
GDP	Gross Domestic Products
GIS	Geographic Information System
GNI	Gross National Income
GNP	Gross National Product
GoP	Government of Palestine
GPS	Global Positioning System
Ha	Hectare
HDI	Human Development Index
HH	Household(s)
ICT	Information and Communications Technology
IFAD	International Fund for Agricultural Development
IFMIS	Integrated Financial Management Information System
IsDB	Islamic Development Bank
JICA	Japan Cooperation International Agency
KM	Knowledge Management
M&E	Monitoring and Evaluation
MFIs	Microfinance Institutions
MIC	Middle Income Country
MoA	Ministry of Agriculture
MEF	Micro Entrepreneurship Facility
MoFP	Ministry of Finance and Planning
MRPs	Multi Stakeholder Rural Platforms
MSMEs	Micro, small & medium sized enterprises
MTR	Mid Term Review
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
NPA	National Policy Agenda
NARC	National Agricultural Research Center

NASS	National Agricultural Sector Strategy
NDC	National Determined Contributions
NDVI	Normalized Difference Vegetation Index
NGOs	Non-Governmental Organizations
NIS	New Israeli Shekels
NPV	Net Present Value
OECD	The Organization for Economic Cooperation and Development
OFID	OPEC Fund for International Development
PA	Palestinian Authority
PARC	Palestinian Agricultural Relief Committees
PCBS	Palestinian Central Statistics Bureau
PCR	Project Completion Report
PECDAR	Palestinian Economic Council for Development and Reconstruction
PEFA	Public Expenditure and Financial Accountability
PER	Public Expenditure Review
PIM	Project Implementation Manual
PLA	Palestinian Land Registration Authority
PMDP	Palestinian Market Development Project
PMU	Project Management Unit
PNRMP	Participatory Natural Resources Management Programme
PP	Procurement Plan
PPL	Public Procurement Law
PPE	Project Performance Evaluation (IFAD Independent Office of Evaluation)
PSC	Programme Steering Committee
RELAP	Resilient Land and Resource Management Project
RDP	Rehabilitation and Development Project
RIMS	Results and Impact Management System
SER	Shadow Exchange Rate
SERF	Shadow Exchange Ratio Factor
SME	Small and Medium Enterprises
SECAP	Social, Environmental and Climate Assessment
SOPs	Standard Operating Procedures
SWOT	Strengths, weaknesses, opportunities, threats analysis
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund is a United Nations
UNRWA	United Nations Relief and Works Agency for Palestine
USD	United States Dollar
VAT	Value-added Tax
VC	Value chain
VCF	Value chain fund
WB	World Bank
WFP	World Food Programme
WOCAT	World Overview of Conservation Approaches and Technologies
WOP	Without Project Analysis
WP	With Project Analysis

Map of the RELAP area

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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.

IFAD *Map compiled by IFAD* | 14-12-2017

Executive Summary

Palestine is at a crossroad with increasing fragility, heightened geopolitical uncertainty and accelerating climate change, which are risking the further marginalisation of the poor, not least in rural areas. This unique confluence of factors has created exceptional challenges for the rural poor, which in turn requires a multifaceted response from all development partners, domestic as well as external. First and most fundamentally, land ownership and access to water resources for Palestinian living in the West Bank are being increasingly challenged. With the expansion of Israeli settlements, the separation wall, and traditional tenure system under pressure, this is threatening not only the rural economy by marginalising farmers, but also undermining the upstream value chains. Indeed, this extraordinary situation has resulted in a fragmented geography, where Palestinian farmland is at risk of being lost if investments and effective use are not undertaken, and where it is difficult for Palestinian farmers to move freely across their own land. Such a set-up challenges the coherent management of natural resources in the wider landscapes, as well as the sustainability and resilience of rural livelihoods, making economic and social life increasingly difficult. Especially rural lands (in what is known as Area C) are being contested and it is increasingly being recognised by all development partners that urgent action is needed.

The restrictions in the ability of Palestinians to effectively access land and also water resources (with more than 80% of the groundwater reserves not accessible to them) is seriously constraining investment and growth. These restrictions make the Palestinian population among the most water stressed in the world, which is further exacerbated by the observed increase in temperatures and more erratic rainfalls over the last decades, adding to the vulnerability of rural villages and the agricultural sector. This vulnerability has also been driving high poverty rates, reaching 17.2% of the rural population in 2011. Future climate change scenarios foresee even more water scarcity, while the current adaptation capacity of farmers and the public response is hampered by inadequate agro-climatic information, lack of climate change impact modelling for different farming systems, and limited interinstitutional capacity to implement harmonized and actionable adaptation strategies.

Challenged access to land and water is only part of the problem facing the rural poor. For many smallholders, the high land fragmentation and limited commercialisation is a key break on their ability to achieve economies of scale and higher value addition. Limited options for bulking and storing their produced, combined with weak value chains, conspire to perpetuate a vicious circle of low volume, low productivity, limited commercialisation leading to low rural incomes. Moreover, especially women and youth are marginalised from rural productive activities as they are disproportionally excluded from access to land and investment resources, making those two segments particularly vulnerable.

The resilient land and natural resource management project (RELAP) aims to drive inclusive and adaptive changes in all the of the above-mentioned challenges[2]. Consequently, the project will seek to catalyse more secure land tenure for smallholders by promoting climate resilient land development activities, using past experiences as a robust platform, but also by innovating around less costly and less invasive land practices that are being tested and tried with farmers. The key theory (borne out of robust evidence) is that by encouraging farmers to start or intensify cultivation of land, their incomes, tenure and land legal security are increased. Moreover, by promoting more climate resilient land-uses and approaches for land development, the RELAP can play an important part in enhancing farmers' ability to manage climate change, in particular increased water scarcity.

[2] RELAP has been designed by Ammar Salahat, acting general director of the land directorate, MoA; Annabelle Lhommeau, IFAD country programme manager for Palestine; Rikke Grand Olivera, lead adviser and natural resource management specialist, IFAD/PTA; Kaushik Barua, programme officer for Palestine, IFAD; Peter Frøslev Christensen, consultant team leader; Thierry Lassalle, clustering and value chain expert; Maria Donnat, M&E/targeting specialist; Anta Sow, financial management and procurement Specialist; Agnese Tonnina, economist/financial analyst; Samvel Ghazaryan, infrastructure engineer, TCI/FAO and; Renaud Colmant, climate change specialist, IFAD. FAO and the Environment Quality Authority – in particular Nedal Katbeh-Bader, minister's advisor for climate change as well as national focal point for UNFCCC and IPCC– contributed to the conceptualisation of the RELAP key climate change engagements.

RELAP will, in cooperation with other development partners, also seek to strengthen commercialisation and market integration for farmers benefitting from land development support. In addition, the project will also support small business development for especially the marginalised rural women and youth without access to land. The RELAP key theory of change rests on the assumption that by encouraging increased investments in bulking of agricultural produce, commercialisation and linking to upstream actors in the value chains, these value chains can be promoted in more effective ways, and hence rural incomes can be increased.

Finally, the RELAP will also promote climate adaptation head on, through investments in generating agro climatic information and climate impact modelling accessible to farmers across Palestine. This will be done through the installation of agro-meteorological stations that can provide farmers with concrete and timely actionable information on climate trends and on how to adapt to the changes. That will be complemented by capacity development to link Palestine to leading research and knowledge networks regionally and internationally. Technical assistance will also be provided to extension services providers and farmers to assist in capacity development for improved adaptation.

Translating RELAP's ambitions into impacts, outcomes, components and activities

RELAP will support key partners in accelerating resilient rural economic growth by both expanding the area under cultivation as well as increasing the productivity and profitability of rural production. Special attention will be made to ensure adaptiveness and inclusion of less advantaged segments of the rural population, in particular families with limited access to land, women and youth, as well as promoting increased climate resilience through adapted agricultural practices, and enhanced governance and management of land and water. Against this background the RELAP will have the goal of *improving the resilience and incomes of rural producers' households in the West Bank*. It is expected that at least 30 000 households (about 150 000 individuals) will benefit from this directly, through higher incomes and enhanced resilience to climate change, the latter especially concerning water access and improved water storage capacity of soils.

RELAP will consequently emphasize resilience of rural economic activities. This is expected to lead to three core impacts: Firstly, it will reduce food insecurity in targeted governorates by increasing food production and improving affordability of key nutritional foods. This is particularly pertinent in a context where imported food can be blocked with virtually no notice. Secondly, it will increase incomes of the rural poor from higher production volumes and from tighter market integration that leverage value addition for higher profitability. Thirdly it will increase adaptive capacities of both farmers and rural households.

Thus, the development objective will be *to increase climate resilience, land productivity, agricultural production and marketing opportunities for smallholders and landless rural poor.* Core indicators for achieving the development outcomes will include, among others: the number of households reached and supported; the percentage of supported farmers reporting an increase in production and increasing their resilient score; and average percentage increase in annual yields, by type of crops and livestock.

While land development and related natural resources management activities will constitute the core of the RELAP intervention, these will be made more climate resilient to current and future climate trends, supporting changes in land uses and in crop and livestock production systems and practices. Off-farm livelihood activities will be promoted, specifically targeting vulnerable rural people and climate adapted small-scale businesses. Interventions will be clustered, using the village as an entry point of interventions rather than the individuals. All this will result in RELAP being implemented utilising a holistic approach, with three complementary technical components.

The first component will enhance access to productive agricultural land and water resources, through a range of investments in resilient land development, agricultural roads, soil improvements and rain water harvesting facilities linked to water-use efficient complementary irrigation systems as well as the related capacities to sustain the investments. These investments will be undertaken in close partnership with beneficiaries, municipalities and villages, and will be based on business plans for the developed land. This component will also support testing and monitoring of adaptation benefits, as well as

cost-efficiency of land development approaches and practices for different land-uses applicable for the conditions of the West Bank. The main outcomes of the component will be more productive land. Finally, improved connectivity will also drive profitability and incomes.

The second component will improve market linkages for the beneficiaries of land development under component 1, by facilitating clustering of agricultural products at village level. This will aim at attracting and connecting farmers with more market actors (e.g. traders, retailers and input suppliers) and increasing local demand for agricultural products. Local bulking will also be enhanced by the rehabilitation / building of agricultural roads linking developed lands to villages (under the first component). Creating such a conducive agricultural trade context may also provide seasonal jobs in the agribusiness sector. Also, specific focus of component 2 will be on creating entrepreneurial opportunities and addressing constraints faced by the marginalized, including landless women and youth. With accelerating climate change, extremely high youth unemployment and low participation of women in the labour force, there is a clear need to develop a diversity of climate resilient income generating activities and opportunities for these groups to develop market-led enterprises in the farming and off-farming rural sectors. Given the initial high costs required to develop climate-sensitive practices, a micro-enterprise facility will be established, which will include climate adaptation as a key criterion, for the award of investment grants. The main outcomes of the component will be: increased production and marketing of agricultural produce by 30%; and the development of 2,575 micro-enterprises that can harness the improved market opportunities, amongst whom 900 are managed by women and youth.

The third component will improve public services for climate resilient agriculture and support Palestinian farmers in taking timely and effective action to protect their crops and animals from pests, diseases, extreme weather and climatic conditions. To increase the resilience of farmers to climate change, this component will strengthen their capacities in absorbing climate risk through its anticipation ad early action. Farmers will also be supported to adopt new practices through access to knowledge, and transformation of livelihood strategies further supported by an enabling environment. To overcome current critical challenges in Palestine for a transformative change in dealing with climate change impacts on agriculture, the third component aims to promote public services that enable farmers to take timely and risk-informed actions; and to consolidate capacities of the MoA, the Environment Quality Authority (EQA), Meteorology Department and other related actors for advanced information, evidence and programming on climate change adaptation in agriculture. The main outcomes of this component will be the number of farmers using advanced agro-climate information and extension services for farming decision making; and secondly, the number of national initiatives in agriculture mainstreaming climate resilient approaches.

Finally, RELAP proposes a paradigm shift in land-use and development in the West Bank for small farmers towards resilience under increasingly water constrained production conditions. The project will inform the policy agenda on upscaling climate resilience land development approaches. Knowledge products and policy briefs will be generated to inform policy reforms and up-scaling strategies to be supported in component 3.

RELAP will be implemented over a 6-year period, starting in the course of the second semester of 2018. The overall project cost for the full 6 years is estimated at around USD 41.37 million, inclusive of a financing gap described on the next page. Project investments are organized into four major components: (i) Climate resilient land development (60 per cent of the total costs); (ii) Market linkages for the rural poor (23 per cent of the total costs); (iii) Improved public services for upscaling climate resilient agricultural land use and production systems (8 per cent of the costs); (iv) Project management[3] (9 per cent of the costs). A summary breakdown of the project costs by components is shown below.

[3] Included seconded staff from the government, which is accounted as PA in kind-contribution.

Palestine
Resilient Land and Resource Management Project (RELAP)
Project Components by Year -- Totals Including Contingencies
(USD '000)

	Totals Including Contingencies						
	2018	2019	2020	2021	2022	2023	Total
A. Climate resilient land development							
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	-	200	123	126	128	150	726
2. Resilient land development	18	4,491	6,237	6,154	4,235	44	21,179
3. Investment in agricultural roads	-	671	688	701	706	-	2,766
Subtotal	18	5,361	7,048	6,981	5,069	194	24,671
B. Market linkages for the rural poor							
1. Rural bulking of agricultural products	182	1,871	1,862	214	134	-	4,263
2. Inclusive entrepreneurship development support	27	1,269	2,508	1,274	18	3	5,098
Subtotal	209	3,140	4,371	1,488	151	3	9,362
C. Improved public services for upscaling climate resilient agricultural land use and production systems	719	976	616	462	332	245	3,351
D. Project Management	752	591	624	598	609	815	3,989
Total PROJECT COSTS	1,698	10,069	12,659	9,529	6,161	1,257	41,373

The total project costs of USD 41.37 million will be financed by i) an IFAD grant (from the trust fund for Gaza and the West Bank) of USD 4.56 million, ii) a cash contribution from government of USD 1.17 million, iii) an OFID grant of USD 0.95[4] million (confirmed), iv) an in-kind contribution from the government currently estimated at USD 6.55 million[5], v) an in kind and cash contribution from beneficiaries, respectively of USD 3.61 million and USD 1.28 million (in the form of cash, casual labour, and some inputs and equipment), and vi) a contribution toward the road construction from the village and municipality councils (estimated at USD 0.24 million). Funds of approximately USD 23 million – including a grant from the Green Climate Fund (GCF) of USD 15 million and a grant of approximately USD 8 million from other partners/entities - are to be budgeted as a financing gap. IFAD, MOA and EQA will be in constant contact with the GCF and other potential co-financiers to mobilize this amount to fill the financing gap or otherwise seek alternative financing sources. It is worth noting that in October 2017, the GCF Secretariat notified Palestine of the approval of two "GCF readiness proposal and preparatory support project in Palestine". One with UNDP acting as Accredited Agency and delivery partner, and the other one with UNEP.

Implementation modalities

IFAD has a long standing and positive partnership with the Ministry of Agriculture, working with on land development in the West Bank. The ministry will therefore be the RELAP main executing agency. All project resources will also be channelled to the ministry and executed through a financing agreement to be signed between IFAD and the Ministry of Finance and Planning, in its quality of Recipient Representative. The Ministry of Agriculture will set up a project management unit, comprising of seconded ministry staff as well as specialists to be hired from the market, who will be directly responsible for the implementation – together with partner NGOs to be competitively selected – of the two first RELAP components. In the RELAP financing agreement, FAO will be mentioned as implementing partner for the RELAP third component, working under the coordination and supervision of - and reporting to - the project management unit. EQA will be part of the RELAP steering committee. Implementation arrangements are described in details in the PDR main text (paragraphs 97 to 102) and in Appendix 5 (tables 36, 37, 38 and 39).

[4] The OFID grant will be USD 1 million, out of which USD 50,000 (5%) will be IFAD management fee.

[5] It will cover VAT, salaries of seconded staff, office space and utilities

Logical Framework

Objectives and expected results	Indicators		Targets			Means of Verification			Risks
		Baseline data	Y1	Mid-term	Y6	Source	Frequency	Responsib.	
Goal: To improve the resilience, land security and livelihoods of rural producers' households in selected villages of the West Bank.	Beneficiaries reporting increase in revenues of:					(i) Baseline and impact surveys; (ii) Sample of farmers' records	(i) Y1, Y3 and Y6; (ii) Annually	PMU	Sudden increase in prices may cause an increase in households' expenditures and override economic resilience benefits.
	- *At least 20% from agriculture for 75% of the 4 500 targeted farmers (component 1)*	n/a	n/a	1,350	3,375				
	- *At least NIS 2,293/month for 70% of 900 investment grant beneficiaries (sub-com 2.2)*	To be collected in Y1	n/a	180	630				
	Number of targeted households (all components) with enhanced resilience to climate change **(A)**	To be collected in Y1	n/a	9,000	24,000	Baseline and impact surveys	Y1, Y3 and Y6	PMU	
Development Objective: To increase climate resilience, land productivity, agricultural production and marketing opportunities for smallholders and landless rural poor	Number of households reached and supported	0	1,231	24,154	30,000	Annual outcome surveys (AOS)			Volatile economic and political situation disrupt project implementation. Severe droughts may cause low agricultural productivity or production. Mobility restrictions may disrupt production and marketing.
	Number of supported households (subcomponent 1.2) reporting increase in production (RIMS)	n/a	0	265	1,590	AOS	Annually, starting Y2	PMU	
	Number of hectares of land brought under climate-resilient management(RIMS)	0	0	955	1,800	Implementers' activity report	Annually	PMU	
COMPONENT 1									
Outcome 1*:* Enhanced smallholders' and livestock keepers' access to productive agricultural land and water	Number of supported farmers reporting reduced water shortage vis-à-vis production needs (RIMS)	n/a	0	795	2,120	AOS	Annually	PMU	Delays in selection or contracting of key implementing partners may cause implementation delays. Interference in local beneficiaries' selection process may cause mistargeting.
	Number of farmers and livestock keepers reporting adoption of climate resilient practices (RIMS)	0	0	1,325	2,120	AOS	Annually	PMU	
Output 1.1: *Unproductive land is developed using climate-resilient techniques*	Number of ha of reclaimed or rehabilitated land areas (both agricultural land and rangeland) that became suitable for agricultural use (MOA):			955	1,800	Implementers' activity reports	Annually	PMU and implementers	
Output 1.2: *Men and women smallholders are provided with legal support to obtain land property titles*	Number of persons provided with legal support to obtain formal land title **(B)**	0	0	20	40.	Implementers' activity reports	Monthly	PMU and implementers	Social or family pressure prevents women from seeking project support. Long court delays.
Outcome 2: Enhanced smallholders' physical access to markets	Number of farmers whose land holdings are connected to constructed or rehabilitated road**(B)**	0	0	2,550	4,500	AOS	Annually	PMU and implementers	Difficulties in identifying land development beneficiaries living close to one another may inflate costs or result in lack of road access for some beneficiaries
Output 2.1: *Market-access rural roads are constructed or rehabilitated.*	Number of km of roads constructed or upgraded (MOA, RIMS)	0	0	25	100	Implementers' activity reports	Monthly	PMU and implementers	
COMPONENT 2									
Outcome 3: Increased marketing and business opportunities for farmers, rural producers and traders	Number of traders, rural producers and brokers with improved marketing opportunities **(B)**	0	0	3,326	6,650	AOS	Annually	PMU and implementers	Farmers' reluctance to use new marketing channels. Traders' and brokers reluctance to join competitors in MRP may hinder results

Objectives and expected results	Indicators		Targets			Means of Verification			Risks
		Baseline data	Y1	Mid-term	Y6	Source	Frequency	Responsib.	
***Output 3.1**: Multi-stakeholders' rural platforms (MRP) are established and facilitated*	Number of micro-entrepreneurs receiving agricultural business development services (MOA, RIMS) **(B)**	0	0	1,675	1,675	Implementers' activity reports	Monthly	PMU and implementers	Lack of facilitation skills by implementers may jeopardize MRP's success.
***Output 3.2:** Village-level collection centers are rehabilitated/constructed, with functional management bodies.*	Number of collection centers constructed (RIMS)	0		11	11	Implementers' activity reports	Monthly	PMU and implementers	Difficulties in identifying suitable municipal land. Political influence may result in selection of unsuitable location.
Outcome 4: Enhanced income-generating capacities for poor, unemployed and landless rural youth and women.	Number of supported (*existing*) micro-enterprises reporting an increase in profit (RIMS)	0	0	1,172	1,507	Annual outcome surveys	Annually	PMU and implementers	Social or family pressure prevents women from seeking project support. Husbands' capture of women's benefits.
***Output 4.1:** Targeted, poor rural youth and women provided with investment grants and business skills training.*	Number of persons receiving investment grants and receiving BDS**(B)**	0	0	675	900	Grants' management committee reports	Monthly	PMU and implementers	The lack of reliable data on applicants' income, may cause mis-targeting
COMPONENT 3									
Outcome 5: Enhanced access by farmers and rural producers to practical agro-meteorological information	Number of supported farmers and livestock owners reporting accessing and using agro-climate information bulletins	n/a	0	15,000	27,000	AOS	Annually	PMU	Difficulties in tracking the total number of households accessing agro-meteorological information in the project target area, may be an obstacle to the proper measurement of results.
***Output 5.1.** Weather stations upgraded/installed and equipped, with relevant staff trained in their proper operation*	Number of agro-metrological stations upgraded/installed and equipped	0	0	12	12	Implementers' activity reports	Monthly	PMU and implementers	
***Output 5.2.** Farmers have received technical advices in their adoption of climate resilient agriculture practices and are provided with regular agro-climate information*	Number of farmers receiving technical advices, by topic**(B)**	0	1,231	17,847	30,000	Implementers' activity reports	Monthly	PMU and implementers	
Outcome 6: Strengthened institutional and technical capacities for the implementation of the "*Action Plan for improving the Institutional Framework for Climate Change in Palestine"*	Percentage of Action Plan adaptation activities fully implemented	0%	0%	40%	70%	Implementers' activity reports	Quarterly	PMU and implementers	Insufficient cooperation between MoA, EQA and FAO could jeopardize results.
***Output 6.1:** MOA and governorates have capacities to mainstream climate change adaptation measures in working/operational procedures*	*Number of governorates that have included climate change adaptation measures in annual planning, budgets, programs, and monitoring*	0	0	4	11		Monthly		

(A) *Indicator on climate resilience on beneficiary households will be monitored using a resilience score card as explained and presented in SECAP Appendix 13 and in M&E Appendix 6*

(B) *Data for these indicators will be disaggregated by sex (number of men and women to be reported separately) and age group (number of youth to be reported separately).*

- *In addition to this log-frame, a more detailed results framework is presented in Appendix 6, table 44.*

I. Strategic context and rationale

A. Country and rural development context

1. In 2017 Palestinians are marking 50 years of occupation of the Gaza Strip and the West Bank. This operating environment is unique and is reflected in this proposed engagement by IFAD. Overall, the operational environment is characterized by: a fragile security situation; numerous restrictions on movement and access to natural resources including access to large areas of the West Bank, limited access to water resources for all Palestinians, limited access to rangeland affecting in particular Bedouin communities; limited possibility for building and developing in Area C[6] (details in appendix 1); and a settlement expansion, which created a fragmented geography where Palestinian farmland is at risk of being lost if investments and effective use is not shown. This situation has resulted in a protracted humanitarian crisis: some two million people – nearly half of all Palestinians, including 70% of all residents of Gaza, are projected to need some form of assistance in 2017, often food and medicines[7]. This unique environment, that has widespread impact on the lives of people, include restrictions on: access and movement of people and goods, and access to natural resources and economic and productive activities. It also results in forced displacement, regular clashes, and difficulties to obtain permits for travel across the West Bank, affecting some groups disproportionately more than others.

2. Territorial fragmentation on account of the physical, political and administrative separation of Gaza and the West Bank is further worsened by the inability of the P.A to access most of Area C (see footnote). This has serious ramifications, for especially agriculture and rural development, increasing both transaction costs and unpredictability, and depressing incomes, as Area C is where the majority of the West Bank's farm and rangeland lie. In addition, 82% of the groundwater reserves are currently not accessible to the Palestinians. With an annual average rainfall from 100mm – 700mm depending on location, this is making Palestinians among the most water stressed people in the world[8]. This is further exacerbated by the increase in temperatures and more erratic rainfalls over the last decades due to climate change, adding to the vulnerability of rural communities and the agricultural sector. Moreover, much of the fertile land is also located in Area C, where it is being either completely closed off to Palestinians, or only accessible with considerable difficulty and often at prohibitive cost (e.g. multiple security check points not allowing vehicular access or with unpredictable denial of access). It is estimated that the restrictions in Area C impose a cost on the Palestinian economy in the magnitude of USD 2.2 billion yearly or around 20% of GDP.[9] The occupation has also resulted in the expansion and construction of new Israeli settlements, creating a segmented geography where Palestinians are impeded from moving freely across their own land and applying a coherent management of their wider landscapes. This is undermining both the territorial integrity and the wider ability to create a contiguous and economically and politically sustainable country.

3. **Poverty.** Despite these challenges, Palestine has achieved middle income country status (per capita gross national income equals USD 4 699 in PPP dollars) and with a Human Development Index (HDI) score of 0.686 both in 2014 (a 5.7% increase since 2005). Palestine is placed within the "medium human development" category and ranks 107th out of 187 countries and territories in the HDI. According to latest estimates, 25.8% of the Palestinian population falls below the poverty line of NIS 2,293 (or USD 650) per month and some 8.8% was below the "deep poverty line". The proportion of the population in the West Bank below the poverty line has steadily decreased from 24% (2006) to 18% (2011). There are however significant differences across the 11 governorates with 30% poor in Hebron, but only 9% in Ramallah. While the occupation is considered a primary driver of economic

[6] Under the framework of the Oslo Accord in 1993, the Palestine Authority (PA) was designated to have exclusive control over both internal security-related and civilian issues in Palestinian urban areas (referred to as Area A) and only civilian control over Palestinian rural areas (Area B). The remainder of the territories (Area C covering 63%) including Israeli settlements, the Jordan Valley region and bypass roads between Palestinian communities, were subject to future negotiations for clarifying the process of transferring part or all of these areas to the PA. However, such negotiations failed to progress and the Israeli claimed part of Area C has been expanding since the Oslo Accords.

[7] United Nations (2016), Common Country Analysis: A Perspective on Vulnerability and Structural Disadvantage in Palestine

[8] Domestic water consumption per capita per day for Palestinians in the West Bank is estimated to be 50 litres which is way below the absolute minimum standard of 100 litres/day/capita recommended by the WHO. "West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development", World Bank, 2009

[9] World Bank: *Area C and the Future of the Palestinian Economy* Washington, 2015

hardship for Palestinian households, poverty is also strongly correlated with the household's size and the education and employment status of the household's head. Poverty rates are thus found higher among larger households and in households headed by an adult with a low level of education, while individuals living in households with one or more unemployed members are more than twice as likely to be poor. More detailed information is found in appendix 2.

4. The gap between male-headed households and female-headed households has reduced (18.3% of female-headed households were poor in 2011 against 17.4% for male-headed households, from respectively 31.4% female-headed households and 23.4% male-headed households in 2006). Similarly, the gap between rural and urban households has tended to narrow-down over time.

5. **Land uses and main farming systems in the West Bank**. The main farming systems in the West bank include: i) orchards on terraces; ii) orchards on terraces, intercropped with annual crops; iii) integrated field crops (wheat, barley) and livestock systems; iv) vegetable production in open fields or green houses; v) grape fields; and vi) rangelands used by Bedouins or other livestock keepers. More details are presented in appendix 4.

6. **Food security.** 1.6 million Palestinians (32%) were food insecure in 2014. In the West Bank only, the percentage has remained stable since previous survey period, at 19%. Food insecure households are evenly split between the severely food insecure and moderately food insecure, while the marginally food secure and food secure households account for 15% and 58% respectively. Food insecurity tends to be higher in rural areas and among women-headed households. A higher proportion of food insecure households is also found among households deriving their primary income source from agriculture (35%) or from private sector employees (34%), whereas this proportion is lowest among family business owners (19%), government employees (26%) and for households whose head works in Israel (27%). The proportion of food insecure households is also found highest in Area C (38%), compared to 30% in Area A and B, while restrictions of movement seem to be correlated with food insecurity. Food insecure households have also more family members than food secure families and their head is more likely to be unemployed.

7. **Nutritional status.** The food insecurity is a key contributor to mal nutrition rather than cultural and food choice factors. In 2016, WFP estimated a global chronic malnutrition rate of 7.4% among children aged 6 to 59 months. Since 2004, the prevalence rate of moderately and severely underweight children has reduced overall, from 4,9% to 1.4%10. A similar trend is also noted in the West Bank, together with a marginal difference between urban (1.3%) and rural areas (1.6%). The 2011 World Bank poverty assessment showed that emergency assistance has been reasonably successful in preventing widespread malnutrition. There are a coordinated network of 14 partners monitoring and working on food and nutrition security in the West Bank.

8. **Gender.** The Gender Development Index (GDI) score of 0.974 is significantly higher than in the average for the Arab region, Palestine ranking 41st out of 187 countries. This score, however, does not reflect appropriately the actual low level of empowerment of Palestinian women. Although life expectancy at birth is higher for women, the difference in human development between women and men is caused by the fact that women have fewer numbers of years of schooling and have, on average, only 20% of men's income level. The legal framework is not favourable to women and the Palestinian society is predominantly a patriarchal one in which women's role is shaped by traditions derived from tribal cultural values of the Arab region and Islamic values. This situation is exacerbated by movement restrictions: these have tended to instigate stricter control by men, and the society, over women in a proclaimed attempt to protect them from the dangers in the society. As a result, Palestine records one of the lowest female labour force participation in the world (17.9% in 2015, against 64.2% for men).

9. Other reasons for low women's participation in the labour force also include the large number of children per household due to a high fertility rate, private sector employers' preference of hiring men over women, and the fact that educated women have predominantly studied "women-appropriate" subjects for which few jobs are available outside of the public sector. Girls' and women's participation in technical training is low (some 30% of trainees) and it is even lower for vocational training (2% to 3%). Two sectors absorb most of the Palestinian women's workforce: services, including health and education (59.7% in 2011) and agriculture (13.1% of women's employment in 2015 against 7.8% of men's employment). Women's participation in the private sector economy is limited and most paid

[10] Source: Palestinian Central Bureau of Statistics (PCBS, 2016)

women are employed in the public sector. In the West Bank, women only account for 16% of the employees of micro, small and medium-enterprises and 24% of the employees of larger enterprises. Furthermore, only 3.4% of the women's workforce are entrepreneurs who have started their own busibusiness and have employees (against 16% for men), while only 13% of women in the workforce are self-employed. Most women working in the agricultural sector are involved in subsistence farming, or they work without pay in their family's or husband's land. It is thus estimated that only 1.8% of women active in the agriculture earn a wage, while only very few women are owner-operators of their farm.

10. Due to their low participation in the formal labour market, as well as issues related to inheritance, it is challenging for Palestinian women to build their own assets' base. Thus, if the inheritance law grants women the right to inherit from their parents (including land), in practice, they tend to inherit smaller shares compared to male heirs. Furthermore, for fear of deceiving their family and loosing fraternal protection, only few women are claiming their rights of inheritance and most chose to abandon their shares to their brothers. As for the few women willing to claim their shares, they face lengthy, complicated legal procedures and expensive court fees. As a result, it is currently estimated that only 7.6% of agricultural holdings in the West Bank are owned by women and most of these are small. As a direct consequence of their lack of assets, Palestinian women do not possess the collateral required to borrow money from a bank and start a business.

11. **The youth.** Palestine's population is young, with an estimated 39% below the age of 15, and almost 30% being aged 15-29 years. UNFPA has recently estimated that the population of youth in the country will double by 2050. Palestinian youth face significantly higher rates of unemployment than older workers: respectively 25.6% and 16.2% of males aged 15-24 years in the West Bank are unemployed, against 9% of males aged 35-54 years. With an unemployment rate four times higher than other women, and nearly double that of men in the same age group, young women are at an even greater disadvantage in the labour market. Several factors explain the difficulties faced by the Palestinian youth in accessing the labour market, one of them being that the educational system pays insufficient attention of the needs of the labour market. Enrolment in vocational training is extremely low (only 5% of the students in Ramallah were involved in vocational training in 2008), largely because of the prevailing, negative societal attitude towards this type of education. While enrolment rates in secondary and tertiary education are high for both girls and boys, dropout rates are also high[11] (35% for males and 29% for females in the age category 15-29), which means that a significant percentage of students leave high school or the university without a diploma.

12. All Palestinians are affected by restrictions of movements, but the youth in general, and the rural youth in particular, pay a disproportional high price. Since the second intifada, youth mobility is being increasingly restricted by parents fearful for their children's safety (in particular boys, more likely to be targeted at checkpoints). Young men are also much less susceptible than older, married men to obtain a working permit to Israel, which limits their ability to seek employment there. Also, the unemployed youth are less able than others to afford the transportation costs necessary to travel to the nearest city or youth centre in search for leisure activities, as a result of which, many are struggling to even fill their free time.

13. **Climate change.** Palestine faces an increase in the frequency of heavy rainfalls, prolonged dry periods, and rising temperatures (with a trend increase in average annual temperature of 0.27 °C/decade for the period 1960-2015). Water stress is being exacerbated as rains are more concentrated and heavier in early winter, increasing the torrential regime and thus the risk of flooding, soil erosion, and reduced infiltration of water in the soils. This results in lower availability of water in spring-summer when water demand for crop production and other human uses is higher. The precipitation increases, during early winter, cannot compensate the decrease in early spring and autumn and for increased evaporation caused by higher temperatures. Both olive and grape production (two core crops) are sensitive to heat waves, frosts and droughts and severe losses were reported in 2010 and 2015 due to extreme weather. Moreover, livestock productivity is also affected both directly as especially lamb and sheep are sensitive to cold and heat waves and there is a clear decreasing trend in total average annual rainfall in the eastern slopes, where most rangeland is found, but also indirectly as grazing land is becoming more sensitive to overgrazing and reduced vegetation, which in turn causes erosion and loss of the fertile top soil. More information is found in appendix 13 (SECAP note) on climate assessment.

[11] The key reported reasons are the lack of money or the need to support their family for males, and marriage for women.

14. **Rural development challenges and the policy response.** Inclusive rural development faces important obstacles and challenges, including, among others: i) the volatility and high insecurity, due to restriction of movements and regular clashes between Palestinians, Israeli security forces and settlers; ii) the agricultural production, which is constrained by the lack of access to water and land in Area C; iii) the impacts of climate change, adding to the existing water stress, drying and degradation of the land; iv) the high food insecurity and the lack of income opportunities for the rural population, in a context of a captive economy, where imported food can be blocked with virtually no notice and where food prices are high and volatile[12]; and v) restrictions on imports and exports of agricultural inputs and outputs, reducing predictability and investment horizons and increasing costs.

15. Further hindering rural development is the small size of farms, on average 1.2 ha (or 12 dunums) in the West Bank often spread out on several plots[13]. Clearly if the productivity of such plots was high, this could partly compensate for the small size. Unfortunately, productivity is relatively low, not least for the major tree-crop grown, olive, which is inherently low productive but also due to limited precipitation that reduce the choice of rain-fed high-productivity crops (and is a main reason for growing olive). Combined with the above-mentioned challenges, agriculture is a difficult sector to engage in. Thus, the rural urban exodus has been gaining strength. In 2000 the rural population constituted 28%, a figure that was down to 25% in 2015, whereas corresponding figures for share of labour force engaged in agriculture halved from 12% to 6%[14]. The area under permanent crop cultivation has declined from 120 000 ha in 1997 to 70 000 in 2012.

16. At the macro level, the PA's main policy is encapsulated in the National Policy Agenda 2017-2022, which has as the overall vision of a free, independent and prosperous state of Palestine. It has three pillars: 1) path to Independence, 2) government reform, and 3) sustainable development. The emphasis of the pillar on sustainable development is on revitalizing agriculture and strengthening the rural communities, not least in Area C. Moreover, the rehabilitation of land is an explicit commitment in the National Policy Agenda, as it is seen a as crucial in protecting the remaining territorial integrity of Palestine. Hence two key policy priorities for the P.A are to firstly increase agricultural plant and livestock production and to develop value chains, and secondly to protect and support farmers, particularly in areas under threat. The specific strategies for delivering on these policy priorities are detailed in the National Agricultural Sector Strategy (NASS), *2017-2022*. A key crosscutting theme in the NASS is the focus on improving steadfastness of farmers and rural communities, with explicit reference to land tenure and land security, but also as regards their ability to improve the livelihoods in rural areas, making it a pro-active and positive decision to stay in and invest in rural businesses, agriculture included. Particular emphasis is given to innovative youth, women farmers, and producers engaged in sustainable and feasible agricultural and rural activities. Water access is also singled out as a key area, partly due to the restricting access, partly due to climate change exacerbating water stress.

17. The PA has demonstrated high commitments to the global climate change agenda. Palestine was among the first countries to sign and ratify the Paris Agreement (22 April 2016) made under the United Nations Framework Convention on Climate Change (UNFCCC) and submitted its Nationally Determined Contribution (NDC) and its National Adaptation Plan (NAP) in a record time after being a party to the convention. The NDC and the NAP prioritise key adaptation actions for the agricultural sector including: Improve farmers' and agricultural engineers' capacities for irrigation management and treated wastewater reuse; introduce new fodder seeds and minimize soil erosion through minimum tillage; soil water harvesting to improve water availability and soil quality; increase agricultural water availability by constructing cisterns and rehabilitating conveyance infrastructure; and introduce/rehabilitate structures for soil and water conservation in sloped terrain to minimise soil erosion.

B. Rationale and theory of change

18. As shown in Section A, the West Bank's rural territorial viability is being threatened by a multiplicity of both manmade and natural threats that is undermining agriculture as one of the key pillars of the national economy. Consequently, many young people (in particular women) leave agriculture, this being also reflected in the aging demographics of farmers, in a country that otherwise characterized

[12] According to the 2014 socio-economic and food security survey, carried out by the Palestinian Central Bureau of Statistics, WFP and UNRWA in the West Bank, food insecurity remained at 17%, unchanged from 2012 levels.
[13] SEC: *Agriculture sector analysis in Palestine: West Bank*, 2016
[14] FAO-STAT: 'Country Profile, Palestine' 2016

by its high share of youth. With high youth unemployment and agricultural land under pressure, the PA has launched a number of initiatives to revive rural growth in general and agriculture in particular, as laid out in the NASS. Against this background and based on the past robust achievements (see Section on lessons learnt and appendix 3), the PA has called upon IFAD to assist in increasing the resilience, adaptability and productivity of the rural economy at a time characterized by transformation, increasing challenges from climate change, threats and some opportunities.

19. In Palestine, IFAD is seen as a long-term partner with a specialization in promoting land development and rural resilient transformations. In the Palestinian context, IFAD's comparative advantage is its unwavering commitment to work directly through the P.A to improve rural livelihoods using both direct assistance to the rural poor as well as indirect means (e.g. generating rural employment both on and off-farm). This will assist thousands in escaping poverty while simultaneously increasing land and food security, nutrition and resilience of livelihoods. By consistently creating employment opportunities in deprived areas, in collaboration with the Ministry of Agriculture (MoA) and in engaging with other development partners, IFAD is contributing to reducing uncertainty and also increasing the resilience of the country, by improving access to productive land and opening up and diversifying opportunities for youth and women in small businesses adapted to the challenges of climate change. This should also be seen as a strategy to breaking the vicious nexus between rural-urban migration, poverty, climate induced stresses and fragility, by providing economic opportunities that have transformational impact. IFAD's comparative advantage will also assist in innovating and turn current risks into more secure, productive and climatically resilient opportunities for the rural poor. Thus, IFAD has been one of the leading promotors of land reclamation and rehabilitation[15], which is now being scaled up with a strong focus on practices addressing climate vulnerabilities in a diversity of land-uses to enhance resilience of Palestinian farmers and herders.

20. RELAP's core theory of change aim to provide sustainable pathways out of three interlinked challenges: First and most fundamentally, land ownership and access is increasingly being challenged, with traditional tenure system under pressures, threatening not only the rural economy by marginalising farmers, but also undermining the upstream value chains. Worse, loss of land and very limited access to groundwater resources also weakens the territorial integrity of the nascent and fragile state, with fewer contiguous areas and only 20% of groundwater resources accessible for Palestinians making economic and social life increasingly difficult. Especially marginal rural lands (in Area C) are being contested, new water related infrastructures needed to cope with increasing water stress are rarely being allowed and it is recognised by development partners that urgent action is needed.

21. However, secure access to land and water resources is only part of the problem facing the rural poor. For many smallholders, the high land fragmentation and limited commercialisation is a key break on their ability to achieve economies of scale and higher value addition. Limited options for bulking and storing their produce, combined with weak value chains, conspire to perpetuate the low volume, low productivity and limited commercialisation. Moreover, especially women and youth are marginalised from rural productive activities as they are disproportionally excluded from access to land and investment resources, making those two segments particularly vulnerable.

22. Third and final, accelerating climate change is worsening the already severe water crises with limited access of Palestinian farmers to the aquifers of the West Bank. Temperatures, and consequently crop water requirements, are gradually increasing, while the rain is concentrated in fewer month and will in future scenarios be gradually decreasing. Again, the rural poor are the most vulnerable and least able to cope or adapt to the ever more water stressed conditions, whereas the public response is hampered by inadequate weather-related information relevant for agriculture and limited inter-institutional collaboration in designing and implementing actionable adaptation strategies.[16]

23. RELAP engagements will aim to drive inclusive and adaptive changes in all of the three above-mentioned challenges. Consequently, the project will seek to catalyse more secure land tenure for smallholders by promoting climate resilient land development, using past experiences as a robust platform, but also by expanding land development practices to cover a broader diversity of farming systems and livelihood. The project will innovate around less costly and less invasive land development practices that will be tested and monitored for socioeconomic and adaptation benefits with farm-

[15] Land development is divided into land reclamation which is visible investments in land not currently under agricultural production (might be used for occasional grazing), and rehabilitation which is improvement of land already used for agriculture.

[16] A schematic presentation of the theory of change is presented in appendix 6.

ers and herders. The key theory of change (based on robust evidence) is that by encouraging farmers to start or intensify cultivation of land, their food security, incomes, tenure and land legal security are increased. Moreover, by promoting more climate resilient approaches and practices, RELAP can play an important part in enhancing farmers' ability to manage climate change, in particular increased water scarcity.

24. RELAP will, in cooperation with other development partners, also seek to strengthen commercialisation and market integration, both for farmers benefitting from land development support, but also for the marginalised rural women and youth. The key theory of change rests on the assumption that by encouraging value chain strengthening, increased investments and bulking of produce, commercialisation can be promoted in more effective ways, and hence rural incomes can be increased. A entrepreneurship development facility will provide small grants to landless women and youth for starting or expanding micro climate resilient businesses to increase opportunities and integrate these groups in the economic development in the villages.

25. Finally, RELAP will also promote climate adaptation head on, through significant investments in generating climate forecasts relevant for farmers across Palestine through the installation of agro-meteorological stations that can provide farmers with concrete and timely actionable information on climate trends and on how to adapt to the changes. That will be complemented by capacity development to link Palestine to leading research and knowledge networks regionally and internationally. Technical assistance will also be provided to assist in capacity development for improved adaptation.

II. RELAP description

A. RELAP area and target group

26. **Target area.** The RELAP target area comprises Areas B and C in the 11 governorates of the West Bank[17]. Component 1 and 2 will initially be rolled out in 6 governorates: Bethlehem, Hebron, Jenin, Nablus, Tubas and Tulkarm. The number of governorates may be increased subject to absorption capacity which will be assessed during supervision missions and the mid-term review. Due to the inherent nature of building a network of agro-meteorological weather stations and the upscaling ambitions, (also to be mainstreamed into policies) component 3 will cover all of the West Bank. In each governorates, the project will seek to select the areas with the highest incidence of poverty. Other criteria for final village selection include the existence of a potential to develop a minimum of 200 dunums of land and with higher vulnerability to climate related risks.

27. **Target groups and targeting strategy.** Project activities have been designed to benefit the following groups, which will be specifically targeted, and have the following characteristics (more details are found in appendix 2):

- *Smallholders and small-scale farmers*: Typically, Area C smallholder farmers have limited access to inputs, including cultivable land and water for irrigation, and to markets and their steadfastness on the land may be at risk. In Area B, smallholders face similar problems in terms of access to cultivable land and irrigation water, except that land tenure security is less of an issue. The average land holding size in the West Bank is 12.2 dunums (1.2 ha) and, overall, holdings of less than 10 dunums (1 ha) amount to 73.5% of total agriculture holdings (while large holdings exceeding 80 dunums (8 ha) account for only 1.8% of total agricultural holdings). The majority of smallholders do not practice full-time farming but have other income sources in the private or public sectors. For the majority, agriculture is practiced to fulfil households' needs for olive oil, fruits and other agricultural produce, with surplus given to the wider family and neighbours and sold to supplement main income. Private land development activities will be targeted at smallholders, who will be selected according to transparent eligibility criteria (see Targeting strategy, appendix 2). As women are estimated to account for 7.6% of land owners in Palestine, and as the project intends to support farmers, including women, in obtaining a legal title (inheritance or succession) to their land, it is expected that no less than 10% of women owners will benefit from land development work. Smallholders and small-scale farmers are

[17] Jenin, Tubas, Tulkarm, Nablus, Qalqylia, Salfit, Ramallah, Jericho, Bethlehem, Hebron and Jerusalem

also expected to benefit from interventions aimed at bulking and aggregating their produce, while most of them will also derive additional benefits from road improvement or construction.

- *Poor, landless and unemployed youth and women*: These will be the exclusive beneficiaries of the investment grant schemes and capacity development support for entrepreneurs and it is tentatively proposed that both groups shall equitably benefit from these interventions.
- *Livestock herders*: Land development will include rangeland rehabilitation on communal grazing land that will benefit many livestock owners who practice semi-intensive or extensive livestock production (providing a source of income and food for an estimated 32 000 households). Heard size is usually relatively small[18], intensive production mainly concerns cow breeders, while semi-intensive or extensive production systems are practiced by sheep and goat keepers. While some 2.02 million dunums of rangeland are found in the West Bank (Jordan Valley and Eastern slopes), closures imposed by the occupation have led to only 30.7% of rangeland being accessible to the herders. As a result, available range land, usually located on communal land, tends to be overgrazed and degraded. Palestinian herders and Bedouins in remote communities are also facing the problem of access to water, mainly relying on water sold from tankers at high costs for their animals. The livestock owners of goats and sheep practising semi-intensive or extensive production will be the direct beneficiaries of the rangeland rehabilitation. Each group supported should have at least 70% poorer households among its members.

28. **Other direct beneficiaries.** In addition to the main beneficiaries just described (who will be specifically targeted by and who are expected to derive significant benefits from project support and interventions), some activities will directly benefit additional households. Construction and rehabilitation of rural roads will benefit all farmers and land owners whose land is located along these roads in terms of improved access to their land and to markets. The multi-stakeholders' platforms promoted by RELAP for market linkages development will benefit all interested local producers, local traders, brokers, as well as members of women associations, who will enjoy improved marketing opportunities (for producers) or reduced transaction costs (for traders and brokers). Activities, aimed at providing better climate information services to farmers and up-scaling climate resilient farming and land development systems and practises, will potentially benefit the entire farming community.

29. **Outreach.** It is estimated that the project will directly benefit a total of 30 000 rural households (representing 150,000 persons[19]), with the following breakdown:

Table 1: Outreach targets

Component	Number of direct beneficiaries	% of women	% youth
Component 1: Climate resilient land development			
Climate adaptation of conventional land development	1,500 smallholders	10%	n/a
Climate adaptive land development – CACL	290 smallholders		
Climate adaptive land development – Wadi	360 smallholders		
Climate adaptive land development - Rangeland	500 herders and other livestock owners	n/a	n/a
Rural roads	4,500 households *(including 1,850 households not benefiting from land development support under C1.2)*	n/a	n/a
Component 2: Market linkages for the rural poor			
Bulking of agricultural products	6,650 rural producers, traders or brokers *(including 900 micro-entrepreneurs below)*	n/a	n/a
Investment grants	900 rural micro-entrepreneurs	50%	50%
Component 3 - Climate change info/services	30,000 farmers trained and receiving agro-climate information	n/a	n/a
Total:	**30,000 households (app. 150,000 persons)**		

30. **Defining land reclamation and rehabilitation.** These are the two core activities of the RELAP land development component and understanding them properly is key to conceptualizing the project.

[18] According to the 2013 PBCS Livestock survey, 61% of livestock holdings that have cows do not exceed three heads, 65% of livestock holdings with sheep do not exceed 19 heads, and 66% of holdings with goats do not exceed 19 heads.

[19] Estimation based on an average number of 4.9 persons per household.

31. *Land reclamation* is the process of creating new agricultural land from areas previously not under cultivation nor used systematically for e.g. grazing. Land reclamation tend to be more expensive than land rehabilitation as the starting point is from scratch, e.g. no systematic planting, contour belting, terracing nor de-rocking has taken place. However, reclamation cost also depend on characteristics of the land and land-use. Up to a point, the steeper the slope of the land, *ceteris paribus*, the higher the cost. In addition, land reclaimed for cultivation purposes also tend to be more expensive than land for grazing.

32. *Land rehabilitation* encompasses more than the name imply. Clearly it involves rehabilitating land (including terraces, access roads, soil quality and irrigation infrastructure) that has been degraded or fallen into disrepair. It may have been completely abandoned or used at a production level below its optimal level. The drivers can be a multiplicity of factors, including climate change, loss of market access (also for inputs), lack of investment capital and aging of the farmers (i.e. a reduction in available labor). However land rehabilitation also involves pushing the production possibility frontier further up, by upgrading production technologies, infrastructure, usage models and processes allowing for higher productivity, incomes and profits. Previously, this has been the main focus of IFAD's engagement in land rehabilitation (under PNRMP) and it is also envisaged to be the main focus on RELAP's efforts in this space.

33. Common for both land development types will be the robust focus on a business case for the developed land and improving climate resilience, not least in terms of water availability, soil water storage capacity and ability to cope with extreme weather events. In addition, RELAP will also consistently work to reduce both land reclamation and rehabilitation cost, using less environmentally invasive methods.

B. Overall goal, development objective & impact indicators

34. RELAP will support key partners in accelerating resilient rural economic growth by both expanding the area under cultivation as well as increasing the productivity and profitability of rural production. Special attention will be made to ensure resilience and inclusion of less advantaged segments of the rural population, in particular families with limited access to land, women and youth as well as promoting increased climate resilience through adapted agricultural practices, and land and water management. Against this background the RELAP will have the following goal:

To improve the resilience and incomes of rural producers' households in the West Bank.

35. It is expected that about 30,000 households will benefit from this directly through higher incomes and enhanced resilience to climate change, the latter especially concerning water access.

36. RELAP will emphasize resilience of rural economic activities. This is expected to lead to three core impacts: Firstly, it will improve food security in targeted governorates by increasing food production and improving affordability of key nutritional foods. This is particularly pertinent in a context where imported food can be blocked with virtually no notice. Secondly, it will increase incomes of the rural poor from higher production volumes and from tighter market integration that leverage value addition for higher profitability. Thirdly, it will increase adaptation capacities of both farmers and rural households through making timely climate information available to them and provide appropriate training. Thus, the development objective will be:

To increase climate resilience, land productivity, agricultural production and marketing opportunities for smallholders and landless rural poor.

37. Core indicators for achieving the development outcomes will include, among others: the number of households reached and supported; the percentage of supported farmers reporting an increase in production and increasing their resilience score; average percentage increase in annual yields, by type of crops and livestock; and the number of farmers that have been receiving and using weather forecasts and early warning information to make decisions on adaptation options for their farming practices.

C. Outcomes and components

38. Land development that incorporates climate change adaptation practices in a diversity of farming systems will be the core of the RELAP intervention. Where changing rainfall patterns do no longer sustain current land uses changes in uses and in crop and livestock production systems will be supported, making them more resilient to current and future climate trends. Off-farm livelihood activities will be promoted, specifically targeted to vulnerable rural people and climate change adapted small-scale businesses. Interventions will be clustered, favouring the village, whenever possible, as an entry point of interventions rather than individuals. All this will result in RELAP being implemented utilising a holistic approach, with three complementary but synergistically linked components, described below.

Component 1: Climate resilient land development

39. The component is designed to enhance access to productive agricultural land and water through a range of investments in land development, agricultural roads, soil improvements and rain water harvesting facilities, which will be undertaken in close partnership with beneficiaries, municipalities and villages. It will also aim to strengthen small farmers' and livestock keeper's resilience to current and anticipated impacts of climate variability and change, by financing capacity development, and by testing and monitoring adaptation benefits and cost-effectiveness of land development approaches and practices applicable for the conditions of the West Bank.

40. For land selection, in addition to village poverty criteria, other selection criteria will include: land-use suitability (such as minimum required annual average rainfall for water harvesting, topsoil depth, reasonable land slopes and not more than 40% rocks); technical feasibility; opportunities for farming business and rural enterprise, while serving in particular the poor rural households, the economically active rural smallholders and women; beneficiary contribution; and capacity to maintain rehabilitated or constructed assets. All selected proposals for investment will have to demonstrate the potential to enhance economic opportunities and improve livelihoods, allowing for future easier scaling-up by beneficiaries (including private sector), municipalities, villages or central government. The identification of areas for land development will be undertaken in a participatory and demand-driven manner at village level to ensure that they meet target group needs. The draft project implementation manual (PIM) specifies the selection criteria in detail (See appendix 11).

41. There is a substantial need for major investment in agricultural land development in the West Bank and in rain water harvesting in soils and facilities for supplementary irrigation for enhanced climate resilience in particular. Any involvement in land development activities will be explicitly linked to their ability to catalyse sustainable and inclusive economic growth. The lack of adequate access to land and water resources, and climate vulnerability, negatively affect the further investment by farmers or the proprietors of small and medium-scale enterprises in agricultural activities at a rural level. The main types of investments eligible under the component will include land and farm development (reclamation and rehabilitation combined with associated capacity development), cisterns for rain water harvesting, tree seedling and planting, and agricultural access roads. The component will comprise of 3 sub-components:

Subcomponent 1.1. Testing and monitoring of resilience benefits of land development practices

42. This subcomponent will be implemented in parallel with subcomponent 1.2 on land development. It will support the systematic testing, monitoring and learning with farmers and livestock keepers from the land development approaches and practices implemented in farmers' fields under subcomponent 1.2. The systematic learning and knowledge products will facilitate diversifying current land development interventions and support the transformation to resilient production systems. The subcomponent will include 4 main activities: i) a stocktake study of current land development practices; ii) the design of testing and monitoring programme and its IT data platform; iii) the testing/implementation of the programme with farmers; and iv) from midterm and to the end of the project, testing and monitoring results will be used for systematic learning and preparation of knowledge products (policy briefs, documentation of practices eventually integrated in the WOCAT platform) and adjustment of land development guidelines. These knowledge products will inform the upscaling of adaptation practices on the ground (supported by subcomponent 3.1) as well as policy processes adjusting/reforming the land development and related policies (supported by subcomponent 3.2). The aim is to improve the policy framework for more sustainable land development and resilience to current and future climate challenges.

43. Key performance metrics for subcomponent 1.1 will be linked to the share of the ability of smallholder farmers to adopt environmentally sustainable and climate resilience natural resources management practices and technologies.

Subcomponent 1.2. Resilient land development.

44. Using local multi-stakeholder platforms at the village level (see component 2), investments will be directed in development of agricultural lands. The planning process with village stakeholders to create a shared vision and identify suitable land and land development approaches is described in details in appendix 4. This will also include specific measures to inform, encourage and further support smallholders, and particularly women, to register their land. The main activities will include soil improvement to enhance fertility and water storage capacity, de-rocking of the land, different types of terracing and soil and water containing infrastructure (depending on slope, could be bench terraces with dry stone masonry retaining walls, counter bounds, V-shape or half-moon), fencing, cisterns for rain water harvesting, land preparation and tree planting.

45. These activities are planned to sustainably develop 18 000 dunums of land (benefiting around 2 700 households), with reclamation efforts being primarily targeted to Area C whereas rehabilitation/improvement efforts will be in both C and B Areas. Land development for orchards in some cases intercropped with annual crops will be implemented for an area of about 10,000 dunum. Some additional 8,000 dunum are anticipated to be developed/improved for other land-uses some of which are suitable for lower rainfall than orchards, such as cultivation of annual and perennial crops in wadis using gabion structures for water and soil harvesting, rangeland rehabilitation, and crop-livestock system under conservative agriculture. An important activity will be capacity development and technical support to farmers in understanding climate risks and adaptation options, soil and water management practices (e.g. use of compost, conservation agriculture, crop rotation, and intercropping with fodder crops) as well as rangeland improvement and management.

46. Also, to achieve more equitable land development, the component will aim at establishing a mechanism whereby both men and women (including the youth) will be supported in the legal paperwork required for land registration and get further protected from land confiscation. Related activities will include sensitization campaigns, provision of legal services, and financial/technical support to prepare documentation for land registration or succession.

Sub-component 1.3: Investment in Agricultural Roads

47. This sub-component will focus on agricultural roads and ancillary structures that will complement the land development activities under the sub-component 1.2, by assuring reliable access to and from the lands developed for agricultural production. Other than to the 2 700 households benefiting from subcomponent 1.2, this subcomponent will benefit an additional 1,800 households.

48. Key performance metrics for subcomponent 1.3 will be 100 km of roads to be constructed, mainly comprising of opening and placement of stabilised gravel layer. Eligible investments will include also road ancillaries such as drainage facilities (side channels and culverts) and required retaining walls to ensure climate resilience of constructed agricultural roads.

Component 2. Market linkages for the rural poor

49. Rural areas are generally well connected to major urban centres, which constitute the main outlets for most agricultural products. However, for small scale family farms, marketing linkages tend to rely on individual contacts in the local community, with limited volumes of transactions. Previous experience indicate that smallholders sell only about 25% of their products in formal markets[20]. This makes it challenging to upscale and promote farming as an attractive business in these areas.

50. By improving facilities for bulking of agricultural products at village level subcomponent 2.1 will aim at attracting and connecting farmers and their organisations, with more market actors (e.g. traders, retailers and input suppliers) and increasing local demand for agricultural products. This will generate more opportunities (through bulking), better prices (through higher value added thanks to processing, and access to markets on better terms) and incentivising trade and investment in agriculture. For instance, farmers benefitting from RELAP land development activities (subcomponents 1.1 and 1.2), whose agricultural production will be increased and bulked with other farmers, will be better

[20] IFAD: Participatory Natural Resources Management Project PCR, 2016.

positioned to apply for activities, call for proposals and/or contract farming facilitation supported by other donors' trade and marketing projects. This will also create a conducive context for the emergence or strengthening of market oriented farmers organisations in the provision of post-harvest services (quality certification, bulk marketing, storing, packaging). Local bulking will also be facilitated by the rehabilitation/construction of agricultural roads linking developed lands to villages (subcomponent 1.3). Finally, creating such a conducive agricultural trade context may also provide seasonal jobs in the agribusiness sector.

51. A second subcomponent 2.2 will focus on creating entrepreneurial opportunities and addressing constraints faced by the marginalized landless women and youth to take advantage of the overall improvement of the local economic context (subcomponent 2.1). With accelerating climate change, high youth unemployment and low participation of women in the labour force, there is a clear need to develop a diversity of climate resilient income generating activities and opportunities for these groups to develop market-led small enterprises in the farming and off-farming rural sectors. Given the initial high costs required to develop climate-sensitive small businesses, RELAP will propose a micro-entrepreneurship facility (MEF) window, which will include climate adaptation as a key criterion for award of grants.

52. The implementation process for this component is composed of four steps, described in details in appendix 4, and the outcomes for the component will be: i) increased production and marketing of agricultural produce by 30%; and ii) the development of 2,575 micro-enterprises that can harness the improved market opportunities, amongst whom 900 (33%) are managed by women and youth that will have upgraded their productive capacities in farming and off-farming activities.

Subcomponent 2.1. Rural bulking of agricultural products

53. This subcomponent will comprise two interwoven activities: i) establishment of 30 local Multi-Stakeholders Rural Platforms (MRPs), and ii) rehabilitation/construction of 10 market and collection centres.

54. It is foreseen to establish 30 multi MRPs based on the number of "clustered sites/villages" of intervention for land development activities whose roles are described in the subcomponent 1.1 and 1.2. Out of them, ten will also be involved in piloting the rehabilitation/construction of ten market and collection centres. Implementation will be phased into two batches of five market & collection centres in the targeted governorates. Increasing local trade of agricultural produce relies on two complementary pillars: i) Mobilisation and involvement of all market stakeholders (producers and their organisations, traders), including the local authorities to develop a shared vision on agricultural product bulking and facilitation of market linkages; and ii) Improvement of common economic infrastructure as well as adapted local regulations to determine the access to and the use of the infrastructure. A MRP is a framework of communication between existing market stakeholders amongst whom existing farmers' organisations (groups, associations, cooperatives) are part of. A MRP may also facilitate the emergence or the maturation of specific organisations to fulfil newly identified roles and services particularly with regards to the management of economic infrastructure.

55. The 10 market focused MRPs will be facilitated in existing "trading nodes" serving surroundings villages and will comprise representatives from all agricultural market stakeholder sectors (e.g. producers and their organisations including cooperatives, local traders, brokers, transporters, women association and youth clubs), including those from neighbouring MRPs where no market investment is done. Through regular meetings, the key functions of the MRPs will be: i) to identify and address the main constraints affecting marketing of agricultural products (from the area to the central wholesale markets[21]); ii) to collect and share market intelligence (price, volume, opportunities); iii) to build trust and develop business to business deals (e.g. between a trader and a producers' group); iv) to act as an interface[22] with other existing broader platforms/programmes at governorate or national levels

[21] In the West Bank, amongst the 11 central wholesale markets - Al Birah, **Beita**, **Bethleem**, **Hahlul, Hebron, Jenin**, Jericho, **Nablus, Qabatiya**, Qalqilya, **Tulkarm** - 7 are located in the RELAP governorates of intervention (bolded).

[22] Examples of possible concrete linkages with other projects/programmes more specifically addressing the marketing and trade issues : under the MRPs, farmers will bulk their produces, and have the opportunity to get together to access processing/marketing facilities offered by other projects/programmes. The RELAP MEF window will be dedicated to the youth, women and their associations, but farmers engaged in MRPs (especially the ones receiving support under RELAP subcomponents 1.1 and 1.2) will be able to apply for broader/bigger investment support facilities offered by, for instance, the multi-donor agricultural project (i.e. call for proposals for investment grants, application for support to pilot new processing and/or marketing techniques, etc.).

supported by government and other donors (such as: the FAO-Canada project to support economic growth through the optimization of the agriculture value chain and the FAO multi-donor agricultural project –MAP, see table 2 below); and v) to organise/participate in events promoting trading of local agricultural products (e.g. bulked and processed).

56. MRPs will also be a point of entry to promote PALGAP (Palestine good agricultural practices) with both producers and urban clientele with the support of the Palestinian standards Institute (PSI)[23]. The MRPs will directly interact with municipality and village councils for logistical improvement of market and collection centres (see paragraph below). MRPs are led by a coordinating committee elected by the various representatives ensuring that (i) all main stakeholders are represented, (ii) at least 40% are women and (iii) at least 40% are youth. MRPs are a communication tool aiming at strengthening synergies between local organised actors; its sustainability will evolve with stakeholders' needs. Their role lies in their ability to influence decision makers, either at production, marketing or institutional level. More information on MRPs' different roles is presented in appendix 4, particularly in Table 18.

57. 1,675 rural entrepreneurs, either in production, post-harvesting or trading of agricultural products, mostly identified through MRPs, will be supported with management and business development trainings to develop their activities. If financial services are required, the MRPs will give the opportunity to local MFIs and potential investors to interact and set deals. Vulnerable groups and individuals (women youth, landless) will combine the access to these trainings with the access to the inclusive MEF window (see subcomponent 2.2). Such training will also be phased to prepare rural entrepreneurs to apply to open calls for grants program (FAO) with concrete and well documented proposals.

58. In each of the governorates of intervention, the RELAP will identify two sites already known as trading nodes between several villages benefiting from rehabilitation and reclamation investments (component 1). In agreement with local authorities (village or municipalities), these sites will be rehabilitated/upgraded as market and collection centres to allow all local market stakeholders to better trade and match the supply with a demand of bulked agricultural products. In each area, sites to be selected will have to be accessible from the main road to easily access urban centres (connected with outlets as wholesale markets, niche and retail markets, agro-processing industry), and to continue to serve as a "trading node" bulking agricultural products from small holders. A collection centre will consist in a dedicated space with enough parking for trade vehicles and fenced transaction areas, small scale buffer storage facilities, ventilated and/or cold storage, to allow few days of storage, packaging/weighing equipment, a small administrative office and sanitary facilities. Municipality and village councils, in close collaboration with the MRPs, will provide a suitable area and will be the owners of the infrastructure considered as a public good.

59. Local authorities will transfer the market and collection centres' management to a legally registered managerial body that might be an existing associations/groups belonging to MRP. It will recover running and maintenance costs from the collection of affordable user's fees[24] (tentatively 2%) as it is currently done in the various wholesale central markets (4% in average). (a draft PIM in appendix 11 will provide some details – but the full PIM will be prepared during the first year of project implementation). Since FOs are part and parcel of MRPs as all local market stakeholders, they participate to design the more adapted management set-up and, may either participate in the creation of the new company (as shareholders) or directly manage the centre if legally registered and MRP / local authorities are satisfied and support it.

Subcomponent 2.2. Inclusive entrepreneurship development support

60. It is foreseen to support the establishment or expansion of 900 rural micro-enterprises by investing in their business development and improve their incomes. A non-exhaustive list of eligible businesses, drawn from success case stories supported by other donors, includes fattening of small ruminants, vegetables / herbs hydroponic production, greenhouse for vegetable production, distributer of drip irrigation equipment, small mechanisation, compost production, honey production, mushroom production, cheese and herbs processing, agricultural products processing (including dried fruit and canned vegetable to increase storage time), packaging and marketing, transport of agricultural products. The MRPs will also support the micro-enterprises development, by helping with business identi-

[23] Through a MoU with Palestinian Standards Institute (PSI)
[24] Market fees varies in the various wholesale central markets from 2 to 7% (4% in average)

fication, management support advice, value chain opportunities and assessment, and support for scaling up.

61. This subcomponent will have a clear focus on the inclusivity of rural women, unemployed youth, their organizations, and the poor landless at the village level, who will also be encouraged to participate in the MRPs. RELAP support will address the key constraints of these groups, including: i) the lack of capital and the lack of collateral (including land) required by financial institutions to obtain credit; ii) the high real interest rates available from MFIs; iii) the mobility constraints and the unreliability of job opportunities in Israel, especially for women and rural youth; and iv) the lack of business advice/ technical assistance.

62. The inclusive entrepreneurship development support will be provided through a micro-enterprise facility (MEF) delivering entrepreneurship investment grants, together with tailored technical assistance delivered by business development services (BDS) providers registered under Chamber of Commerce. Support will focus on the target groups or individuals in developing or expanding climate resilient and market oriented micro and small businesses generating incomes. The MRPs will have a catalytic effect on local and agri-based enterprises in the villages and municipalities. Proposals with a demonstrated income generation and job creation effect as well as proposals contributing to increased production and local availability of agricultural products will be given priority. Investment grants could be awarded in instalments against achievement of results, depending on size and business plan (to be decided on a case-by-case basis).

63. Applications for investment grants (shared with the MRPs for increased accountability) will be channelled to the PMU through municipality and village councils, that will confirm applicants' compliance with eligibility criteria (to ensure exclusive targeting of the vulnerable and landless people). The PMU will then confirm the feasibility as well as eligibility, and grants awarding will be decided upon by an independent committee (comprising of MoA, the PMU marketing officer, Ministry of Social Affairs, EQA, and other potential partners to be identified in the inception phase) that initially meets on a monthly basis[25]. The award committee will be based at the MoA. FIs and particularly MFIs are invited to participate in MRPs where they may provide financial intelligence on reviewing proposals before submission to the RELAP assessment. However, since MFIs do not contribute in any form to the financing plan, they will not be asked to provide a decisive motivated opinion which is also a costly exercise for them. However, through their participation in MRPs, they are aware of successful applications and can develop financial products to address rural micro-entrepreneurs needs in the future on the basis of the lessons drawn from RELAP MEF.

64. The eligibility criteria for the investment grants (maximum of USD 5,000 per individual, with possibility to be considered as a group with higher ceiling) will be detailed in the PIM (a draft PIM is provided in appendix 11, that will be reviewed, validated and finalized with the PMU during the first year of implementation). Only micro-enterprises owned by landless women or youth (below 35 years) or their associations will be eligible. These could include individual projects (especially those requiring investments on a lower scale) and/or group/collective projects (managed by cooperatives, women associations or youth clubs). Formal business registration will not be a requirement, but the micro-enterprises should be recognized by municipality and village councils. In all cases, applicant(s) must demonstrate that the key ownership and decision making is under the control of women and /or youth.

65. All applicants should demonstrate the ability to contribute to the investment with a minimum of 15% in cash (to be used as investment or working capital). The grants' award will be decided based on criteria to be developed later in the PIM (and in consultation with the MoA and local stakeholders). These will include, among others: potential for job creation; agricultural production; and introduction of climate adapted technologies. This support will be phased in line with MRPs and market and collection centres (subcomponent 2.1) to benefit from synergies and emerging opportunities for micro-entrepreneurs.

[25] While the comparable PMDP awards grants (to larger businesses) on a weekly basis, such a frequency for RELAP would be too cumbersome and the available amount for investment grant would not be sufficient.

Table 2: Matrix of synergies between RELAP and FAO supported projects

Description	**RELAP**	**FAO** **- Multi-donor agribusiness programme (MAP)** **- Canada funded value chain development Project (VAL)**	**Possible synergies and complementarities**
Starting dates (ground activities)	2019 - 2024	VAL: on-going until 2022 MAP: 2018 - 2021	During 4 years During 3 years
Geographical location	6 governorates in West Bank: Hebron, Jenin, Nablus, Tubas, Tulkarm, Bethleem	All governorates in the West Bank (for VAN), and in both Gaza Strip and the West Bank (for MAP)	In the 6 governorates covered by RELAP for components 1 and 2
Targeted beneficiaries: productive investment grant	- Women (individual or group) - Youth (individual or group) - Selection involving MRPs and village authorities, final decision at MoA - 15% own contribution, - Ceiling 5,000USD - Supported by BDS (CCI)	- Targets: farmers, profit & non-profit companies, cooperatives - 2 open calls with information campaigns in 2018 and 2019 - Own contribution: from 15-50 % according to profit (low for women) and location (low in Gaza) - Ceiling for gross annual revenue: info. not available at design mission	Conditions are aligned (15%) for women and youth RELAP targeted beneficiaries whose project overrun ceiling will be encouraged to apply for MAP second call (2019)
Project interface	MRPs based on participatory and inclusive approach to be used as interface with MoA / Project	NGO implementing partner	Dissemination of information about calls
Support to coop.		- VAL: Already selected cooperatives: 15 women coop, 25 farmers cooperatives (production, PH/processing, marketing, inputs supply, nursery) - MAP: See below	RELAP supported groups to benefit from services when the cooperative is in the same area
Quality of the products	Partnership with PSI on PALGAP at MRP level	- Global GAP (support 70 quality standards) - MAP: To support coops to respect GAP to get certificates - Campaigns towards clientele	VAL: To participate in MRPs open days/ fairs to sensitise clientele to PALGAP
Commercial infrastructure	Rehabilitation of 10 marketing and collecting centres - to be owned by local authorities with a delegation of management to an autonomous private body involving collection of market fees (around 4% covering costs and taxes) to ensure sustainability	- MAP: 3 main wholesale markets - 1 in Gaza, 2 in the West Bank (Hebron, Ramallah to be confirmed with feasibility studies to ensure the best return on investment)	To facilitate exchanges and transactions between marketing and collecting centres and wholesale markets through market intelligence feeding private sector / cooperatives ("mini-corridors")
Implementation model and implementing partners	- PMU integrated in the MoA with an officer in charge of Component 2 implementation (agribusiness) - One NGO per Governorate (can be the same for comp. 1 and 2)	- VAL: through NGO (UAWC - union of agricultural workers committee), on-going call for women focused NGO - MAP: NGO selection to be completed early 2018 - PALTRADE: marketing assessment for potential export markets, information to agribusiness, business to business info - ITC: International Trade centre for marketing activities (intelligence)	Implementing partners are made aware of the respective projects and the necessity to proactively interact with each other in complementary activities especially when operating in the same location.

Component 3: Improved public services for climate resilient agriculture

66. This component will support Palestinian farmers in taking timely and effective action to protect their crops and animals from pests, diseases, extreme weather and climatic conditions. To increase the resilience of farmers to climate change, this component will strengthen the capacities in absorbing climate risk through its anticipation, adoption of new practices through access to knowledge, and transformation of livelihood strategies supported by facilitating public services. To overcome current critical challenges in Palestine for a transformative change in dealing with climate change impacts on agriculture, this component aims to 1) promote public services that enable farmers to take timely and risk-informed actions, 2) consolidate capacities of the MoA, EQA, Meteorology Department (PMD) and other related actors for advanced information, evidence and programming on climate change adaptation in agriculture. In support of the project subcomponent 1.2, this component will develop capacities required in MoA to guide climate adaptation in farm-level interventions for land development. The component 3 will upscale good adaptation practices and approaches through the incorporation in national programming and decision-making using the evidence created in subcomponent 1.1 of the resilience benefits of different land development approaches and practices. The project will build on and reinforce existing initiatives and capacities (such as the MoA component of the Climate Change Capacity Development Program Phase I) and addresses critical gaps for upscaling good practices (such as institutional bottlenecks and scattered expertise to implement national climate change goals).

Subcomponent 3.1. Improving agro-climate information and extension services to farmers

67. The objective of this subcomponent is to enable the generation of practical agro-meteorological information to support farmers in applying agricultural activities that reduce and mitigate negative impacts of weather extremes and climate change on crops and livestock. Outputs and activities under this sub-component will include improving agrometeorological observations network covering the main agro-ecological zones in the West Bank. This will involve updated capacity assessments and feasibility studies to specify instruments needed and the installation design at the project start. Subsequently RELAP will procure and upgrade/install (tentatively 12) new synoptic weather stations and manual instruments and upgrade existing stations with sensors for measuring atmospheric and soil environment parameters (e.g. soil moisture and temperature) according to specifications. Results from the testing and monitoring of climate resilient agriculture practices under component 1 and other remote sensing, analysis of historical climate data and future trends will be used to model future impacts of climate change on main crops and farming systems. Subsequently upscaling potentials of different adaptation practices will be assessed. A training curricula, toolbox and manuals will be developed for the Climate Change Unit at MoA, focal points at governorate level, extension staff and national NGO partners. A series of training of trainers will be provided to significantly strengthen field capacities to guide farmers in the adoption of climate resilient agriculture practices.

Sub-component 3.2: Strengthening institutional and technical capacities for the implementation of agriculture goals in the National Determined Contributions

68. The objective of this sub-component is to facilitate the implementation of the “Action Plan for improving the Institutional Framework for Climate Change in Palestine”. The subcomponent will support the horizontal and vertical institutionalization of climate change adaptation in agriculture, including efficient mechanisms for the operationalization, partnerships and progress monitoring of national goals. Under this sub-component the project foresees the mainstreaming of climate change actions into agricultural institutions at both central and local level. Moreover, a plan for upscaling validated climate change adaptation practices will be prepared based on the systematic recorded evidence under subcomponent 1.1 and the climate impact modelling under subcomponent 3.1. Finally support will be granted to strengthening Palestinian agricultural partnerships and initiatives on climate change, nationally and internationally.

D. Lessons learned and adherence to IFAD policies and the SECAP

69. **Lessons learnt.** IFAD has been engaged in Palestine since 1994, and the accumulated context-specific knowledge has informed the RELAP design. This section presents the main lessons learnt (more details can be found in appendix 3) and how they feed into the RELAP design process and future implementation. RELAP will especially build on results and lessons learned from the PNRMP, on which there is a robust platform to learn and to scale up from. The RELAP design also

builds on the experiences from i) IFAD investment projects in NEN countries, ii) the conclusions from the PNRMP completion report, iii) the IFAD's Office of Evaluation ongoing performance evaluation of the PNRMP (draft available at the time of the detailed design), and iv) those of development partners who have been working on agriculture. Core learning include the following:

70. *Land development remains a key priority*. Many donors have been involved in land development activities in the West Bank. While many of them are now shifting their support to marketing oriented projects, the national agricultural sector strategy 2017-2022 highlights that land development needs are still significant and delivery needs acceleration, particularly in Area C. Lessons from all land development projects also suggest that land development activities should be carried out in a more inclusive and more sustainable way considering the needs of adaptation to climate change challenges and reducing the investment cost per dunum. Hence testing and applying diversified land development models is needed. Earlier land development practices have proven effective in terms of putting more land into production and increasing beneficiary household production and income. Still, more needs to be done to develop alternative models and improved technologies covering a broader diversity of farming systems and livelihoods.

71. *Cost sharing and market terms should be preliminary requirements to land development works*. First, 100% subsidies contribute to increasing Palestinian farmers' reliance on assistance and discourage many of them to invest in improving their agricultural holdings in hope of getting external assistance to do so. Cost sharing in investment – as already done by the PNRMP – is key to sustainability and ownership. Secondly, all supported investments should be thought along with an analysis of the local market demands, as to ensure that land development activities do not only respond to the need of protecting the land, but also to local market terms.

72. *Water accessibility and use efficiency is key to sustainable economic outcomes and resilience to climate change risks*. The need to further focus on water harvesting and management was constantly raised by the MoA and by farmers met during the RELAP detailed design mission. IFAD experience in Palestine has informed that farmers whose land had a better access to water had achieved better economic returns from their lands and were more likely to maintain their agricultural lands than others. Improving water accessibility for complementary irrigation is a critical success element in any land development intervention.

73. *The villages/municipalities as entry point and community-based landscape approaches to maximize project impact*. PNRMP provided support for land development activities to relatively scattered individual farmers. To maximize project impact and reduce intervention costs, it is essential to maximize land development activities, as much as possible, at village or municipality levels. The PNRMP experience also found that adopting a village-based landscape approach would help enhance both sustainability and effectiveness (reducing unit costs by allowing intensive works to be focused on consolidated plots, and mobilizing community-wide natural resource management approaches/plans).

74. *Targeting poorer farmers will require a reduction in the cash contribution required from farmers*. Land development activities, to which small-scale farmers have to contribute substantially (both in cash and in kind), may lead to the exclusion of the poorest ones. One of the key lesson from PNRMP is that a cash contribution of 25% of land development total cost represents an investment which is too costly for small farmers. It is essential to reduce the cash contribution, while balancing with a higher in kind-contribution to labour intensive works. Individual farmers receiving RELAP's support will be required to provide a 15% cash-contribution to the machinery works (equivalent to about 5% of total investment cost) and a 30% in-kind contribution of labour intensive works, equivalent to about 20% of total investment cost (details can be found in Appendix 4 and 11). This will also ensure that the cost-sharing-for-sustainability principles outlined above can be maintained.

75. *Targeting the poorer segments of the rural population requires supporting the non-farm and off-farm sectors*. Experience has demonstrated that the inclusion and provision of benefits to small-scale asset rural stakeholders in land development projects is a challenge. This is also true in Palestine, where the poorest and most vulnerable rural smallholders are generally not landowners. Their inclusion requires to promote the development of economic opportunities in the off-farm sector, and to develop mechanisms directly targeting them.

76. *Gender participation is not enough to ensure women's empowerment*. Specific activities for women's empowerment (and not just measures to enhance participation) are needed to effectively engage with rural women and the youth. The experience from PNRMP and from the JICA financed

Project on improved Extension for Value Added Agriculture also demonstrated that it is necessary to make the project teams understand why gender mainstreaming is important in agricultural projects. PMUs shall comprise of a knowledgeable and skilful staff as "gender-in-charge" and provisions for capacity development and trainings for the PMUs shall be budgeted.

77. *Effective inclusion of the youth*. Whether in developing countries or in middle income counties (MICs), young people's access to land is influenced by the perception that young people have not reached "maturity" yet and by the shortage of land, the latter being further exacerbated in Palestine. Increasingly farming is not perceived as an attractive profession by the young, as it involves hard labour and often unstable and low incomes. The youth in Palestine face several constraints with regard to employment and building sustainable livelihoods including lack of access to land/ capital, lack of collateral required to access finance. These will be addressed through RELAP. Youth will be supported through targeted economic incentives to develop or expand off-farm economic activities. RELAP will also provide its target groups, including the youth willing to work on farm, with tailored support to claim succession or inheritance rights.

78. *Market access and value chains*. In the West Bank, the barriers to enter a value chain serving export markets are often too high for poorer farmers, and in a context where imported food can be blocked at any time, it is key to better understand local market requirements that are most relevant to small scale farmers and to use this understanding to better guide producers in making decisions that will optimise the use of available limited resources. Interventions focussing on agriculture need to embrace a market-based approach as a complement to the community approach (exactly the RELAP approach), guided by an awareness of end consumers at every step, working through profit-based arrangements with private sector entities to address gaps and blockages in product value chains. The design approach for MRPs is based on lessons learnt from IFAD (PRODAF Niger, PRELNOR Uganda, etc.) as well as those of FAO, UNDP, PMDP-DFID, the Australia Middle East NGO Cooperation Agreement Program Phase II (AMENCA II), and the EU in Palestine. Main lessons are summarized below, as well as the way RELAP design has addressed and taken them into account:

- Local women groups have regularly been supported by development projects and programmes with the promotion of income generating activities (processed agricultural products and foods, processed milk, beekeeping, greenhouses, hydroponics, etc.). Although they are quite successful in terms of production capacities, access to reliable markets remain their bigger challenge. Market initiatives need to further mainstream gender and women economic empowerment within outputs and activities as women empowerment can be facilitated through MRPs, which RELAP will do (sub-component 2.2). In the RELAP approach, the provision of investment grants will build especially on lessons from the DFID financed PMDP.

- To better serve local markets, it is important to pool agricultural production at local level, and provide farmers with support and advices to base agricultural production decisions on local realities and demand. For this to happen, it is important to work with local professional advisors who will be engaged to help groups identifying and benefiting from business opportunities while negotiating mutually beneficial arrangements with other agribusinesses. This is what RELAP proposes for the inclusive entrepreneurship development, supported through a micro-enterprise facility delivering entrepreneurship investment grants, together with technical assistance delivered by local business development services (BDS) providers registered under Chamber of Commerce. There is a need to find the adequate balance between processing new applicants and follow-up on active clients/beneficiaries is a challenge for the BDS since the demand for matching grant is always increasing. It is therefore important to set realistic targets and inform stakeholders of the MRPs accordingly. This has been integrated in the RELAP design, since number of investment grants planned over a 6 year period is of 900.

- The modality of working at community level (through NGOs, CBOs, local platforms) has proven more efficient than targeting individual beneficiaries, and this is the approach which RELAP will follow, as these grassroots organisations/set-up facilitate a participatory approach, widening networks and mobilising local power.

- The focus on collection centres and support to processing has also been developed based on findings that most of the smallholders supported by IFAD and other donors sell their products directly, and usually unprocessed, on the local market. The civil society sector in Palestine

contains many capable NGOs and these organisations could assume more responsibilities, including in facilitating the MRPs. NGOs will be the main IPs for RELAP components 1 and 2.

79. *Institutionalization of capacities and ownership building*. IFAD has been one of the only donors developing projects for implementation directly through government structure. One of the PNRMP lessons is that ownership and accountability are higher when management is integrated in the MoA. The RELAP will therefore continue relying on permanent and legitimate institutions for implementation.

80. **Adherence to IFAD policies.** A summary is presented below, while details are in appendix 12.

81. *Alignment with IFAD's strategic framework (SF) 2016-2025*. This SF serves as an overarching policy guideline to provide direction to IFAD's work and development effectiveness. RELAP is fully aligned with the SF, aiming at an enabling inclusive and sustainable rural transformation. Indeed, RELAP will aim at transforming Palestine's smallholders to become more secure in their land tenure, commercially more competitive and climatically more resilient. This will be accomplished by strengthening the resilience and improving economic opportunities for the rural poor based on competitive farms and agribusinesses that are connected to and integrated into more profitable value chains, making sustainable use of Palestine's land and water resources. In particular, RELAP will contribute: i) to increase productive capacities (SF's first objective), through more secure access to and management of natural resources and enhancing agricultural productivity (especially supported by component 1); ii) to increase benefits from market participation (SF's second objective), through agricultural roads and facilitation of market linkages; and iii) to strengthen environmental sustainability and climate resilience of poor rural people's economic activities (SF's third objective), through more secure access to and sustainable management of NR, increased on-farm climate resilient production, and improved institutional capacities of public services for a better access of farmers to information on climate risks and impacts on different cropping and livestock systems.

82. *Alignment with IFAD fragile situations strategy.* RELAP has a clear focus on resilience and on root causes of fragility (access to natural resources, most notably land). Through component 2, there is an integrated and mainstreamed targeting strategy to reach women and youth. Also, and unlike most other donors, IFAD is working directly through the MoA to support institution- and nation building, itself a prerequisite for reducing fragility.

83. *Alignment with IFAD's engagement with middle income countries (MICs).* The project will develop and test new land development models, ensuring that IFAD supports the country through a mix of financial and knowledge products, as recommended by the IFAD's approach with MICs. Based on subcomponent 1.1 and component 3, key knowledge products will be developed to inform land development policies and guidelines and upscaling of climate change adaptation practices.

84. *Alignment with IFAD's grant financing policy.* IFAD's resources invested in RELAP come from the IFAD's Trust Fund for Palestine and the financing is aligned with the key principles of: i) the project makes a contribution to a national public good related to IFAD's mandate through its contribution to enhanced food security, productivity and resilience, in a region where food production and distribution systems are disrupted by restrictions; and ii) the project focuses on interventions where grant financing has added value and comparative advantage over loans (the PA not being eligible for financing through the PBAS).

85. *Alignment with IFAD's private sector development and partnership strategy.* RELAP is aligned with this strategy, placing strong emphasis on further developing and strengthening the linkages of smallholder farmers with the private sector. The linkages with local markets, for farmers and their organizations where they exist, local women and youth associations, but also other local stakeholders will be facilitated under the RELAP second component. Also, climate information received by farmers, thanks to the RELAP third component, will help them to make better market decision, thus ensuring more viable market prospects for agricultural products. Finally, the RELAP will follow an approach that works backwards from the market to ensure that there is a demand for the products of the smallholder and that market links are established with local traders/buyers prior to initiation of any activities.

86. *Alignment with IFAD's policies on inclusive targeting, youth and gender mainstreaming.* Women and youth are given a clear focus in the project, with specific targets and separate budget line items allocated for them. RELAP's approaches and implementation modalities across components are in line with the guiding principles of the targeting policy including: focusing on "active poor"; and expanding outreach to include those with fewer assets or opportunities, addressing gender differences.

87. *Alignment with IFAD's climate change strategy.* IFAD recognizes that the speed and intensity of climate change are outpacing the ability of poor rural people and societies to cope. RELAP takes cognisance of the fact that poor rural people are in the front line of climate change impacts: the ecosystems and biodiversity on which they rely on are increasingly degraded.

88. The project incorporates IFAD's assessment that climate-related risks, and potential opportunities, can be addressed more systematically within its projects activities and policy advice. The project will make use of the IFAD and GCF resources to integrate climate change and environmental concerns. It will: i) help smallholder farmers to build their resilience to climate change (key objective of RELAP first and the third component); ii) help them to take advantage of adaptation incentives and funding (basis of the engagement with the GCF and focus of the small investment grants under RELAP second component); iii) inform a more coherent dialogue on climate change (RELAP subcomponent 3.2 focusing on strengthening institutional capacities and partnerships, with activities directly supporting the Action Plan for improving the Institutional Framework for Climate Change and the implementation of the NAP). Also, weather stations are being planned to assist vulnerable farmers with timely information on changes in weather, rainfall, temperatures and their use in shaping decisions regarding watering, use of adapted crop varieties, animal breeds and other adaptation measures. The investments to be undertaken within RELAP will promote resilience and take into account the vulnerability of the target areas in terms of water shortage, salinity and post-harvest losses.

89. **Environmental and social category (more details are available in the SECAP note, appendix 13).** Potential adverse environmental impacts (e.g. unintentional removal of topsoil in land development, or excessive use of agrochemicals in e.g. greenhouses and other irrigated production) will be mitigated by: i) the development, testing and scaling-up of less invasive land development practices; ii) the careful consideration of land-use suitability (based on soil types, rainfall and water availability and land capabilities), which, combined with market opportunities, will be the basis for deciding on land development approaches, production activities and cropping and livestock management plans to avoid unsustainable land uses; and iii) provide capacity building in integrated pest management and safe (both for farmers and consumers) and environmentally responsible use of pesticides and handling of empty containers. Works in terracing and the rehabilitation or construction of rural roads, will be subject to an assessment of eventual environmental risks to be mitigated as part of the engineering design. RELAP will develop mechanisms to target the poor and vulnerable households, and will, as such, have positive social impacts. Considering that environmental improvements and social inclusion are at the heart of RELAP and potential negative impacts are mitigatable, the project is categorized as B.

90. **Climate risk category (details in the SECAP note).** Climate change and variability historical trends and future scenarios for the West Bank have been analysed in details during the design presented in appendix 13. The trends shows steadily increase in temperature and concentration of rainfalls in fewer months with heavier rain as detailed in paragraph 13. Because of the low average annual rainfall from 100mm – 700mm depending on location and the restrictions on Palestinian's access to groundwater resources the impacts of climate change is primarily adding water stress to an already challenging situation. The RELAP is addressing in particular the issue of water stress in land development approaches as the most important impact of climate change on farmers and rural villages as described above. The main component 1 will focus at increasing climate resilience of a diversity of farming systems and rural livelihoods by promoting practices for soil moisture conservation, local rainwater harvesting and water-use efficiency in complementary irrigation. The resilience of landless rural women and unemployed youth will also be supported through applying a climate resilience criterion for the selection of micro-businesses to be supported by small investment grants targeting in particular these groups. Green Climate Fund financing, is in the process of being mobilized and will be invested to ensure climate adaptation and resilience of infrastructures and livelihood strategies of rural poor. With this mainstreamed resilience focus, the climate risk to RELAP is assessed to be moderate.

III. RELAP implementation

A. Approach

91. A key ambition of RELAP is to promote institutional development among its core partners. In this regard, the project will contribute to institutional development and outcomes in several ways, in-

cluding: i) the establishment of the PMU in the MoA, which will have overall responsibility for implementing RELAP (see below); ii) the promotion of adaptive and inclusive land development practices, for further scaling-up by government; iii) the development and establishment of institutionalised support and advisory services for the promotion of the rural poor's market integration and bulking of agricultural produce; iv) capacity development of government structures and other stakeholders in utilising climate information; and v) support to and expansion of public-private-NGO partnerships in climate adaptive infrastructure and land development models. Details can be found in appendices 4 and 5. Especially the work on land development practices and models is expected to generate useful knowledge products on low cost highly adaptive interventions that have better inclusion and gender sensitivity. This is also expected to inform the IFAD – PA policy dialogue. Similarly with the work on climatic modelling and forecasting will constitute a knowledge platform upon which farmers will be able to make better informed decision on adaptation practices related to e.g. crop choice, planting regimes, irrigation practices and other climate related issues.

B. Organizational framework

92. *The Ministry of Finance and Planning (MoFP)* will be the Recipient Representative, responsible for the negotiation and signature of the financing agreement (FA) with IFAD, the management of donor funds and government contribution (including tax exemption), and the reporting to IFAD, in particular the submission of annual audited financial statements.

93. *The MoA will be the lead agency*, responsible for the RELAP implementation, through direct and regular consultation with the EQA and other involved stakeholders. The general directorate of the agricultural land/MoA will be responsible for ensuring that all aspects of implementation are carried out in accordance with the project FA and agreed annual work plans and budgets (AWPB).

94. *A project steering committee (PSC)* will be established at national level to: i) provide policy guidance and strategic directions, ii) ensure alignment/complementarity/integration of RELAP with projects financed by other donors in the West Bank, and iii) approve the project AWPBs. The PSC will be established by a P.A decree and will be chaired by the MoA. The PSC members will include: i) all MoA general directors involved in RELAP implementation and/or monitoring, ii) the Minister's Advisor for climate change and national focal point for UNFCCC and IPCC/EQA, iii) representatives of the Ministry of Social Affairs, the Ministry of Women Affairs, the MoFP, and Palestine Trade Centre (PALTRADE) , as well as iv) ad-hoc technical resource persons to be invited by the MoA as and when needed (e.g. the chamber of commerce and farmers' organisations). The PSC will meet twice a year to approve the AWPBs and take stock of their implementation in the middle of each year. The project director will be the Secretary of the PSC, responsible for preparing the minutes of the PSC meetings.

95. A *technical committee* will be established to ensure coordination of implementation within and between components consisting of all implementing partners, including NGOs, NARC, FAO and PWA, PMD, field coordinators, PMU and others as needed. The technical committee will meet monthly invested and hosted by the PMU.

96. A *PMU* will be established in Ramallah and will be responsible for overseeing RELAP implementation, in coordination with implementing partners and service providers. The PMU will produce the AWPBs and the associated procurement plans (PPs) to be submitted to the PSC for review and approval, and subsequently to IFAD for no objection. Likewise, the PMU will take the lead in the procurement of civil works for sub-component 1.3 and for contracting partner NGOs under components 1 and 2. The PMU will be integrated into the MoA, will be led by the general directorate of agricultural land, and will be vested with financial and technical autonomy. Its staffing, as well as time allocation for the seconded staff, have been discussed and agreed upon with the MoA, based on a careful assessment of activities to be carried out. Leading the PMU will be the project director, seconded from the general directorate of agricultural land on and 60% part-time basis, to ensure full alignment with government policies and priorities as well as allowing for mainstreaming and scaling up of successful RELAP engagements. Other key positions include a full time depute director, a climate change specialist (with robust focus on water and irrigation issues), a land development engineer and an agricultural road engineer. The detailed information on staffing can be found in appendix 5.

97. **Implementation arrangements.** A summary of the proposed implementing partners and implementation arrangements is presented below, while details can be found in appendices 5 and 11.

The PMU will be responsible for establishing mechanisms to ensure linkages and synergies between the 3 technical components as well as facilitating information sharing with stakeholders and the PSC

98. *Implementation arrangements for component 1*. The overall implementation and coordination of the RELAP first component will be under the direct responsibility of the PMU. For subcomponent 1.1, the PMU will assume overall responsibility and supervision of activities, will define scope of collaboration with NARC, and will recruit the partner NGO who will design (with NARC support) and train MoA staff in implementing the monitoring and testing programme. The actual field implementation of activities for land development for orchards under sub-component 1.2 will be the responsibility of NGOs, selected on a competitive basis by the PMU, while the PMU will be responsible for the direct implementation of activities related to wadis land reclamation, conservation agriculture in crop-livestock systems, and rangeland rehabilitation contracting technical assistance from NGOs and individual experts as needed. The PMU will also be responsible for implementation of sub-component 1.3.

99. Besides general activities (information campaign, monitoring and evaluation, preparation of AWPBs and PP, progress reporting, etc.), the tasks of the PMU under component 1 will also include: i) the preliminary screening and selection of villages and municipalities which will receive proposals for land development investments, ii) the final approval of investment proposals, in consultation with village and municipality councils, iii) the selection and supervision of participating NGOs, iv) the selection of proposals for agricultural roads investments, v) the review and approval of designs provided by the selected villages/municipalities, vi) the procurement of works for roads investments, and vii) the supervision of works through private sector consultant to be selected on a competitive basis. The main tasks of the participating NGOs will be: i) following-up on the preliminary screening of investment proposals, ii) conducting baseline data collection, feasibility study and ranking of qualified proposals before providing to the PMU the list of selected proposals for approval, iii) further to the PMU approval, proceeding with agreements signing with selected municipalities/villages and farmers, iv) developing detailed designs and engineering estimates for selected investment proposals, v) procuring and supervising related civil works, and vi) providing technical assistance to beneficiary farmers in agricultural and irrigation practice, as well as in legal aspects of land certification as it would be required. The various steps for identification, screening, ranking and selection of the investment proposals for land development are described in detail in appendix 5 as well as in the draft PIM presented in appendix 11 (which is already quite thorough for implementation of component 1).

100. *Implementation arrangements for component 2*. The overall implementation of component 2 will be under the responsibility of the PMU: an agribusiness expert will join PMU through an open recruitment process, and a third-time seconded marketing officer from the directorate of agricultural marketing) will support this unit. The main implementing partners for the component will be NGOs, competitively recruited and supervised by the PMU. MRPs are facilitated by a competitively recruited implementing partner (NGO) on the basis of ToR focusing on (i) social engineering and (ii) management and business development and, (iii) marketing support. Linkages between MRPs and other platforms/forums/commodity councils (including other projects and programmes), will be facilitated by the PMU in Ramallah and in coordination with district officers, and municipality and village councils. Also, FAO being a partner of most of the ongoing marketing and trade initiatives, the PMU will closely coordinate with FAO (who also implement RELAP component 3) on a regular basis to identify fields of collaboration and synergies.

101. The MEF will be administered by the PMU, and grants will be awarded by a MoA chaired “inclusive entrepreneurship committee” (details are provided in the draft PIM but will be reviewed/finalized during the first year of implementation). The roles and complementarities of the main RELAP implementation partners for component 2 are detailed appendix 5.

102. *Implementation arrangements for component 3*. FAO will be the main RELAP implementing partner for component 3, and will deliver activities together with local and national NGOs (which will be selected and supervised by FAO). To ensure coordination and complementarity of project activities under components 1, 2 and 3, FAO will work based on the RELAP approved AWPBs and will directly report to the PMU. For component 3, FAO will also be responsible for procurement of goods and services. FAO will work under the supervision of the PMU/MoA and will provide the PMU with narrative and financial progress reporting, as per the clauses and provisions included in RELAP financing agreement. To ensure that RELAP activities are delivered in a coherent manner, it will be important that the FAO coordinator for component 3 is based in Ramallah.

C. Planning, monitoring, evaluation, learning and knowledge management

103. **Planning.** Towards the end of each fiscal year, the PMU will prepare a results-oriented AWPB for the next fiscal year. Using the template shown in appendix 11, this document will identify, for each sub-component: i) the detailed outputs to be produced, and the related physical targets, ii) the key activities, sub-activities and inputs required in order to deliver planned outputs, iii) the timetable for implementation of key activities, iv) the responsible entity for each activity and sub-activity, and v) the financial resources for implementing planned activities and acquiring planned inputs. The key reference for the preparation of the AWPBs will be: i) the detailed log-frame (annex 1, appendix 2); ii) the description of activities (appendix 4); and iii) the cost tables. The PDR and cost tables shall not, however, constitute a rigid blueprint, and the original log-frame targets and financial envelopes may need to be revised at mid-term, upon recommendations of the mid-term review and IFAD's approval.

104. If the first AWPB will be drafted during the start-up workshop, the preparation of subsequent AWPBs shall follow an iterative process, starting around September each year with the consultation of all involved stakeholders and implementing partners. Facilitated by the PMU, this process will provide with the opportunity to reflect on past performance, discuss implementation issues and identify preliminary annual targets. On this basis, the consolidated AWPB will be prepared by the PMU and submitted to the PSC for approval. After approval by the PSC, the AWPB (accompanied by the PP) shall be submitted to IFAD for no-objection no later than 60 days before the end of the fiscal year (i.e. by 31st October each year), together with the minutes of the PSC. In case IFAD would want to introduce changes to the AWPB, the PMU shall inform the PSC about such changes[26]. The final, approved AWPB and PP will constitute binding documents that will govern, throughout the year, IFAD's decisions related to funds' release or procurement matters. They may be amended in the course of the year at the request of the PMU if proper justification is provided, and upon prior IFAD's no-objection.

105. **Monitoring and evaluation (M&E) purpose and scope**. The PMU M&E officer will be responsible to establish a M&E system, the main purpose of which will be to provide project management, government and IFAD with reliable and timely information on project execution performance and results, so that corrective actions may be taken on a timely basis to ensure that implementation remains both efficient (i.e. results are obtained at reasonable costs) and effective (i.e. goods and services are delivered and intended outcomes are achieved). More precisely, the M&E system will aim at:

- *Monitoring execution*: tracking activities and outputs against planned, physical targets (identified in the AWPB), and monitoring quality of products and services delivered. This will also help inform log-frame output indicators, including 1st level RIMS[27] indicators.
- *Monitoring outreach:* M&E activities will play a critical role in ensuring that the right target groups are being reached through effective targeting mechanisms and in keeping track of the number of households received project goods and services.
- *Measuring and evaluating results:* M&E activities will help measure the effects and early impact of activities on beneficiary, assess their satisfaction and ensure that project implementation does not have unexpected, negative consequences. In so doing, the M&E system shall help inform all log-frame outcome and impact indicators, including RIMS 2nd level indicators.

106. **M&E tools and processes.** The key reference for the setting-up of the M&E system will be the detailed log-frame (in annex 1 of appendix 6), while the shorter log-frame will serve as a key reference during supervision missions. It includes all relevant IFAD's RIMS indicators, as well as all pertinent output and outcome indicators of the NASS 2017-2022. The M&E system shall also be developed considering reporting requirements of the GCF. A specific scorecard for monitoring the resilience of beneficiary household is proposed in Annex 2 to appendix 6. The M&E tools, processes, responsibilities and data requirements will be described in the M&E Manual (part of the PIM) and will have to be finalized within 3 months of project start (see appendix 11, M&E manual outline). Under all components, the primary responsibility for collecting the data will be vested with each project implementer (NGOs, local MoA staff, FAO). Standard data collection forms and reporting templates will be the key tools used by project implementers. For transparency purposes, all key outputs and capacity building

[26] PSC approval may also be sought and granted as a final step, after IFAD's no objection is granted. This means that, in the event when the PSC would recommend changes, IFAD's no objection on revised AWPB will have to be sought again,

[27] Results and Impact Management System

support provided under each component shall be geo-referenced and mapped digitally, using a simple GIS technology. The M&E officer will use a central, Excel-based database to record and manage all the data necessary to monitor project execution and outreach.

107. **M&E results' measurement.** Using complete baseline data of the socio-economic situation of beneficiaries prior to their participation in project activities, the measurement of results (outcomes and impact) will seek to quantity the changes in the resilience and incomes of direct beneficiaries, as well as changes in land productivity, agricultural production and marketing opportunities that can be directly attributable to project interventions. For women and the youth, an additional focus will be on measuring changes in social status or sense of empowerment. The following tools will be used:

- *Village-level baseline surveys* will be undertaken upon villages' selection to collect secondary data on the economic characteristics of the population;
- *Other important baseline data* on specific socio-economic characteristics of beneficiary households prior to their participation in project activities will be collected upon selection of each beneficiary. This baseline will concern subcomponents 1.2, 1.3 and 2.1 beneficiaries. Under subcomponent 1.1. a specific M&E system will be set-up by the partner NGO;
- *Under component 1.1.* a specific M&E system will be established with the support from a partner NGO, in collaboration with the PMU and the National Agricultural Research Centre (NARC), in order to measure in a scientific way adaptation benefits, stability and level of yields, improvements in soil quality, as well as any other pertinent aspects, among selected households practicing climate resilient land development and management;
- *Monitoring of changes in beneficiary household resilience* is a particular feature of the monitoring of the RELAP impact at goal level, which will be done using a resilience scorecard. The questions proposed to be included in the scorecard are presented in appendix 13 section G.2 linked to RELAP supported activities addressing climate risks and vulnerabilities. The draft resilience scorecard, to be finalized during project start up, is presented in annex 2 to appendix 6;
- *Outcome surveys* will be conducted among a small sample of actual project beneficiaries (some 200 households) by local MoA and PMU staff, under the supervision of the M&E Officer, on an annual basis starting project Year 1. They will help document beneficiaries' satisfaction with project support and interventions as well as the direct outcomes of project interventions;
- *Farmers' and entrepreneurs' records*: Beneficiaries will be requested to keep records of key data on production, expenditures, sales and net profit, using standard templates. The objective will be to help them develop a more business-oriented mind-set. Also, this information will help to measure impact on incomes and triangulate findings of mid-term and completion surveys;
- *Gender studies*: Qualitative surveys shall be conducted periodically by the PMU Gender Specialist, with support from the M&E Specialist and the MoU Gender Focal Point, among women and young beneficiaries to identify any possible factors that may hinder their participation. Collection of data will be disaggregated by sex and age category (youth/non-youth).
- *Mid-term and a completion surveys* will be outsourced to a competent service provider and conducted under the guidance of the M&E Officer. Using a before/after evaluation design, they will be conducted among a representative sample of project beneficiaries and will document changes in beneficiaries' socio-economic situation, as compared to baseline data.

108. **M&E reporting.** Based on i) the monthly activity reports and annual progress reports, and ii) on the activity reports, the M&E Officer will prepare 6-monthly and annual progress reports, to be submitted to IFAD for information. IFAD's RIMS reporting will be done during supervision missions. Towards the end of the third year of implementation a Mid-Term Review (MTR) will be jointly organized by the government and IFAD. Before the project completion date, a Project Completion Review (PCR) will also be jointly organized by the government and IFAD. Both the MTR and PCR processes shall be informed by the findings of the mid-term and completion surveys.

109. **Learning and knowledge management (KM).** RELAP is expected to pilot new approaches and models for land development and draw out lessons learnt from upscaling these models with farmers. The project implementation is expected to generate useful lessons in a number of key thematic areas, which may be of value to MoA and EQA policy makers and other stakeholders.

110. Capturing, documenting and disseminating learnings and experience will be one of the key tasks of the M&E and KM officers. For this, they will establish a KM and communication plan, within 12 months of project start. This plan will be developed in consultation with the MoA, EQA, FAO, and NGOs selected as implementing partners (i.e. for the KM plan to be realistic, relevant and commonly understood, it can only be developed once all partners are on board). The KM plan will aim at collecting, documenting and disseminating lessons and best practices emerging from the project. It will define realistic targets for information dissemination, timeframe as well as appropriate formats (e.g. brochures, case studies, articles, newsletter, audio and video, web, etc.). This knowledge-sharing process will be integrated into project workshops and management, with key findings routinely disseminated across the PSC and to donors/ partners in the agricultural sector working group.

111. Close linkages between M&E activities and KM activities will ensure that the lessons generated are credible and based on evidence. For more complex policy issues, initial project lessons and experience may need to be complemented with more in-depth policy studies or analysis. FAO, who will implement the RELAP third component, and who has a robust experience in supporting policy studies in the country will also be an important partner for the generation and dissemination of lessons learnt and best practices. In particular, activities implemented under component 3 will enable MoA and EQA to develop models on key crops and water/soil resources under different climate change scenarios. KM will not only flow to ministries or other partners, but to village and municipality councils and farmers. Agro-climate information bulletins will provide clear analyses and recommendations for farmers to reduce their vulnerabilities to climate change.

D. Financial management, procurement and governance

112. **Overall risk assessment.** The country inherent risk is rated as high in light of the highly volatile political and security situation, and weaknesses highlighted in the 2013 PEFA and the 2016 World Bank Public Expenditure Review (PER) reports. In spite of significant progress shown in recent years by the P.A in terms of efficiency, accountability, and transparency of its public financial management system (PFM), further improvements are still necessary in budget preparation and execution, public disclosures, fiscal relations between central and local governments, accounting policies/practices and internal controls. In addition, the currently ongoing public procurement reform is yet to be fully implemented. With regard to public expenditure, although the PA has made major efforts to reduce the budget deficit and to fund the capital investment program from domestic resources, the PER report has highlighted the need to address the current fiscal situation; the substantial dependence on foreign aid; the very low level of public investment; the heavy reliance on public sector employment to increase economic growth (as evidenced by the high public sector wage bill); and the average quality of public services. Finally, though no Transparency International scoring was conducted, the literature available suggests that, despite improvements, corruption remains a problem in the West Bank.

113. The project fiduciary risk, initially rated as medium due to potential difficulties in the recruitment of competent staff, the inadequacy of the government Integrated Financial Management Information System (IFMIS) for project accounting and financial management, and the limited capacity of the internal audit unit at the executing agency level, may be reduced to low provided that appropriate mitigation measures are implemented. The risk assessment summary table and proposed mitigation measures are shown in appendix 7 (attachment 1).

114. **Financial management.** The RELAP PMU will be embedded within the MoA and vested with financial and administrative autonomy. The fiduciary team will be composed of a finance officer, a procurement officer and an accounts & administrative assistant, all recruited through a competitive process. The project internal control mechanisms (and its linkages to the MoA internal controls system) will be detailed in the financial and administrative procedures manual, to be drafted and submitted to IFAD's approval prior to first disbursement. The IFMIS currently in use by the MoA is not adapted to project accounting, and does not provide the required financial statements and reports. As a condition precedent to the first disbursement, the PMU will therefore acquire and install an accounting software designed for project accounting, allowing for (i) recording and reporting of transactions by component, category, source of fund, AWPB activity and geographical location, (ii) budget monitoring, (iii) automated bank reconciliations, (iv) contract management and monitoring of financial commitments, (v) production of the required financial reports and statements including those related to contributions in kind, and, (vi) possibly, the automated production of withdrawal applications. The PMU will be required to produce monthly financial reports to inform project parties on financial progress and con-

straints, as well as quarterly interim financial reports to be submitted within 30 days after the end of each reporting period. At the latest 2 months after the end of each fiscal year, the PMU will submit its unaudited annual financial statements (in accordance with IPSAS cash basis of accounting) to IFAD and to the external auditors.

115. **Flow of funds.** The Recipient will open USD denominated Designated Accounts (DAs) operated by the MoFP in a commercial bank, in order to receive IFAD grant and co-financiers' resources. The authorized allocations will be equal to 6 to 9 months of project expenditure so as to ensure easy flow of funds and avoid delays in project implementation. Project accounts (also in USD) will be opened for PMU payments, which will be processed through the government IFMIS system. In order to expedite the effective launch of project activities, start-up costs limited to USD 200 000 will be authorized prior to the satisfaction of disbursement conditions. [28] A chart of the flow of funds is shown in appendix 7 (attachment 2).

116. **Implementing partners.** As IPs in charge of the implementation of certain project activities, selected NGOs and the FAO will be required to maintain dedicated bank accounts and separate accounting records for RELAP. These accounts will be subject to annual external audits. The agreements signed between the IPs and the RELAP/MoA will specify the modalities for the release of funds as well as the financial reporting requirements.

117. **Counterpart funding.** Government contribution to project costs will be in the form of tax exemptions (since IFAD grant proceeds cannot be utilized for the payment of taxes), cash contributions to cover certain project activities, and in-kind contributions (essentially office space and utilities, PMU operating costs and salaries). Payments from the counterpart cash contribution will be managed through a separate bank account, recorded separately in the RELAP accounting system, and reported separately in both the quarterly interim financial reports and the annual financial statements.

118. **Audit.** The Palestinian state audit institution, the State Audit & Administrative Control Bureau, does not currently have the capacity to conduct external audits of donor-funded projects. The Bureau was requested to participate in or conduct the RELAP annual audit as soon as it becomes feasible. In the meantime, the annual external audit of the project will be carried out by an independent audit firm acceptable to IFAD, in accordance with the International Standards on Auditing and the IFAD Guidelines for Project Audits, and based on terms of reference subject to IFAD no objection. The final audit report and management letter are required to be submitted to IFAD by the Recipient at the latest 6 months after the end of each fiscal year. With regard to internal audit, the MoA unit in charge currently lacks the human and financial resources necessary to conduct project audits, As an alternative, the MoA is encouraged to submit an official request to MoFP for the use of their Internal Audit Unit as internal auditors of RELAP.

119. **Procurement.** Although the legal and regulatory framework adopted by the P.A is in line with international standards and IFAD procurement guidelines, most of the related institutional arrangements and instruments are still not operational. Consequently, the procurement of goods, works and services will be conducted in accordance with the IFAD Project Procurement Guidelines and Procurement Handbook, the provisions of the FA and the Letter to the Recipient, and the RELAP financial and administrative procedures manual. Prior to the start of each fiscal year, the PMU will prepare a detailed PP derived from the AWPB. The PP will be submitted (together with the AWPB) to the PSC for approval and to IFAD for no objection. The PP will be presented by component and type of procurement, and for each envisaged procurement, it will indicate the AWPB reference, the estimated cost, the procurement method, the need for IFAD prior review (based on applicable thresholds) and the timeline for execution of the procurement process until contract signature. An assessment of the current procurement systems and the MoA procurement capacity is included in appendix 8.

120. **Governance.** The primary responsibility for detecting fraud and corruption lies with the Recipient. However, the project should note that IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. The dissemina-

[28] Start-up costs will be authorized for expenditures related to: recruitment of the PMU contracted staff and salaries for first 3 months; start-up workshops; installation of the accounting software (including acquisition of license, customization and training); drafting of the PIM; procurement of the IT equipment and the project vehicle; selection of the implementing partners (NGOs); and baseline survey.

tion of IFAD's anti-corruption policy[29] amongst project staff and stakeholders, as well as the adoption of IFAD procurement guidelines for RELAP procurement should reinforce the use of good practices. In addition, RELAP will promote good governance through the involvement of municipalities, villages and beneficiaries in (i) the preparation of the annual work plans and budgets; (ii) the implementation of project activities; and (iii) the monitoring and evaluation of project activities.

E. Supervision

121. The project will be directly supervised by IFAD. At least one supervision mission will be organized each year, supported by regular implementation support and/or follow-up missions. The supervision exercise will provide continuous feedback regarding the RELAP coordination and management, particularly with respect to the progress made towards the achievement of the targets, and the likelihood of reaching the intended objective and the overall goal. Supervision will allow for the following activities: i) policy dialogue, ii) fine-tuning of implementation procedures, iii) revising agreements/contracts with partner NGOs, and iv) revising design to respond to unforeseen problems and issues. OFID, who will co-finance RELAP, will be invited to participate in supervision missions. The supervision planning will also be shared with the GCF, who may wish to join the supervision missions.

F. Risk identification and mitigation

122. Even with a well-thought out risk management plan, political risks in the West Bank are higher than average and have to be accepted as part of the framework conditions when working in Palestine. This has been agreed upon at the RELAP entry into the IFAD pipeline of projects in May 2017.

123. *For activities to be delivered under component 1*. No significant risks in terms of implementation of proposed land development procedures and technologies are identified. The proposed technologies and procedures have been widely used in the implementation by many projects/programmes funded by different donors in the project area, including recently completed IFAD funded PNRMP. Risks and associated mitigation measures, are proposed in the table below.

124. *For activities to be delivered under component 2*. No major risks in terms of implementation of the access to markets. The interventions rely upon village/municipality councils' and local stakeholders' participation and involvement to ensure ownership and durability of the investments. Risks may arose from a big number of implementing agents (NGOs, municipalities / councils...) but through its agribusiness unit, the PMU can guide and control the quality of the delivered services by implementing partners. Risks and associated mitigation measures are also identified in the table below.

125. *For activities to be delivered under component 3*. A main risk related to the weather stations is the subsequent operation and maintenance hereof, as well as the processing of the data into actionable recommendations that farmers will utilise. To counter this risk a thorough needs and cost-effectiveness analysis will take place, including farmers demands and utility of the data to be produced. Another risk could come from a lack of coordination between the PMU and FAO in implementing the component's activities. However, this risk is mitigated by the fact that i) FAO will implement activities based on agreed AWPBs and ii) EQA will be part of the PSC.

Table 3: Risk Matrix

Risk	Rating	Mitigation Measures
Political and institutional risks		
Closure of movement of people and markets, which can: i) stifle the economy quickly and directly given its reliance on Israel, and ii) reduce demand as many Palestinians work in Israel but spend their income in Palestine.	High	No project can address this problem, but through having more domestic food production and by offering more income generation rural opportunities (including jobs), as well as easier connections to central wholesale markets the resilience of rural households to such shocks will be increased by the RELAP

[29] IFAD's anticorruption policy is available on the IFAD website at www.ifad.org/governance/anticorruption/index.htm. Instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight can be found on the following site http://www.ifad.org/governance/anticorruption/how.htm.

Volatility in parts of Area C which are adjacent to the separation wall, settlements or Israeli roads could hamper land development and subsequent production	Medium	RELAP intervention in Area C will only focus on non-sensitive areas within the Area C (i.e. there will be no RELAP investments near the separation wall, Israeli settlements and/or Israeli roads). Land development works will i) only be done on land with property titles, and ii) in partnership with NGOs who can help liaising with the relevant Israeli authorities in case of problems. The PMU will also be staffed with professionals who well aware of the local environment and political sensitivities. Alternative plans will also be considered in the case implementation problems would occur in Area C, e.g. (and only if need be) shifting part of the investments to Area B after mid-term review.
Insufficient cooperation between MoA, EQA and FAO could undermine the needed CC adaptation focus and eventual CGF co-financing.	Medium	EQA will be in the RELAP steering committee and will closely work with the climate change department of the MoA. FAO will be an implementing partner reporting directly to the MoA/PMU. Strict modalities for lines of responsibilities, reporting and implementation modalities are agreed to.
Delays in staffing, project start up and disbursement	Medium	Use of IFAD grant to facilitate start-up. Key staff will be trained in IFAD procedures and processes at project start. Most of the PMU is to be seconded, and for the position to be recruited from the market, this could be done from IFAD board approval (using start-up costs and before conditions for disbursement are met.
Component 1		
Political priorities may not always be consistent with procedures established for the selection of villages/municipalities and investment proposals.	Medium	Empowerment of villages/communities in decision making. The approval process of AWPBs, in conjunction with the programmatic approach in which programme works will be selected on an annual basis provides opportunities to fine tune decision making during implementation and to minimize the risk that such adverse effects could occur.
Inadequate technical models for land development/improvement that could increase the investment cost.	Medium	The sub-component 1.1 for capacity development and applied research for cost-efficient land development is designed to minimize this risk
Implementing NGOs have incentive to inflate cost as they tend to be paid as share of total	Medium	Strict monitoring by PMU. Appliance of new low-cost methods as developed in component 1.1. Possible improvements to the remuneration formula for NGOs.
Inadequate operation and maintenance of constructed/rehabilitated facilities.	Medium	Strict application by PMU of selection criteria requiring adequate proposals for future O&M for agricultural roads by village/municipality councils, and required cash and in-kind contributions by the villages/municipalities and farmers will minimize this risk.
Negative environmental impact of project investments.	Low	For selected infrastructure schemes the participating NGOs and PMU will be responsible for ensuring that all environmental assessment requirements have been met during the design and construction stages.
Component 2		
Economic risk, e.g. lack of viable commercial outlets for small scale farmers' agricultural products	Medium	All market stakeholders (including traders) will participate in MRPs with a focus on market intelligence and promotion of local products in urban areas. Prefeasibility analyses will be made prior to investment support.
Economic infrastructure constructed (collection centre) are unused or not viable	Low	Municipal/village councils, with MRPs support, will have the responsibility to ensure the sustainability of the investments through local PPP covering management aspects.
Interventions are jeopardised by other marketing/value chains development projects	Low	The PMU will regularly liaise with other projects/donors and MRPs will be local entry points to synergise market development interventions.
Targeted rural poor are not fully aware of the MEF that is captured by local elites.	Low	Sensitisation and monitoring will involve a wide range of local stakeholders including the local authorities (local councils) and the MRPs
Supported business fail to find outlets	Medium	Non-financial services leading to a viable business de-

and generate a viable income		velopment plan are a pre-requisite to get the investment grants. Investors will access market intelligence (bulking, outlets, opportunities) through MRPs.
Component 3		
Possible lack of coordination between the PMU and FAO	Medium	Activities will be delivered after approval of the AWPBs, ensuring coherence and complementarity between components. This risk will also be mitigated by the fact that FAO reports to the PMU and by EQA involvement in the PSC. Discussion have already taken place at design with FAO during design to draft the collaboration agreement and discuss implementation.
Lack of financing for O&M of weather stations	Medium	Detailed analysis of cost implications and soliciting commitment from PA.
Utility and appropriateness of information produced may be limited	Medium	Needs assessment to be undertaken and information packaged to suit farmer's needs.

IV. RELAP costs, financing, benefits and sustainability

A. RELAP costs

126. RELAP is financed over a six-year (6) period, and it is assumed to start in the course of the second semester of 2018. Costs have been estimated on the basis of prices prevailing during the project detailed design in September 2017.

127. **Project costs by components.** Project investments are organized into four (4) major components: i) Climate adaptive land development (61% of the total costs), ii) Market linkages for the rural poor (19.4% of the total costs), iii) Improved public services for upscaling climate resilient agricultural land use and production systems (12.1% of the costs), and iv) Project management and M&E (7.5% of the costs). A summary breakdown of the project costs by components is shown in Table 4 below.

Table 4: Cost by component

Palestine
Resilient Land and Resource Management Project (RELAP)
Project Components by Year -- Totals Including Contingencies
(USD '000)

	Totals Including Contingencies						
	2018	2019	2020	2021	2022	2023	Total
A. Climate resilient land development							
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	-	200	123	126	128	150	726
2. Resilient land development	18	4,491	6,237	6,154	4,235	44	21,179
3. Investment in agricultural roads	-	671	688	701	706	-	2,766
Subtotal	18	5,361	7,048	6,981	5,069	194	24,671
B. Market linkages for the rural poor							
1. Rural bulking of agricultural products	182	1,871	1,862	214	134	-	4,263
2. Inclusive entrepreneurship development support	27	1,269	2,508	1,274	18	3	5,098
Subtotal	209	3,140	4,371	1,488	151	3	9,362
C. Improved public services for upscaling climate resilient agricultural land use and production systems	719	976	616	462	332	245	3,351
D. Project Management	752	591	624	598	609	815	3,989
Total PROJECT COSTS	1,698	10,069	12,659	9,529	6,161	1,257	41,373

B. RELAP financing

128. The total project costs of USD 41.37 million will be financed by an IFAD grant (from the trust fund for Palestine) of USD 4.56 million (confirmed), ii) a cash contribution from the government of USD 1.17 million (confirmed), iii) an OFID grant of USD 0.95[30] million (confirmed), iv) an in-kind contribution from the government currently estimated at USD 6.55 million[31], v) an in kind and cash contribution from beneficiaries, respectively of USD 3.61 million and USD 1.28 million (in the form of cash, casual labour, and some inputs and equipment), and vi) a contribution toward the road construction from the village councils (estimated at USD 0.24 million). Funds of approximately USD 23 million –

[30] The OFID grant will be USD 1 million, out of which USD 50,000 (5%) will be IFAD management fee.
[31] It will cover VAT, salaries of seconded staff, office space and utilities

including a grant from the Green Climate Fund (GCF) of USD 15 million and a grant of approximately USD 8 million from other partners/entities - are to be budgeted as a financing gap. IFAD, MOA and EQA will be in constant contact with the GCF and other potential co-financiers to mobilize this amount to fill the financing gap or otherwise seek alternative financing sources. The financing plan is summarized in cost by financier below.

Table 5: Cost by financer

Palestine
Resilient Land and Resource Management Project (RELAP)
Components by Financiers
(USD '000)

	The Government in kind		The Government in cash		IFAD GRANT		OFID		GCF		Other entities		Beneficiaries in kind		Beneficiaries in cash		Village council		To
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
A. Climate resilient land development																			
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	110	15.2	-	-	223	30.7	60	8.2	60	8.2	273	37.6	-	-	-	-	-	-	726
2. Resilient land development	3,389	16.0	646	3.1	1,160	5.5	845	4.0	8,810	41.6	2,106	9.9	3,619	17.1	604	2.9	-	-	21,179
3. Investment in agricultural roads	443	16.0	-	-	66	2.4	-	-	-	-	2,017	72.9	-	-	-	-	240	8.7	2,766
Subtotal	3,941	16.0	646	2.6	1,449	5.9	905	3.7	8,869	36.0	4,396	17.8	3,619	14.7	604	2.4	240	1.0	24,671
B. Market linkages for the rural poor																			
1. Rural bulking of agricultural products	682	16.0	-	-	1,269	29.8	-	-	-	-	2,312	54.2	-	-	-	-	-	-	4,263
2. Inclusive entrepreneurship development support	95	1.9	-	-	103	2.0	-	-	3,032	59.5	1,193	23.4	-	-	676	13.3	-	-	5,098
Subtotal	777	8.3	-	-	1,373	14.7	-	-	3,032	32.4	3,504	37.4	-	-	676	7.2	-	-	9,362
C. Improved public services for upscaling climate resilient agricultural land use and productio	351	10.5	-	-	-	-	-	-	3,000	89.5	-	-	-	-	-	-	-	-	3,351
D. Project Management	1,483	37.2	520	13.0	1,744	43.7	44	1.1	99	2.5	99	2.5	-	-	-	-	-	-	3,989
Total PROJECT COSTS	6,552	15.8	1,166	2.8	4,566	11.0	950	2.3	15,000	36.3	8,000	19.3	3,619	8.7	1,280	3.1	240	0.6	41,373

129. For detailed information on project cost and financing, reference is made to appendix 9, which includes a more elaborate explanation, as well as a complete set of summary and detailed costs tables in its Attachments. Also, based on confirmation of co-financing from the GCF and other entities, the overall budget and financing plan will be revised at start-up. In case the co-financing of the GCF and other entities would not materialize, component 3 would be dropped while components 1 and 2 would be downscaled in geographical coverage (reducing the number of villages supported and the number of beneficiaries). This was discussed and agreed upon with government and would not change the nature of the RELAP design, which would still have climate change adaptation strongly mainstreamed into components 1 and 2.

C. Summary benefits and economic analysis

130. **Project benefits.** Benefits are expected to derive from i) enhanced access to productive agricultural land and water through a range of investments in land development, agricultural roads, soil improvements, and rain water harvesting facilities, ii) strengthened smallholders' resilience to current and anticipated impacts of climate variability and change through adapted agricultural land-uses and practices, and improved soil and water management, iii) improved market linkages at cluster levels, and iv) entrepreneurship development support, which will focus on creating economic opportunities for women and youth. Furthermore, it is important to highlight that through land development interventions, by turning unproductive or semi-productive lands into productive ones, registered owners of the lands would increase the rights that they have on the land and therefore decrease the possibility of land confiscation by the State. Indeed, according to the Ottoman law code in West Bank (of 1848 and today still in force), "if a registered land is not cultivated for three successive years, it may become the property of the Ottoman State, i.e. "State Land". To represent project financial benefits, 12 financial farm and activity models have been prepared. They form the building blocks of the economic analysis.

131. **Number of beneficiaries[32].** RELAP is expected to benefit about 30,000 households, or 150 000 direct beneficiaries, considering an average household size of 5 in West Bank[33].Approximately 2 700 households will benefit from resilient and equitable land development activities; 4 500 households – including 1 850 not benefiting from land development - will benefit from agricultural roads construction; 900 households will benefit from inclusive entrepreneurship development support; and 6 650 households will benefit from cluster development support – out of which 4 000 households will exclusively benefit from cluster development support and 2 650 households will also benefit from access to grants and resilient land development activities . Finally, 30,000 households will directly benefit from component 3's activities, including climate resilient trainings and enhanced information/knowledge

32 Estimates to be finalized during the final design mission.
33 http://www.pcbs.gov.ps/site/512/default.aspx?lang=en&ItemID=1566

sharing. The below table summarizes the beneficiaries' phasing-in by activity. For economic analysis purposes only, an 85% beneficiary's adoption rate is considered (see appendix 10).

Table 6: Direct household beneficiaries' phasing-in by main activity

Direct households beneficiaries'phasing-in by main activity								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Direct HHs beneficiaries	Direct Beneficiaries
Orchards using terrasses, contour bounds, v-shapes		300	450	450	300		**1 500**	**7 500**
Conservation agriculture in crop-livestock systems		87	87	87	29		**290**	**1 450**
Wadis land development		144	144	72			**360**	**1 800**
Rangeland land development		125	125	125	125		**500**	**2 500**
Investment in agricultural roads (benefiting from roads and land development)		1 125	1 125	1 125	1 125		4 500	22 500
Investment in agricultural roads (benefiting only from roads)		469	319	391	671		**1 850**	**9 250**
Cluster development support (benefiting from Component 1, MGs and cluster development support)		1 663	1 663	1 663	1 663		6 650	33 250
Cluster development support (benefiting only from cluster development support)		1 007	857	929	1 209		**4 000**	**20 000**
Inclusive entrepreneurship development support (MGs)		225	450	225			**900**	**4 500**
Farmers receiving trainings and agro-climate information (including beneficiaries from component 1 and 2)	1231	8154	8462	6308	3538	2308	**30 000**	**150 000**
Farmers receiving only trainings and agro-climate information (excluding beneficiaries from component 1 and 2)	1231	5797	6030	4029	1205	2308	20 600	**103 000**
Total direct households/beneficiaries	***1 231***	***8 154***	***8 462***	***6 308***	***3 538***	***2 308***	***30 000***	***150 000***

132. **Summary of financial models' results.** Based on field visits, PNRMP's activities, national statistics, and on expected project activities, a number of indicative financial models were identified during the project design process. Twelve illustrative financial models were prepared to demonstrate the financial viability of the investments: seven resilient land development financial models: i) orchard land reclamation with terrace on slope between 10-30%, ii) orchard land rehabilitation with terrace on slope between 10-30%, iii) orchard land rehabilitation with terrace on slope between 30-40%, iv) orchard land rehabilitation with terrace on slope<10%, v) wadis land development, vi) rangeland land development, vii) crop – livestock conservation agriculture (CA) system; three financial models representing potential activities that landless women or young people could undertake through inclusive entrepreneurship development support: viii) bee-keeping model, ix) mushroom model, x) sheep model; two infrastructure models: xi) road model, xii) market model. All farm and activity models generate attractive profitability indicators, as summarized in the table below. In the case of land reclamation with terrace on slope between 10-30%, the results are borderline mainly due to the high investment cost (NIS 9 200 per dunum). However, when excluding family labour from the final calculation, results improve significantly (NPV: NIS 67 500 and IRR 20%). Most importantly, results obtained considering the flow of fund proceeding from donors and the farmer indicates that the activity is financially viable and further sustainable from farmers' viewpoint. Finally, the investment is further justified when considering that, according to the Ottoman Law referenced above, registered productive lands cannot be confiscated from the farmer.

Table 7: Household and cooperative models summary

	Net income WP (NIS)	NPV @ 10% (NIS)	B/C	IRR	Switching value benefits	Switching value costs	Return to family labour (NIS/day)
Land reclamation slope 10-30% (7 dunums)	33,214	9,985	1.06	11%	-5%	6%	405
Land rehabilitation slope 10-30% (7 dunums)	28,307	21,735	1.54	20%	-35%	54%	293
Land rehabilitation slope 30-40% (7 dunums)	25,620	25,977	1.20	18%	-17%	20%	283
Land rehabilitation slope <10% (7 dunums)	30,705	28,523	1.19	15%	-16%	19%	341
Wadis land development (7 dunums)	27,951	25,696	1.19	16%	-16%	19%	363
Rangeland land development (7 dunums)	17,444	15,444	1.31	23%	-24%	31%	317
CA and livestock integrated system (7 dunums)	23,087	40,870	1.28	85%	-22%	28%	308
Sheep breeding _grant	12,263	6,148	1.07	16%	-7%	7%	415
Mushroom grant	21,772	13,076	1.17	50%	-14%	17%	211
Beekeeping_grant	11,550	11,005	1.69	26%	-41%	69%	444

133. **Economic rate of return.** The overall economic internal rate of return (EIRR) of the project is estimated at 27% for the base case. The net present value (NPV) of the net benefit stream, discounted at 9%, is USD 56.5 million. See below the economic analysis summary table.

Table 8: Economic analysis summary

	Total Benefits USD '000	Total Costs USD '000	Cash flow USD '000
Y1	-56	1631	-1688
Y2	-6679	3167	-9846
Y3	-8243	3634	-11877
Y4	-4267	2597	-6864
Y5	2293	1540	753
Y6	10564	1093	9471
Y7	13510	500	13010
Y8	15090	500	14590
Y9	16087	500	15587
Y10	16647	500	16147
Y11	16888	500	16388
Y12	17005	500	16505
Y13	17209	500	16709
Y14	17412	500	16912
Y15	17586	500	17086
Y16	17663	500	17163
Y17	17673	500	17173
Y18	17672	500	17172
Y19	17673	500	17173
Y20	17674	500	17174
NPV@9%	**56,460**		
EIRR	**27%**		

134. **Sensitivity Analysis.** In order to test the robustness of the above results, a sensitivity analysis has been carried out, the outcomes of which are presented in table 8 below. The sensitivity analysis investigates the effect of fluctuations in project costs, benefits, and delays in implementation on the NPV and ERR. It shows the economic impacts that a decrease in project benefits – up to -50% – will have on the project viability. Similarly, it shows how the economic viability of the project will be affected by an increase of up to 50% in project costs; and by a one to three-year delay in project implementation. The analysis confirms that the economic viability of the project remains attractive as a positive NPV and ERR above 9% are preserved in each case analysed.

Table 9: Sensitivity analysis

	Assumptions	Related Risk	NPV USD	EIRR
Programme base case			56,460,129	27%
Decrease in programme benefits	-20%	Reduced no. of beneficiaries if not all co-financing expected materialize. Socio-political unexpected problems. Market/price fluctuations. Delays of trainings.	42,611,738	25%
	-30%		35,687,542	24%
	-50%		21,839,150	20%
Increase in programme Costs	20%	Market/price fluctuations (changes in market demands). Procurement risks. Socio-political unexpected problems.	53,903,763	25%
	30%		52,625,581	24%
	50%		50,069,215	23%
Delays in programme implementation	1 year	Delays in having the Project approved by all parties and financiers. Socio-political unexpected problems.Any other unforeseable event.	44,785,582	24%
	3 years		29,639,353	20%

135. For detailed information on economic and financial analysis, reference is made to appendix 10, which includes an elaborate explanation on the analysis carried out (and assumptions considered).

D. Sustainability

136. Sustainability is being built into the design of the land development component in several critical ways. By application of demand-driven and cost sharing approach, and by enhancing the target group capacity for improving the productivity of existing resources, it is expected that they will use the existing natural resources (land and water) more efficiently and profitably. This in turn will enable the target group to respond more resiliently to the challenges of climate change as well as having a financial incentive and means to finance the routine maintenance cost of the investments. The project will

ensure environmental sustainability by insisting that all activities and inputs of component 1 are screened from an environmental perspective. And finally, the selection criterion on feasible and sustainable procedure for operation and maintenance of the proposed investments will be endorsed by the responsible institution, i.e. the municipality/village councils for agricultural roads and individual farmers for improved lands. The endorsement will be subsequently formalized in agreement with participating NGOs/PMU stating the commitment to make yearly provisions for maintenance of rehabilitated/constructed assets. The sustainability is also strengthened by carefully calibrated user contributions designed to balance sustainability prospects with inclusion. Under the previous project (PNRMP) the required contribution by farmers for land development was 25% in cash that was too high for them to afford. Based on the lessons learned from the previous project the approach has been revised and only 5% of total cost is required now in cash and 20% in kind, while keeping the overall total 25% contribution requirements as per the regulations in the PA. As per the road investment, it is considered 10% cash contribution by municipalities for investment cost. This option has been discussed in all the municipalities visited by the design mission and there was no concern about it. Furthermore, all the municipalities suggested to do the designs for road improvement at their own expenses. And this proposal was adopted by the design team, i.e. in addition to cash contribution for roads investment works the municipalities are obliged to procure the engineering designs, clearly also an indication of ownership and willingness to invest in the infrastructure.

137. Investment, operation and maintenance of the agricultural road network in West Bank is under the responsibility of village/municipality councils. The investment and maintenance funds are provided from their budget. Funds allocated hereto are generally sufficient to cover the maintenance of agricultural roads provided that they are properly built. Furthermore, as the roads that will be included in RELAP will mainly serve to ensure the access to developed agricultural lands, farmers will consequently have particular economic incentive to keep these roads in proper conditions (at least the routine maintenance will be carried out by farmers whereas they are a likely vocal constituency pressuring the local councils to honour their O&M obligations). Thus, if the adequate quality of works is ensured and the particular economic interests of benefitting farmers, the sustainability of the roads investments will most likely be ensured.

138. Similarly to component 1, sustainability is part and parcel of the market approach (component 2) through all market stakeholders' involvement at early stages and thereafter all along the process. Village/municipal councils will own the common economic infrastructures. The Project will support the establishment of autonomous private management set-up to whom village councils will delegate, through a local public private partnership, the sustainable use and management of the marketing and collecting centre through the collection of an agreed market fee. In the long run, it is also expected that the recognition of Palestinian origin for agricultural products on urban markets will provide effective and regular outlets for the products. Through the MRPs, that enhance local social capital, financial institutions are made aware of the viable entrepreneurship initiatives and encouraged to support investors with financial services with less risks.

139. The exit strategy for both component 1 and 2 rest of the strong economic incentives that will be created for the private sector (mostly farmers and agribusinesses) to continue to profit from commercially beneficial MRP and resilient farming principles. This will be core ambition, but the public sector will also play a crucial role in providing an enabling framework for the farmers and agribusinesses in terms of infrastructure, market access, climate information provision and testing of new innovative land and farming models.

140. Finally, component 3 sustainability is based on the strong and accelerating demand for improved climate information, including forecasting modelling and translation into actionable information for farmers. All stakeholders, including MoA, EQA and meteorological services have expressed commitment to the O&M of the proposed stations. Sustainability for component 3 is also backed up by the fact that i) both MoA and EQA consider RELAP as an important project aiming at decreasing the vulnerability of the sector and enhance the resilience of Palestinian target communities, and ii) strongly advocated for the inclusion of the third component into the RELAP design.

Appendix 1: Country and rural context background

141. The situation in Palestine is universally recognized as one of the most fragile, complex and volatile political and institutional contexts globally. Palestine has been, and continues to be, affected by extended periods of political, economic and security instability. The confluence of these factors pose multiplicity of challenges and requires adaptive and politically smart responses to navigate, not least in relation to a sensitive area such as land. This in turn will also require substantial insights into the contextual background and history that has shaped the current situation.

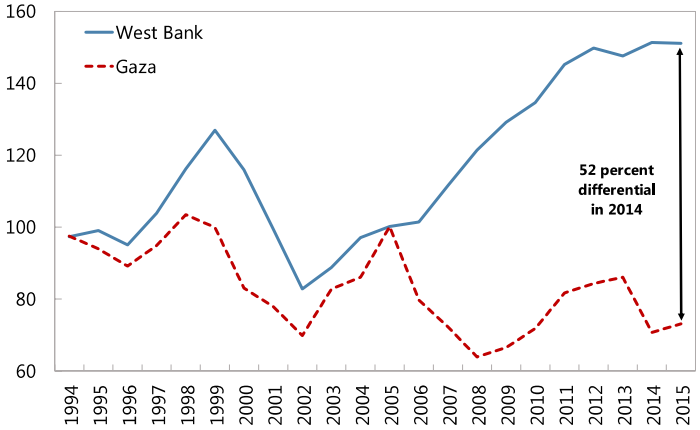
142. Under the framework of the Oslo Accord in 1993, the Palestine Authority (PA) was designated to have exclusive control over both internal security-related and civilian issues in Palestinian urban areas (referred to as Area A) and only civilian control over Palestinian rural areas (Area B). The remainder of the territories (Area C covering 63%) including Israeli settlements, the Jordan Valley region and bypass roads between Palestinian communities, were subject to future negotiations for clarifying the process of transferring part or all of these areas to the PA. However, such negotiations failed to progress and the Israeli claimed part of Area C has been expanding since the Oslo Accords, progressively restricting the ability of Palestinians to effectively access land and also water resources.

143. This has serious implication for both the economy and the wider national strategies of the nascent Palestinian state as Area C is where the majority of the West Bank's natural resources lie. For example, 82% of the groundwater reserves not accessible to the Palestinian. These water restrictions make Palestinian among the most water stressed country in the world, which is exacerbated by the increase in temperatures and more erratic rainfalls over the last decades due to climate change, adding to the vulnerability of rural communities and the agricultural sector. Moreover, much of the fertile land is also located in Area C, where it is being either complete close off to Palestinians, or only accessible with considerable difficulty and often at prohibitive cost (e.g. multiple security check points not allowing vehicular access or with unpredictable exclusion of access). It is estimated that the restrictions in Area C impose a cost on the Palestinian economy in the magnitude of USD 2.2 billion yearly or around 20% of GDP.[34] The Israeli expansion and construction of new settlements has created a segmented geography where Palestinians are impeded from moving freely across their own land and applying a coherent management of their wider landscapes. This is undermining the territorial integrity and the wider ability to create a contiguous, economically and politically sustainable country.

144. **Macro-economic performance.** The economy has also been subject to the above-mentioned shocks and volatility, resulting in uneven and depressed growth rates, but with significant variations between the West Bank and Gaza, as illustrated in Figure 1 where successive conflicts with Gaza have resulted in increased divergence in macro-economic performance. However what is also clear is that the volatility is higher in Gaza, but in both cases economic growth has tended be around the level of population growth (3%) since 2012 with the 2014 war in Gaza obviously inducing a dip in performance there. Thus GDP per capital has plateaued since 2012 (see Figure 2), with few indications that a revival of substantial growth being imminent.

[34] World Bank: *Area C and the Future of the Palestinian Economy* Washington, 2015

Figure 1: Growth/capita 2005 = 100



Source: IMF: World Economic Outlook 2017

145. As in previous years, in 2016, GDP growth was driven by an unsustainable expansion in domestic demand, in particular private consumption, which accounted for 26 per cent of bank credit to the private sector. While the relative importance of private consumption in economic growth increased relative to government consumption, investment and exports continued to lag behind. In the meantime, the usual 'income-elevators' for developing countries (e.g. productivity growth in agriculture and labour –intensive industrialisation), are being undermined. The drivers of the de-industrialisation and "de-agriculturalisation" of Palestine are well-known: The continuing loss of land and natural resources and the annexation of land in the West Bank, as well as fragmentation of the economy into disconnected markets and regions, and restrictions on the importation of essential production inputs, all escalate production costs, depress investment and inevitably set the economy onto a distorted path of high unemployment and widespread poverty. Consequently, the share of value added of agriculture contracted by 11 per cent in 2016, resulting in the sector's share in the overall economy to fall from an already low of 3.4% to only 2.9%.[35] The share of agriculture in overall credit disbursement is now at 2%, half of the share of credit to finance car purchases.[36]

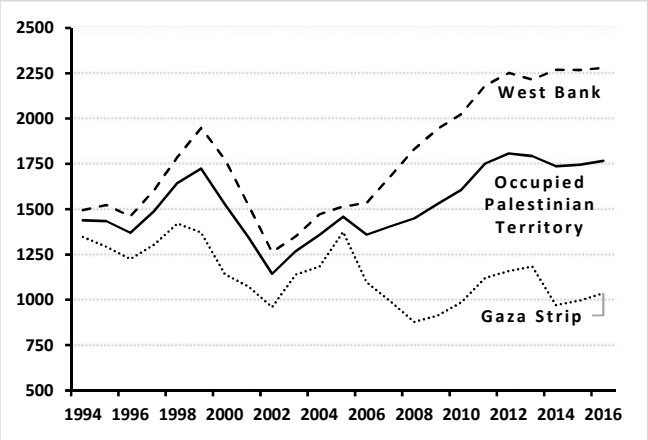
146. A key consequence of these unfortunate events has been that unemployment has remained stubbornly high, especially among young people**.** Overall unemployment reached 27% 2016, up by about 2 percentages point compared to 2015. Conditions are especially difficult in Gaza, where unemployment exceeds 40 percent and close to two-thirds of young people are without a job. With the dearth of job opportunities, too many people are disengaged from the labor market and labor force participation stood at just 46% percent in mid- 2016.[37]

147. In the West Bank the situation is only marginally better. Overall unemployment is at 18% here whereas youth has a substantial higher risk at 27%.[38] Unemployed youth are often considered a lost generation, as they do not have the opportunity to build up relevant skills during their first years in the workforce. Such disenfranchisement of young generations discourages investment in education, lowers the accumulation of human capital and deprives the economy of the new thinking, creativity, technological awareness and transformative innovations that are naturally associated with the young.

148. For the economy as a whole, extreme youth unemployment has negative ramifications for long-term productivity, competitiveness, economic growth and fiscal sustainability. The skills atrophy caused by youth unemployment is associated with longer spells of job searches in the future, underemployment, long-term un-employability, reduced lifetime earnings, poverty, despair and poor health, as well as economic, cultural, social and political marginalization. The underutilization of human capital pertaining to youth, college graduates and women is another element of the economic cost imposed by occupation on the Palestinian people.

35 PBS 2017
36 UNCTAD: *Developments in the Economy of the Occupied Palestinian Territory*, September 2017
37 IMF 2016.
38 PBS 2017

Figure 2: Real GDP/capita 1994-2016 (USD)



Source: Palestinian Central Bureau of Statistics (PCBS).

149. The loss of future income due to youth unemployment will aggravate the fiscal problems of the PA with regard to both revenue and expenditures as a result of low tax revenues and the increased burden of government spending on social transfers and health services. This is also a key driver for both the PA and its international development partners (IFAD included) to focus on youth in particular when promoting job generation, not least in rural areas.

Rural development challenges

150. In the unique Palestinian context, rural development faces important obstacles and challenges, including, among others: i) the volatility and high insecurity, due to restriction of movements and regular clashes between Palestinians, Israeli security forces and settlers; ii) agricultural production constrained by Israeli water and land-use controls in Area C; iii) impacts of climate change adding to the existing water stress and drying and degradation of the land; iv) high food insecurity and the lack of income opportunities for the rural population, in a context of a captive economy, where imported food can be blocked with virtually no notice and where food prices are high and volatile[39]; and v) both permanent and ad-hoc restrictions on imports and exports of agricultural inputs and outputs, reducing predictability and investment horizons and increasing costs.

151. Further hindering rural development is the small size of farms, on average 1 ha (or 10 dunums) in the West Bank often spread out on several plots.[40] Clearly if the productivity of such plots was high, this could partly compensate for the small size. Unfortunately, productivity is relatively low, not least for the major tree-crop grown, olive, which is inherently low productive but also due to limited precipitation that reduce the choice of rain-fed high-productivity crops (and is a main reason for growing olive). Combined with the above-mentioned challenges, agriculture has become an increasingly difficult to engage in, not least for the youth. Thus, the rural urban exodus has been gaining strength. In 2000 the rural population constituted 28%, a figure that was down to 25% in 2015, whereas corresponding figures for share of labour force engaged in agriculture halved from 12% to 6%.[41] The area under permanent crop cultivation has declined from 120 000 ha in 1997 to 70 000 in 2012.

152. With the increasingly marginalisation of agriculture and deleveraging of investments in the sector, it has also become a more women-dominated sector, but at the lowest and most menial level, and not at ownership level. The share of women in the agricultural workforce has consequently increased from 66% in 2000 to 76% in 2015.[42] However, with the existence of traditions and cultures which tend to favour inheritance of men, women's access and control of land and natural resources is limited. Though legislation provides women with the right to inherit, own and dispose of land independently from the men in their family, men hold primary power over the use and ownership of land, which con-

[39] According to the 2014 socio-economic and food security survey, carried out by the Palestinian Central Bureau of Statistics, WFP and UNRWA in the West Bank, food insecurity remained at 17%, unchanged from 2012 levels.

[40] SEC: *Agriculture sector analysis in Palestine: West Bank*, 2016

[41] FAO-STAT: 'Country Profile, Palestine' 2016

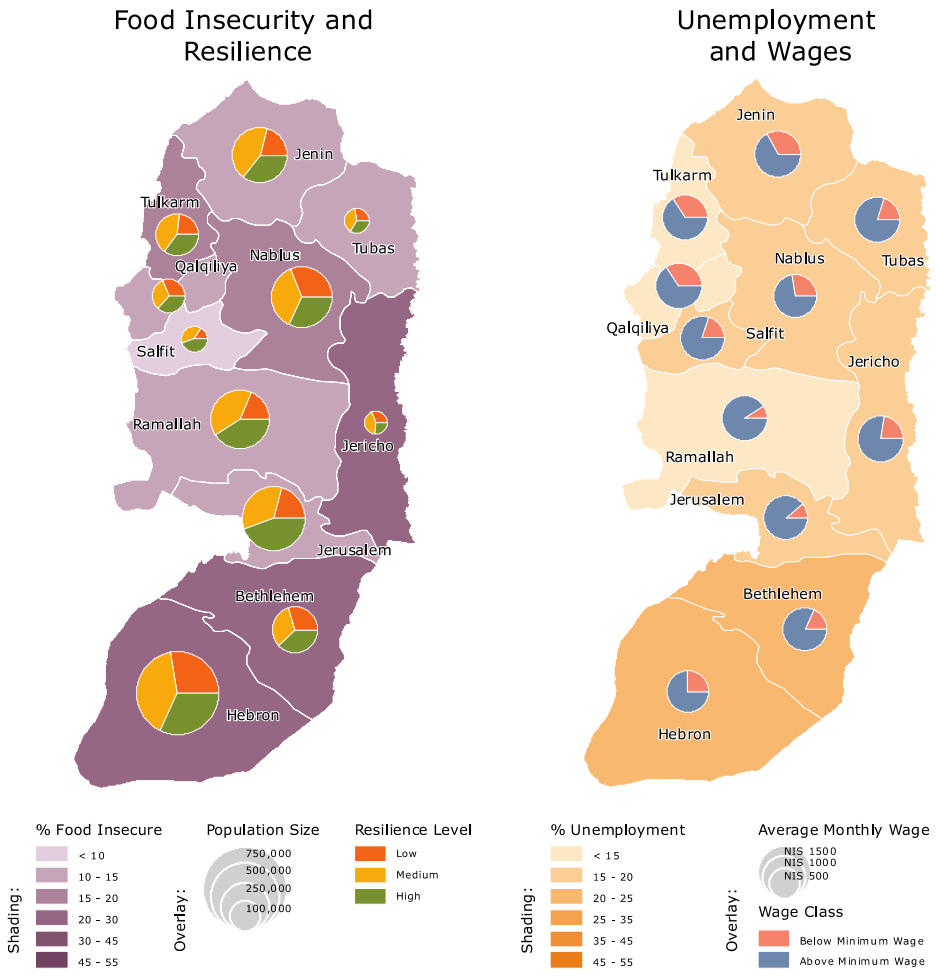
[42] Ibid.

tinues to reinforce the denial of women's equal rights to land even when the legal frameworks provide for it.[43] Thus women are mainly confined to unpaid or low paid menial work in the farms (see appendix 2 for further details). Young men are increasingly shunning primary agricultural production as it is not seen compatible with the lifestyle ambitions[44].

153. Youth have also other challenges in engaging productively and profitably in agriculture and broader agribusinesses. Few have access to investment credits, both due to financial institutions' inherent reluctance to invest in agriculture, but also due to young people lack credit history and collateral. Moreover, both banks and MFIs view youth as more footloose and less committed to agriculture, than more established farmers[45]. Again, this limits innovation and entrepreneurship in the sector at a time when this is critically needed. As a consequence, many young Palestinians who are unemployed engage in fresh produce retail trade in villages and cities, carried out on an extremely small scale based on small vehicles self-constructed from wood and bicycle tires or selling produce laid out in the street, as they have to keep capital investment at a minimum[46].

154. Combined, all of these challenges conspire to high level of food insecurity and unemployment as well as low wages all over the West Bank, as can be seen from Figure 3 and in appendix 2.

Figure 3: Food security, employment and wages



Source: FFS: Humanitarian Response Plan, 2016

43 PARC: Policy Brief: Delivering on Women Farmers' Rights, Ramallah, 2015
44 SEC; *Agriculture sector analysis in Palestine: West Bank*, 2016
45 Interviews with MFIs and banks in the West Bank.
46 Rico Ihle, Israel Finkelshtain and Ofir Rubin, 18th ICABR Conference "Bioeconomy and Development" Food Trade in Political Conflict: Demand for Differentiated Fresh Fruits in the Palestinian Wholesale Market of Hebron, 2014

155. **Government policies and strategies.** At the macro level, the PA's main strategy is encapsulated in the *National Policy Agenda 2017-2022*, which has as the overall vision of a free, independent and prosperous state of Palestine. It has three pillars: 1) path to Independence, 2) government reform, and 3) sustainable development. Of interest in this context is obviously the pillar on sustainable development, where emphasis is on revitalizing agriculture and strengthening the rural communities, not least in Area C. Moreover, the rehabilitation of land is an explicit commitment in the National Policy Agenda as it is seen a as crucial in protecting to the remaining territorial integrity of Palestine. Hence two key policy priorities for the PA are to firstly increase agricultural plant and livestock production and develop value chains and secondly to protect and support farmers, particularly in areas under threat.

156. The specific strategies for delivering on these policy priorities are detailed in the *National Agricultural Sector Strategy (NASS)*, *2017-2022*. The NASS has five core strategic objectives: 1) farmers' resilience and land security enhanced; 2) agriculture sustainably managed and better adapted to climate change (CC); 3) increased agricultural production, productivity, and competitiveness facilitating food security and economic growth; 4) better access to quality agricultural services especially for value chains (VCs); and 5) improved institutional and legal frameworks. The RELAP intend to support especially the three first strategic objectives of the NASS (farmers' resilience, increased productivity and production and; sustainable and climate smart agriculture). It will, however, also integrate farmers into more profitable VCs (often supported by other partners) thus also contributing to the 4th strategic objective (better access to quality agricultural services).

157. A key crosscutting theme in the NASS is the focus on improving steadfastness of farmers and rural communities, with explicit reference to the land tenure and land security, but also as regards their ability to improve the livelihoods in rural areas, making it a pro-active and positive decision to stay in and invest in rural businesses, agriculture included. Particular emphasis is given to innovative youth, women farmers, and producers are engaged in sustainable and feasible agricultural and rural activities. Water access is also singled out as a key area and here the NASS has ambitious targets for improving availability using a diversity of options, including: water wells, tanks, cisterns, canals and treated waste water. Combined with more efficient irrigation techniques, this is intended to catalyse a shift towards higher value crops, as well as expanding the area under active cultivation to improve steadfastness. Finally the NASS also aimed to rehabilitate or reclaim at least 13.000 dunums (1.300 ha) of lands and built 350.000 retaining walls, again with the objective of improving resilience to land encroachment and increasing incomes. Clearly this is also an area where RELAP will contribute both quantitatively as well as through better land development models

158. For climate context, policy response and RELAP engagement, please see social, environmental and climate assessment (SECAP) note in appendix 13.

Appendix 2: Poverty, targeting and gender

A. Poverty, food security and vulnerability

159. **Poverty measures.** Rural poverty in Palestine is not well researched nor documented[47]. Furthermore, various definitions of poverty, corresponding to various poverty lines, have been used in the West Bank and Gaza since 1997. Until 2011, the official poverty line was calculated by the Palestinian Central Statistics Bureau (PCSB) based on expenditures data from household expenditure and consumption surveys, using a reference family of 2 adults and four children. The official poverty line changed frequently over time, from NIS 1 642 per month in 2001 and NIS 1 800 in 2003[48], to NIS 2293 in 2011. Derived from a relative concept of poverty, it was being used as an absolute poverty line and was not adjusted for spatial price differences.

160. In 2011, this methodology was changed to reflect international best practices and standards. The new methodology involves an adjustment for spatial price difference across the various governorates in the West Bank and in Gaza as well as for inflation, and poverty headcount is calculated at individual level rather than at the household level. In order to reflect the results of the 2007 population census, it also uses a reference family of two adults and three children. The year 2010 is now considered as a new base year for estimating poverty rates. The data series for the period 2004-2009 presented in the next table was adjusted by the PCBS to reflect these methodological changes. The latest data on the proportion of population below national poverty line is for the year 2011 and a new poverty assessment is planned to take place in 2018.

Table 10: Proportion of the population below the poverty line

Year	Palestine					West Bank					Gaza				
	Total	Men	Women	Urban	Rural	Total	Men	Women	Urban	Rural	Total	Men	Women	Urban	Rural
1996	23.6	23.4	25.7	19.4	22.2	16.2	15.6	23.1	11.3	19.0	41.9	41.5	48.0	35.0	49.1
1997	22.5	21.8	29.9	20.1	20.5	15.6	14.5	26.7	11.5	18.2	38.2	37.3	51.6	28.6	34.5
1998	20.3	19.8	25.6	17.3	18.3	14.5	13.7	21.7	10.4	16.5	33.0	32.7	36.8	28.6	34.5
2001	27.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2004	25.6	26.0	21.0	24.4	24.6	19.8	20.1	17.1	16.6	23.2	37.2	37.5	32.8	35.6	61.5
2005	29.5	29.8	25.0	24.9	32.5	22.3	22.4	18.1	16.0	29.0	43.7	44.3	42.0	41.3	69.7
2006	30.8	30.3	35.6	29.3	29.5	24.0	23.4	31.4	20.7	26.5	50.7	50.9	47.9	48.7	83.1
2007	34.5	34.5	34.5	33.1	30.3	23.6	22.9	30.0	19.7	27.8	55.7	56.6	44.4	55.4	66.9
2009	26.2	26.5	22.5	26.2	26.6	19.4	19.3	21.0	17.6	22.7	38.3	39.0	25.4	38.8	80.2
2010	25.7	25.5	29.8	25.8	21.9	18.3	18.0	23.7	18.3	17.9	38.0	37.9	41.9	36.3	76.1
2011	25.8	25.5	26.2	26.1	19.4	17.8	17.4	18.3	17.6	17.2	38.8	38.6	39.0	37.5	53.0

Source: Palestinian Central Bureau of Statistics, MDGs Indicators in Palestine, 1994-2012

161. Since 2011, the official poverty line[49] is set by the PCBS at NIS 2,293 per month (or USD 650[50]). According to latest PCBS estimates, some 25.8% of the Palestinian population falls below this line, with a marked difference between the West Bank and Gaza. Since 2006, the proportion of the population in the West Bank below the poverty line has thus steadily decreased (from 24% to 17.8% in 2011), while Gaza is yet to recover to its 2004 level. Within the West Bank, and according to the data from the 2013 Poverty Atlas in Palestine[51], there are however large differences across the 11

[47] The latest comprehensive poverty assessment was conducted in 2011 by the World Bank, but there was no specific focus on rural poverty. The Poverty Atlas conducted in 2013 identifies the list of poor localities in West Bank and Gaze, but does not analyze the key drivers of poverty. Other, available surveys and studies on vulnerability (UN, 2016), food security (WFP/PBCS 2014), or resilience (FAO, 2015) provide only indirect measurement of rural poverty, or are largely based on qualitative assessments.

[48] By way of comparison, the official Israeli poverty line for a family of two adults and four children was set at NIS 5,926 (approximately USD 1,350) in 2002.

[49] It includes expenditures for food, clothing and housing, as well as other necessities (health care, education, transportation, personal care, and housekeeping. The “deep poverty line”, on the other hand only includes expenditures for food, clothing and housing and stood at NIS 1,783 (or USD 478) in 2011.

[50] As per October 2017 exchange rate

[51] Poverty Atlas in Palestine, PCBS, June 2013

governorates: the largest proportion of people below the poverty line is found in Jericho and Hebron (31% and 30% respectively), while only 9% and 16%, respectively of the population in the governorates of Ramallah and Qalgylia are considered poor.

Table 11: Poverty headcount rate – West Bank Governorates

Jenin	19.30%
Tubas	24.47%
Tulkarm	20.81%
Nablus	20.18%
Qalqylia	15.82%
Salfit	23.96%
Ramallah	8.87%
Jericho	31.28%
Bethlehem	17.35%
Hebron	29.88%
West Bank	21.31%

Source: Poverty Atlas, PCBS, 2013

162. According to the latest available data (2011), some 8.8% of the population in the West Bank was below the "deep poverty line", which only considers expenditures to fulfil a household's essential needs (food, clothing and housing). Emergency assistance to needy households remains widespread in Palestine and is usually successful in lifting many households above the poverty line: in 2003, the World Bank had thus estimated that the emergency assistance received had helped to lower the then poverty rate from 22% to 16%, a reduction of almost a third[52]. Nonetheless, the same study had shown that 32% of the neediest households had not received emergency assistance, chiefly because of their lack of access to information on available emergency assistance programmes.

Table 12: Proportion of population below the deep poverty line

	Poverty		Deep poverty	
	2009	**2010**	**2009**	**2010**
West Bank	19.4%	18.3%	9.1%	8.8%
Gaza	38.3%	38%	21.9%	23%
Palestine	26.2%	25.7%	13.7%	14.1%

163. Human development. According to the latest Human Development Report, Palestine's Human Development Index (HDI) score for 2014 was 0.686. Palestine is within the "medium human development" category and ranks 107th out of a total of 187 countries and territories. Compared with 2005 (0.649), the HDI has increased by 5.7% (or an average annual increase of about 0.7%). In the same year, the Gender Development Index (GDI) score was 0.974, which is significantly higher than in the overall average for the Arab region, Palestine ranking, overall, 41st out of 187 countries. This score, however, does not reflect appropriately the actual low level of empowerment of Palestinian women. The difference in human development between women and men is due to the fact that, although life expectancy at birth is higher for women, women have fewer numbers of years of schooling and fall significantly below men in the income category (with an estimated per capita gross national income of USD 1 651 compared to USD 8 580 for men).

164. **Food security.** As per latest available official data[53] (2014), some 1.6 million Palestinians (or 32.2% of the total population) are food insecure. In the West Bank, this percentage has remained stable since previous survey period, at 19%. Overall, food insecure households are evenly split between the severely food insecure and moderately food insecure (13% each), while the marginally food secure and food secure households account for 15% and 58% respectively. In the West Bank, food insecurity tends to be higher in rural areas (33% of rural households are food insecure against 27% of urban households) and among woman-headed households (36% of female-headed households are food insecure against 29% for man-headed households, although they tend to receive proportionally more food assistance). In terms of occupation, a higher proportion of food insecure households is found among households deriving their primary income source from agriculture (35% of food insecure

[52] Source: *Poverty in the West Bank and Gaza after three years of economic crisis,* WB and PCBS, 2003.
[53] Source: joint PBCS, FAO, UNWRA, WFP Socio-Economic & Food Security Survey (2014) .

households) or from private sector employees (34%), whereas this proportion is lowest among family business owners (19%), government employees (26%) and for households whose head works in Israel (27%). The proportion of food insecure households is also found highest in Area C (38%), compared to 30% in Area A and B, while restrictions of movement seems to be correlated with food insecurity (72% of food secure households report no limitations of movements, against 60% of severely food insecure households). Food insecure households have also more family members than food secure families and their head is more likely to be unemployed.

165. Overall, some 16.5% of households in the West Bank had received assistance from Government, UNWRA or other sources in 2014, against 25% in 2011. In 2014, some 36% of total assistance in the West Bank was in the form of cash allowance (36%), followed by food and food vouchers (23%), free health services (19%) and assistance for housing (13%). On average, assisted households have received an amount equivalent to USD 86 per month, down from USD 128 in 2012.

166. **Child malnutrition.** In 2016, WFP estimated a chronic malnutrition rate of 7.4% among Palestinian children aged 6 to 59 months. Since 2004, the prevalence rate of moderately and severely underweight children has reduced overall, from 4,9% to 1.4%[54]. A similar trend is also noted in the West Bank, together with a marginal difference between urban (1.3%) and rural areas (1.6%). The 2011 World Bank poverty assessment showed that emergency assistance has been reasonably successful in preventing widespread malnutrition.

Table 13: Prevalence of underweight children under-five years of age

Year	Palestine						West Bank					
	Total	Boys	Girls	Urban	Rural	Camps	Total	Boys	Girls	Urban	Rural	Camps
1996	3.6	3.1	4.0	..	..	..	3.9	3.4	4.5	..	..	..
2000	2.5	2.2	2.8	2.4	3.3	1.3	2.6	1.9	3.5	..	..	..
2004	4.9	4.7	5.1	4.9	4.2	6.0	4.9	5.1	4.6	..	..	..
2006	2.9	2.1	3.8	2.6	2.1	2.2	3.2	3.1	3.3	3.0	3.5	2.6
2010	2.5	2.7	2.4	2.5	2.7	2.6	2.5	2.5	2.5	2.3	2.9	2.8
2014	1.4	1.6	1.1	1.3	1.6	1.4	1.5	..	..	..	..	..

Source: Palestinian Central Bureau of Statistics, MDGs Indicators in Palestine, 1994-2012

167. **Drivers of poverty and vulnerability**. According to the latest poverty assessment conducted by the World Bank in 2011, there are multiple drivers of poverty and the most important include household's size, education and employment status. Thus, poverty rates are found higher among larger households and in households headed by an adult with a low level of education, while individuals living in households with one or more unemployed members are more than twice as likely to be poor, in comparison with other households. Available data further show that, since 2006, the gap between man-headed households and woman-headed households has reduced (18.3% of woman-headed households were poor in 2011 against 17.4% for man-headed households, from respectively 31.4% woman-headed households and 23.4% man-headed households in 2006). Similarly, the gap between rural and urban households has tended to narrow over the years[55].

168. Using a different methodology[56], the 2016 UN Common Country Analysis sheds some additional light on the profile of vulnerable households in the West Bank. According to this assessment, and while the occupation is found to be a cause of vulnerability for all Palestinians, some groups appear to be more vulnerable than others. These are: adolescent girls and women exposed to gender-based violence, food- insecure households headed by women; out-of-school children in the labour force and children subject to violence; the youth; the elderly; communities in Area C; Bedouins and herder communities living in Area C; Gaza residents without access to clean water or sanitation; Hebron H2[57]

[54] Source: PCBS

[55] 26.5% of rural households used to be below the poverty line in 2006, against 20.7% of urban households; while this percentage reached 17.2% and 17.6%, respectively, for rural and urban households in 2011.

[56] The methodology adopted to conduct the CCA was based on a review of primary and secondary data and documentation, consultations with UN agencies, the Government of Palestine, civil society and donors, as well as reviews and validation of content by UN agencies, relevant bilateral agencies, government ministries, private sector and civil society organizations (CSOs).

[57] Hebron is divided into H1 and H2 under the 1997 Hebron Protocol. H1 covers approximately 80 per cent of the city and is under Palestinian civil and security control; H2 is under Israeli military control and Palestinian civil control.

residents; persons living in the Seam Zone[58]; persons with disabilities; individuals in need of urgent medical referrals; refugees; small-scale farmers, non-Bedouin herders, fisher folk; and working poor.

169. For these marginalized groups, the key structural drivers of vulnerability include place of residence, exposure to violence (in particular for refugees or the residents of certain localities), economic factors (in particular, access to employment opportunities and to productive resources and assets), institutional and political factors (leading to inadequate access to education and healthcare), and socio-cultural norms (*see section on gender issues*).

170. **Resilience**. The livelihood baseline profiles for West Bank and Gaza undertaken in 2015 by the FAO has classified the West Bank population in three resilience groups (low/medium/high resilience). The key characteristics of each group, depending on key livelihoods (urban and peri urban, herding, farming, mixed farming and herding) are presented in the table below.

Table 14: Key characteristics of livelihoods in the West Bank

Types of livelihoods	Low resilience group	Medium resilience group	High resilience group
Urban and peri-urban	**22%**	**36%**	**42%**
Main income source:	43% from private sector, 22% from assistance; 20% from Israel and settlements; 5% from agriculture	48% from private sector; 23% from Israel or settlements, 10% from public sector; 8% from assistance; 5% from agriculture	55% from private sector; 15% from Israel or settlements; 13% from public sector; 8% from assistance; 2% from agriculture
% of income from agriculture:	5%	5%	2%
Monthly household's expenditures:	NIS 1,605	NIS 2,375	NIS 3,556
Daily income per adult:	NIS 15	NIS 23	NIS 55
Average land size:	1.9 dunums	2.1 dunum	2.1 dunums
Average herd size:	3 chickens	30 chickens	140 chickens
Hhs reporting difficulty in accessing land/ workplace	23%	17%	9%
Crop farming	**13%**	**31%**	**56%**
Main income source:	32% from private sector; 24% from agriculture; 20% from assistance; 10% from public sector	43% from private sector; 20% from Israel or settlements; 21% from agriculture; 10% from assistance	50% from private sector, 25% from public sector, 10% from Israel or settlements; 7% from assistance
% of income from agriculture:	24%	21%	15%
Monthly household's expenditures:	NIS 1,892	NIS 2,525	NIS 4,154
Daily income per adult:	NIS 17	No data	NIS 46
Average land size:	4 dunums (0.4 ha)	6 dunums (0.6 ha)	8 dunums (0,8 ha)
Average herd size:	No data	No data	No data
Hhs reporting difficulty in accessing land/ workplace	23%	19%	9%
Mixed farming and herding	**15%**	**28%**	**57%**
Main sector from which income is primarily derived:	40% from agriculture; 31% from private sector; 10% from public sector; 8% from assistance; 8% from Israel or settlements	35% from agriculture; 33% from private sector; 15% from public sector; 10% from Israel or settlements	37% from agriculture; 35% from private sector; 13% from government; 12% from Israel or settlements
% of income from agriculture:	40%	35%	37%
Monthly household's expenditures:	NIS 2,032	NIS 2,553	NIS 3,446
Daily income per adult:	No data	No data	No data
Average land size:	13 dunums (1.3 ha)	7 dunums (0.7 ha)	21 dunums (2.1 ha)
Average herd size:	34	30	53
Hhs reporting difficulty in accessing land/ workplace	31%	28%	23%
Herding livelihoods	**15%**	**33%**	**52%**
Main income source:	39% from agriculture; 30% from Israel or settlements; 22% from private sector; 10% from assistance	38% from private sector; 38% from agriculture; 15% from Israel or settlements; 8% from assistance	42% from private sector; 25% from Israel or settlements; 12% from public sector; 21% from agriculture
% of income from agriculture:	39%	38%,	21%
Monthly household's expenditures:	NIS 1,867	NIS 2,043	NIS 3,434
Daily income per adult:	NIS 17	No data	NIS 36
Average monthly assistance received	NIS 390	No data	NIS 40
Average land size:	4 dunums	No data	No data
Average herd size:	24 sheep/goat, 9 chickens	31 sheep/goats, 8 chickens	37 sheep/goats, 8 chickens
Hhs reporting difficulty in accessing land/ workplace	34%	26%	16%

Source: (FAO, 2015)

[58] The Seam Zone corresponds to areas in the West Bank situated between the Barrier and the original Green Line.

171. The above table shows that across all livelihoods' types, the most resilient households tend to work more in the private or public sector and dependent less from employment in Israel or the settlements. Conversely, the least resilient households tend to derive a larger proportion of their income from the agricultural sector or from assistance. Livelihoods based on mixed farming and herding tend to be more resilient compared to herding alone or crop farming alone. Across all types of livelihoods, the high resilience groups cultivate larger areas of land and own more animals, while the least resilient tend to more frequently report difficulties in accessing their land or workplace. Finally, according to this assessment, rural households seem to be more resilient than urban and peri-urban households (which is in contradiction with findings of the 2014 PCBS socio-economic and food security survey[59]).

B. Gender issues

172. **Legal and institutional framework**. The Basic Law of 2002 (amended in 2003) stipulates that all Palestinian citizens are equal before the law regardless of their race, sex, colour, religion, political views and disability, and basic human rights and freedom are protected and respected. On the other hand, in the West Bank, all matters related to inheritance, marriage, divorce and child custody are governed by the Jordanian personal status law of 1976, which is based on Islamic law and still contains many provisions that discriminate women. For example, the testimony of a woman is worth only half of that of a man in cases related to marriage, divorce and child custody; women, unlike men, can request divorce only in special circumstances; and only fathers are considered legal guardians of their children who shall remain in their custody in case of a divorce. Also, there is no specific law against domestic violence, and a clause in the Jordanian penal code is still in effect in the West Bank in virtue of which men are exempted from punishment for killing a female relative if she has brought dishonour to the family by a "shameful" behaviour[60].

173. Palestinian women nevertheless enjoy equal voting rights and equal rights to stand for election according to the law. Following 2006 elections, women occupied 14% of the seats in the Palestinian Legislative Council, and, during the 2012 municipal elections, women represented 21.4% of elected members in the West Bank, from 18% in 2010. For many observers, however, this level of representation is largely due to the quota system introduced in 2005[61], rather than political empowerment[62].

174. Palestine is not eligible to ratify any United Nations international conventions and could not, therefore, ratify the *UN Convention on the Elimination of all forms of Discrimination Against Women*[63]. Israel is in principle responsible for reporting on the situation of women to the UN, but did not do it so far[64]. The Ministry of Women's Affairs is since 2003 responsible for the promotion and protection of women's rights and Gender Units are established in each line ministry. Developed by the ministry with support from UN Women, the *Cross-Sectoral National Gender Strategy 2014/16* serves as a practical road map for the government to address gender issues on the national agenda. Its five strategic objectives are: (i) to increase women's participation in the labour force: (ii) to reduce all forms of violence against women; (iii) to increase women's participation in decision-making institutions; (iv) to ensure that all Palestinian women have access to basic services; (v) and to mainstream and universalize gender issues. The "*National Strategy to Combat Violence Against Women 2011-2019*", on the other hand, specifically tackles gender-based violence and violence against women, while "*Gender Charter for the Aid Coordination Structure in Palestine*" aims to promote gender mainstreaming in aid coordination amongst the Palestinian Authority and the donor circle.

175. **Women's status.** The Palestinian society is predominantly a patriarchal one, in which women's role is shaped by traditions and norms derived from tribal cultural values. According to such traditions and norms, a decent woman should be married, at home taking care of her family and children and she should not interact with men who are not her relatives. Since the Oslo Accord, researchers note

[59] The methodology used by FAO for the 2015 Livelihood baseline profiles is not described in the document provided to the RELAP design mission.

[60] There is a general lack of reliable data on the issue, but, according to UNICEF 1999 estimates, two-thirds of all murders in the Palestinian territories were likely honor killings, while the ministry reported that the rate of such crimes had risen by 100% in 2013, with an estimated number of 27 cases.

[61] Article 4 of the Law on Public Legislative Elections of 2005 guarantees the representation of women in electoral lists, while Article 17 of the Palestinian Law on Local Council Elections guarantees that women hold 20% of seats in local bodies.

[62] Source: JICA, Country Gender Profile, January 2016.

[63] In a symbolic act, however, President M. Abbas signed the CEDAW in 2009.

[64] Source: *MENA Gender Equality Profile*, UNICEF, 2011.

that the modern values that had begun to emerge in the 1980s, including women's empowerment and gender equality, are weakening and that re-emerging conservatism is having a negative impact on Palestinian women[65]. This situation is exacerbated by the movement restrictions. These have thus tended to instigate much stricter control by men, and the society, over women in a proclaimed attempt to protect them from the dangers in the society[66], thereby reducing even further their mobility and ability to work. As for violence against women, there are few studies and statistics available, and the issue is still regarded by the society more as a private, domestic problem to be dealt with inside the family. Nevertheless, a 2011 PBCS study had shown that some 30% of married women in the West Bank had experienced at least one form of spousal violence (physical, psychological, sexual or economic), while 65% of the victims did not tell anyone about such abuses.

176. **Women's employment.** Although Palestinian women tend to be more educated than men[67], Palestine records one of the lowest female labour force participation in the world[68] (18% in 2015, against 64% for men[69]). Besides the restrictions of movement imposed on them, other reasons for the low women's participation in the labour force point again to the prevailing gender norms, including men's preference for their wives not to work outside of the home, the large number of children per household due to a high fertility rate[70], private sector employers' preference of hiring men over women, and the fact that educated women have predominantly studied "women-appropriate" subjects, (such as health, education and humanities) for which few jobs are available outside of the public sector[71]. Girls' and women's participation in technical training is low (some 30% of trainees) and it is insignificant for vocational training (2% to 3% according to the Ministry of Women Affairs). Overall, it is also estimated that more than 60% of women's daily time is spent at home caring about their households[72] and that the percentage of women who are outside of the labour force because they need to take care of their children and their households is 66% (compared to 0.9% of men)[73]. For those women able to find an occupation, gender discrimination in the labour market is evidenced by the fact that women receive only 57% of the median wage of men, while the percentage of women working as unpaid family workers was 23.1% in 2011 compared to 5.5% for men[74].

177. Two sectors absorb most of the Palestinian women's workforce: services, including health and education (59.7% in 2011) [75] and agriculture (13.1% of women's employment in 2015 against 7.8% of men's employment)[76]. Women's participation in the private sector economy is limited and most paid women are employed in the public sector (the sector absorbs 26% of women's workforce and 41.2% of civil servants were women in 2015). In the West Bank, women account for only 16% of the employees of micro, small and medium-enterprises (MSMEs) and 24% of the employees of larger enterprises[77]. Furthermore, only 3.4% of the women's workforce are entrepreneurs who have started their own business and have employees, against 16% for men, while only 13% of women in the workforce are self-employed. In many cases, the key reason for a Palestinian woman to start a business is out of sheer necessity[78], and many of these small businesses tend to be limited to what is perceived as being women activities (such as beauty parlours) or socially-accepted, home-based activities (such as handicraft or food processing). Beyond the social norms and traditions discussed earlier, key reported constraints include the lack of entrepreneurial mind-set among women, the fact that few girls and women enrol for vocational training, limited access to business information and inadequate sources of

[65] Source: *Country Gender Profile: Palestinian Territories,* JICA January 2016.
[66] The JICA Country Gender Profile reports that the movement restrictions imposed by the Israeli Government impact women more than men, as they are more often than men subject to harassment at checkpoints or the borders (including sexual harassment), for example by being kept waiting for several hours without explanation.
[67] According to PCBS data from 2013/14, the net enrolment ration in basic education in 92.7% for boys and 94.6% for girls; the ratio of girls to boys in secondary education is 1.25; and the ration of girls to boys in tertiary education is 1.49.
[68] According to the World Bank, women's participation in the labour market in 2013 was 25% in the Arab region and 51% in the rest of the *world.*
[69] Source: *Labour Force Survey,* PCBS, 2015
[70] The fertility rate in the West Bank, at 3.4%, is one of highest in the world.
[71] Working Palestinian women then dominate a few occupations, including office clerks and teaching professionals.
[72] Source: *Time use survey*, PCBS, 1999/2000
[73] Source: *Labour force survey*, PCBS, 2008
[74] Source: PCBS, 2011.
[75] The service's sector, as defined by PCBS, includes health and education, therefore also concerns public sector employees.
[76] Source: PCBS, 2015.
[77] Source: *Country Gender Profile: Palestinian Territories*, JICA, 2014.
[78] For example, because she became a widow or her husband is unable to work.

financing. On the other hand, a recent study revealed that 65% of Palestinian women are willing to launch a business, which indicates a clear discrepancy between potential entrepreneurship and the current reality[79].

178. **Women in agriculture.** Women's employment in the agriculture has been declining steadily in the last decade (from 35.1% of the women's workforce in 2066 to 13.1% in 2015), reflecting only partly the overall decline in the number of total agricultural workers[80]. Another salient feature of the Palestinian agricultural sector is that most women working in the sector are primarily involved in subsistence farming, or they work without pay in their family's or husband's land[81]. It is thus estimated that only 1.8% of women active in the agricultural work earn a wage[82], while it is assumed that there are only very few women who are owner-operators of their farm. Further, of the 230 agricultural cooperatives that were active in the West Bank as of 2015, 39% are comprised of men members only, while women constitute, overall, only 7% of cooperative members. In mixed cooperatives, women tend to have little decision-making power, while women-only cooperatives (which represent only 5% of all cooperatives) are smaller in size and mainly active in traditional "woman" areas of work (home gardening, chicken and goat raising and small-scale processing), which reinforces the traditional gender-segregation of roles. To a certain extent, the focus of donors' assistance targeted at Palestinian women on these areas of work has the same consequences, while largely failing to empower them economically. More research and studies are required to further explore Palestinian women's involvement in, and contribution to, the agricultural sector.

179. The Agriculture Sector Strategy 2017-2022 recognises women's labour contribution to the sector, and it vision statement includes a reference to the fact that "that development is a right of all men and women, boys and girls, without any discrimination or marginalization based on sex, region or age". One of the "guiding pivot" used in defining the sector's strategy was also the need to foster the "active participation and involvement of female and male farmers and producers in the planning, evaluation and implementation processes of any agricultural intervention" Of the five strategic objectives only the fourth includes specific guidance for women and youth namely: (i) Finding mechanisms to ensure access of small farmers, women and youth to funding with the aim of enhancing their current farmers and creating entrepreneurial agricultural businesses, (ii) Empowering youth, women, farmers and entrepreneurs to access quality services in the field of agricultural business development and intensification of efforts to support entrepreneurship in the agricultural sector; (iii) Highlight the role of women in agricultural work and their contribution to national output and enable them to strengthen their resources resulting from agricultural work and the Gross National Product (GNP), while empowering them to enhance their agricultural resources and income.[83]

180. **Assets' ownership**. Due to their low participation in the formal labour market, as well as issues related to inheritance, it is hard for Palestinian women to build their own assets' base. Thus, if the Jordanian inheritance law grants women the right to inherit from their parents, in practice, they tend to inherit smaller shares compared to male heirs. Furthermore, for fear of deceiving their family and loosing fraternal protection, or because they have been threatened or coerced by their brothers, only few women are claiming their rights of inheritance and most chose to abandon their shares to their brothers[84]. This may be done legally using *Takharuj,* an irreversible compromise among inheritors allowing some of them to abandon their shares of inheritance against an agreed sum of money. Data from the Ramallah, Hebron and Nablus courts show that, in 2013, applications for certificates of succession by men accounted for 77% to 90% of total applications. As for the few women willing to claim their shares, they face lengthy, complicated legal procedures and expensive court fees (in 15% of the cases, claims take more than ten years, while close to 50% of the claims take five years to be settled in a court). As a result, it is currently estimated that only 7.6% of agricultural holdings in the West Bank are owned by women[85].

[79] Source: *Unlocking the labor market for Palestinian women*, Al Ashabaka, 2015.

[80] As per PBCS data, the sector absorbed 16.7% of the total work force in 2006 compared with 10.4% in 2015.

[81] The Agricultural Census 2009/10 revealed that there were 292,031 employees in agricultural holdings in the Palestinian Territory, 94.6% of them being unpaid family members and 5.4% permanent paid employees.

[82] Source: Center for Development Studies, Birzeit University, 2015.

[83] SO4 is *"to improve female and male farmers and entrepreneurs access quality agricultural services needed for increasing value along agricultural* value *chains"*

[84] Source: *Palestinian women and inheritance,* Women Centre for Legal Aid and Counselling, 2014.

[85] Agricultural Census, 2009/2010.

181. A 2013 study by the Institute of Women's Studies at Birzeit University further reveals that overall, only 1% of Palestinian women own a car, 8% own a house or a share in a house, and 12% have a bank account. For economically active women, the situation is slightly better, and 15% of them own a car, 29% own land or a share in land, and 11% a house or a share in a house. By and large, the most widespread women's assets in Palestine remain jewellery from their dowries (52% of women own some jewellery). As a direct consequence of their lack of assets, Palestinian women do not possess the collateral required to borrow money from a bank and start a business. Also, even in the case of working women receiving a salary, several studies have shown that, according to prevailing social norms, it is men's role to control the money in the household[86].

182. **Civil society organizations and donors' assistance**. According to a World Bank study, the West Bank was home in 2006 to some 1,750 NGOs (but only half of which were found actually functional) which provided a wide range of services and played an important role in agriculture, vocational training and preschool education. The number of NGOs and other civil society organizations concerned with women empowerment is not known, but most researchers tend to highlight the important role that women's rights' groups have played in recent years in advocating for quotas to increase women's representation in decision-making bodies and in the electoral process. The Women's Affairs Technical Committee, founded in 1991, is an umbrella organization for seven women's organizations which work "*to eliminate discrimination against women and to empower women to assume decision-making positions at all levels of society with a focus on marginalized, rural-dwelling, and refugee women".* The Rural Women's Development Society is one of the leading women's organization working to empower rural women economically, politically and socially, with a strong and respected grassroots presence in rural communities and a network of 64 clubs with over 3,000 members.

183. The 2016 JICA *Country Gender Profile: Palestinian Territories* report identifies a number of donors involved in the financing of projects and programmes with a strong focus on gender issues or women empowerment. These include: JICA, UN Women, UNRWRA and UNDP. In particular, the UNDP/UN Women-funded *Sabaya Programme* aims to support Palestinian women in marginalized rural communities and has established 50 women community centres. Since 2012, UN Women has also established a civil society advisory group, composed of representatives from gender equality networks, women's organizations, academia and NGOs, recognizing the need for a forum to exchange views, ideas and perspectives on gender issues and women empowerment.

184. **Youth.** Palestinian population is a relatively young one, with an estimated 39% of the population below the age of 15, and almost 30% being aged 15-29 years. Although the women's fertility rate – one of the highest in the world – tends to decline, UNFPA has recently estimated that the population of youth in Palestine will double by 2050[87].

185. As in other parts of the region, Palestinian youth face significantly higher rates of unemployment than older workers. Hence, in the West Bank, respectively 25.6% and 16.2% of men aged 15-24 years are unemployed, against 9% of men aged 35-54 years. With an unemployment rate four times higher than other women, and nearly double that of men in the same age group, young women are at an even greater disadvantage in the labour market.

[86] Source: *Country Gender Profile: Palestinian Territories*, JICA, 2014.
[87] Source: *Palestine 2030 - Demographic Change: Opportunities for Development, UNFPA,* December 2016

Table 15: Percentage distribution of individuals aged 15 years & above

Age and sex	Labour force status		Employment status		
	Inside labour force	Outside labour force	Full employ-ment	Time-related Underemployment	Unemployment
Males					
24-15	54.4	45.6	71.7	2.7	25.6
34-25	89.3	10.7	81.5	2.3	16.2
44-35	92.9	7.1	89.0	1.9	9.1
54-45	87.9	12.1	89.0	2.0	9.0
64-55	61.6	38.4	88.0	1.8	10.2
+65	16.8	83.2	95.5	0.7	3.8
Total	**72.7**	**27.3**	**82.3**	**2.2**	**15.5**
Females					
24-15	11.4	88.6	48.1	1.4	50.5
34-25	27.2	72.8	55.9	2.0	42.1
44-35	23.7	76.3	88.8	0.8	10.4
54-45	19.1	80.9	94.3	1.3	4.4
64-55	10.1	89.9	97.1	0.9	2.0
+65	1.7	98.3	97.0	0.0	3.0
Total	**17.7**	**82.3**	**68.8**	**1.4**	**29.8**

Source: PCBS, Labour force survey annual report, 2016, West Bank only.

186. According to a recent study[88], several factors may explain the difficulties faced by the Palestinian youth in accessing the labour market, one of them being that the educational system pays insufficient attention of the needs of the labour market. At the same time, enrolment in vocational training is extremely low (only 5% of the students in Ramallah were involved in vocational training in 2008), largely because of the prevailing, negative societal attitude towards this type of education. Also, while enrolment rates in secondary and tertiary education are high for both girls and boys, dropout rates are also high[89] (35% for men and 29% for women in the age category 15-29), which means that a significant percentage of students leave high school or the university without a diploma.

187. Almost all Palestinian are affected by the occupation and restriction movements, but the youth in general, and the rural youth in particular, pay a disproportional price. Thus, since the second intifada, youth mobility is being increasingly restricted by parents fearful for their children's safety (in particular boys, who seem to be a specific target at checkpoints). Young men are also much less likely than older, married men to obtain a working permit to Israel, which limits their ability to seek employment there. Also, the poor, unemployed youth are less able than others to afford the transportation costs necessary to travel to the nearest city or youth centre in search for leisure activities, as a result of which, many are struggling to even fill their free time[90]. There are also accounts of young men with no jobs and no prospects for the future who have joined the armed wings of Palestinian factions, although they had no history of political activism[91]. On the positive side, and in parallel, there seems to be an increasing number of Palestinian youth who chose to become engaged in civil or community development work as an alternative to joining militant groups or factions[92].

188. As far as the institutional framework is concerned, the Higher Council for Youth and Sport is responsible, among others, for drafting youth-related policy and legislation and for facilitating young people participation in policy-making and decision-making; it is also responsible for: (i) Assisting in the development of the sport and youth legislative agenda, (ii) Promoting a legal environment for organizing youth work and sports; (ii) Partnering with international organizations to support youth work, volunteering and development; (iii) Establishing minimum standards for youth and adolescents centers. The *Youth cross-cutting strategy (2011-2013)* is the most recent official document, the vision of which was for "*Palestine's youth to become empowered and participative, with diversified and equitable opportunities for a balanced growth within the framework of a democratic, pluralistic society"*.

[88] Source: *The status of youth in Palestine,* Sharek Youth Forum, 2009.

[89] The key reported reasons are the lack of money or the need to support their family for males, and marriage for females.

[90] As reported by the Sharek Youth Forum 2009 study, a 2005 study had found that 77% of Palestinian youth reported spending their leisure time at home, not having any other alternatives for entertainment.

[92] *Idem.*

189. As of 2006, the Higher Council for Youth and Sports had licensed some 500 youth associations, and there *were* around 250 other types of organizations that offered youth programmes in West Bank and Gaza. According to a 2008 survey, most of these associations focus on sports and arts, followed by social services and capacity building[93].They however tend to be concentrated in major population centres, and the outreach in isolated villages and rural areas is very limited or inexistent.

C. Target groups and direct beneficiaries

190. **Rationale.** Experience of the recently completed IFAD-funded PNRMP has shown that it is difficult to involve households below the poverty line in land development work, partly because the poorest may not own enough land, or because they would not be in a position to contribute financially to the development costs. It is thus recognized that component 1.2 will not necessary benefit the poorest households; rather, the project will target households who are at risk of falling below the poverty line in case of economic shocks, such as the loss of the primary income source or the sudden increase in food prices. In other words, and in a volatile economic environment and labour market marked by the frequent occurrence of chocks, the project intends to make component 1.2 beneficiaries more resilient by diversifying their income base (in case of smallholders not previously involved in agriculture), or increasing the incomes they derived from agriculture (for the others). In order to prevent leakages of project resources and benefits, specific income-based and assets-based eligibility criteria will be applied (see Targeting strategy and selection criteria) for the selection of component 1.2 (land development) beneficiaries. An exception concerns the land development work on communal grazing land, as it will benefit all herders using this land, irrespective of their income or assets' base.

191. Recognizing that rural women and the rural youth are among the poorest and most vulnerable groups, women and the youth will be the exclusive groups targeted under Component 2.2. Among these two groups, the project will seek to select the poorest, such as the landless/unemployed youth or landless/unemployed female heads of households, using a set of eligibility criteria.

192. **Target groups**. With this rationale in mind, the project is designed to benefit the following groups which will be specifically targeted:

a) Small-holders and small-scale farmers: Typically, Area C small farmers and smallholders have limited access to inputs, including cultivable land and water for irrigation, and to markets. Planning and zoning restrictions make it difficult for residents to invest in critical infrastructure, such as irrigation systems, while only 15% of ground water resources are available for Palestinian use. The current land tenure system, where unutilized Palestinian land may be granted to settlers makes land tenure highly insecure, in a context where few small-scale farmers have formal property rights over their land[94]. Area C residents living near settlements are also more prone to settlers' violence, particularly during olive harvest season, resulting in lower productivity. In Area B, smallholders face similar problems in terms of access to cultivable land and irrigation water, except that land tenure security is less of an issue.

A salient feature of the Palestinian economy is the fact that agriculture is the main income-generating activity for only 17% of the 90,908 agricultural holdings' owners found in the West Bank[95] and it is assumed that only large land owners can be profitably engaged in full-time farming. The average land holding size in the West Bank is 12.2 dunums and, overall, holdings of less than 10 dunums amount to 73.5% of total agriculture holdings (while large holdings exceeding 80 dunums only account for only 1.8% of total agricultural holdings). The majority of smallholders, therefore, do not practice full-time farming but have other main sources of finance from remittances or income from private or public employment. For the majority, agricultural production is practiced in order to fulfil households' needs for olive oil, fruits and other agricultural produce, while surplus is being sold to supplement main income.

Under component 1.2, private land rehabilitation or reclamation activities will be targeted at smallholders only, who will be selected according to transparent eligibility criteria (*see Targeting*

[93] Source: *The status of youth in Palestine,* Sharek Youth Forum, 2009.

[94] Most land registrations recorded by the Palestinian Land Administration Agency do not reflect the current ownership status; in many cases, the registered owner is deceased and the family has failed to register subsequent transactions, particularly in the form of inheritances.

[95] Source: Agricultural Census, 2019/2010.

strategy). As women are estimated to account for 7% of land owners in Palestine, and as the project intends to support women in obtaining a legal title to their land, it is expected that not less than 10% of women owners will benefit from land development work. All component 1.2 beneficiaries are expected to benefit from component 2.1 interventions, while most of them will also derive additional benefits from road improvement or construction activities under component 1.3.

(b) Poor, landless or unemployed youth and women: Due to prevailing social norms that require women to stay at home and take care of their family, and although they tend to be more educated than men, Palestinian women's participation in the labour force is one of the lowest in the world. The large majority of women working in the agriculture sector are unpaid family workers, while only a minority of Palestinian women are entrepreneurs or self-employed. Key obstacles to women's participation in the labour market, beyond the prevailing social norms, are the lack of entrepreneurial mindset among them, the lack of technical and business skills and the lack of access to financial capital, the latter being due to their inability to borrow money from a bank due to their lack of assets and collateral. As for female-headed households, they tend to be poorer, and more food insecure, than male-headed households, although they tend to benefit more from Government and UNWRA food assistance schemes.

The youth constitute another vulnerable group, facing economic and social hardship due to the movement restrictions as well as unemployment. The lack of employment opportunities and of appropriate leisure activities negatively influence their psychological well-being and places them at risk of negative influences. For the purpose of the RELAP, and in line with Article 1, Article 28 and Article 32 of the UN Convention of the Rights of the Child, "youth" will refer to "persons aged 18-30" at the time of selection of project beneficiaries[96].

Both groups will be the exclusive beneficiaries of the grant schemes and capacity development support under Component 2.2. and it is tentatively proposed that both groups shall equitably benefit from these interventions.

(c) Livestock herders: The land development works on communal grazing land will benefit many livestock owners in the concerned villages who practice semi-intensive or extensive livestock production. Livestock production plays an important role in Palestine, providing a source of income and of food for an estimated 32,000 households. Cattle size is usually relatively small[97], and intensive production mainly concern cow breeders, while semi-intensive or extensive breeding systems are practiced by sheep and goat breeders. While some 2 million dunums of rangeland are found in the West Bank, closures have led to only 31% of rangeland being accessible to the population. As a result, available range land, usually located on communal land, tends to be overgrazed and degraded. Palestinian herders and Bedouins in remote communities are also faced with the problem of access to water, and they rely on water sold from tankers at high costs for their animals. The products of non-Bedouin herders are also not competitive in local and international markets because of high production costs and low productivity resulting from degraded grazing land, shortage of water and lack of access to quality inputs. Two-thirds of the Bedouin and herder communities living in the central West Bank have also reported facing violence over the past three years[98].

Livestock owners of goats and sheep practising semi-intensive or extensive production will be the direct beneficiaries of the grazing land rehabilitation works under Component 1.2, irrespective of their income levels or cattle size.

193. **Other direct beneficiaries**. In addition to the main beneficiary households just described (who will be specifically targeted by the project and who are expected to derive significant benefits from project support and interventions), some project activities will directly benefit additional households. Thus, component 1.3 activities will also benefit the farmers and land owners whose land is located

[96] In the *Youth Cross-cutting Strategy* of the *Palestinian National Development Plan (2011-13)*, youth was defined as "persons in the 13-29 age category". The same document however notes that persons between 13 and 17 years of age are subject to definitions prescribed by International Convention of the Right of the Child and should be considered "adolescents", and therefore placed under the responsibility of the Adolescent Directorate of the Higher Council for Youth and Sports.

[97] According to the 2013 PBCS Livestock survey, 61% of livestock holdings that have cows do not exceed three heads, 65% of livestock holdings with sheep do not exceed 19 heads, and 66% of holdings with goats do not exceed 19 heads.

[98] Source: Common Country Analysis, UN Country Team, 2016

along the newly constructed or rehabilitated roads, and who will benefit from improved access to their land and to markets. Under component 2.1. the multi-stakeholders' platforms will benefit all interested local producers, local traders, brokers, as well as members of women associations or other local producers' groups, who will enjoy improved marketing opportunities (for producers) or reduced transaction costs (for traders and brokers). As for the activities supported under component 1.1 and component 3, they have the potential to benefit the entire farming community in the West Bank, while component 3 will also target national and local level government staff providing climate change adaptation related services to smallholder farmers.

194. **Outreach.** It is estimated that the project will directly benefit to a total of 30,000 rural households (representing some 150,000 persons[99]), with a range of various goods and services.

195. Not all these households will derive the same types of benefits from project participation. It is thus expected that: (a) some 3,550 households will derive significant economic benefits from land rehabilitation and income-generation support under Component 1.2, 1.3 and 2.2; (b) some 5,850 households will solely benefit from an improved access to their lands and to markets under Component 1.3 and 2.1; (c) while some 20,600 households will solely benefit from training on climate resilient agriculture under Component 3.

Table 16: Outreach targets

Component	Number of direct beneficiaries	% of women	% youth
Component 1.2:			
Climate adaptation of conventional land development	1,500 smallholders	10%	n/a
Climate adaptive land development - CACL	290 smallholders		
Climate adaptive land development - Wadi	360 smallholders		
Climate adaptive land development - Rangeland	500 livestock owners	n/a	n/a
Sub-Total C1.2:	***2,650 households***		
Component 1.3 - Rural roads	4,500 households *(including 1,850 households not benefiting from land development support under C1.2)*	n/a	n/a
Sub-Total Component 1:	***4,500 households***		
Component 2.1 - Cluster development support	6,650 rural producers, traders or brokers *(including 900 micro-entrepreneurs below)*	n/a	n/a
Component 2.2- Investment grants	900 rural micro-entrepreneurs	50%	50%
Sub-Total Component 2:	***6,650 households*** *(including 4,500 households also supported under Component 1)*		
Component 3 - Subcomponent 3.1	30,000 farmers trained and receiving agro-climate information	n/a	n/a
Total Component 3:	***30,000 households***		

D. Targeting strategy and selection criteria

196. Targeting will take place following a two-stage process: i) geographical targeting, for the selection of project villages, and ii) beneficiaries' selection. The key proposed criteria for the identification and selection of project villages and beneficiaries reflect the intention of ensuring that the project will be implemented in localities with high incidence of poverty, and, within these localities, that project interventions benefit smallholders, including woman smallholders under component 1, as well as vulnerable groups (unemployed/landless women and the youth) under component 2. The detailed targeting criteria and mechanism shall be described in the project implementation manual.

197. Throughout project implementation, a gender mainstreaming strategy will also serve as a practical guide to ensure that the specific constraints and needs of poor women and the youth are duly considered, as a way to promote their participation in project activities and to maximize the benefits they will derive from this participation.

Selection of project villages

[99] Estimation based on an average number of 5 persons per household.

198. *Under Component 1,* the following eligibility criteria will be applied for the initial identification of potential project villages: i) villages located in Area B and C of the project target area; ii) villages located in localities where 27.73% or more of the population is below the poverty line, as identified in the 2009 PBCS Poverty Atlas and its future updates100; iii) villages with the potential to develop a minimum of 200 dunums; and iv) villages located in areas with a minimal annual rainfall of 300 mm.

199. Once the initial list of eligible villages will be available, priority will be given, through a scoring system, to the following villages: i) villages located in Area C with an estimated greater risk of land loss, while avoiding sensitive areas (near the settlements, near the settlement roads and near the separation wall); and ii) villages in which the plots to be developed potentially developed are contiguous, in order to allow for a more landscape-based approach.

200. *Under Component 2*, and to maximize synergies and not to spread RELAP resources too thinly, activities will be implemented in the same, or neighbouring, villages selected under component 1.

201. *Process*. The initial list of eligible project villages will be prepared by the PMU based on available information on poverty, rainfalls and potential for land development. The PMU will then contact the village/municipal councils of all eligible localities in order to gather the additional information required for final selection.

Selection of project beneficiaries

202. *Under component 1.2 and component 2.2*, the selection of beneficiaries will be done according to a number of pre-defined criteria and following a transparent, participatory selection process. The following criteria, to be fine-tuned in the PIM if need be, will thus be applied:

203. *Under component 1.2,* the following eligibility criteria will be applied for the initial identification of potential beneficiaries of private land rehabilitation/reclamation works:

i) Households with a maximum monthly income equivalent to the national poverty line plus 30/50%, with the rationale that this will prevent elite capture of project benefits.
ii) Households owning not more than 10 dunums (1 ha) in rain-fed areas and not more than 5 dunums (0.5 ha) in irrigated areas[101].
iii) Households whose land slope is not exceeding 40% (or with less than 90% of slope below 30%), and with acceptable levels of top soil depth.
iv) Households whose land is not adjacent to “hot spot” areas (e.g. a settlement, a military camp or the separation wall).
v) Households who have not benefited from government or donor subsidies for land development activities in the past 10 years.
vi) Households genuinely interested to develop their land and make it productive, and with the time, and physical capacity, to do so.
vii) *(In Area C only):* Households with a formal property title over their land or equivalent supported by Ministry of Local Government (or who are being supported by the project to obtain a formal property title over in the case of women).

204. Once the initial list of eligible beneficiary households will be available, priority will be given, through a scoring system, to the following households:

i) Households with the larger number of children or dependents;
ii) Women-headed households, or households for which the land to be developed belongs to a woman (formally or informally[102]).
iii) Households whose head is below 50 years of age.
iv) Households whose head is employed as daily wage earner or other precarious, low paid jobs

[100] The Poverty Atlas is supposed to be updated in 2018 by the PCBS.
[101] Although official statistics on average land holdings’ size are not available, the 1994 study *Dry land farming in Palestine*, by the Applied Research Institute estimated that 50% of holdings in the West Bank are estimated to be less than 10 dunums.
[102] While in Area C, formal land title will be an eligibility criterion, the project will support women willing to obtain such a formal ownership document.

205. *Under Component 2.2*, the following individuals will be eligible of the investment grants' scheme:

i) Women whose household is below the poverty line or depends from food assistance
ii) Women or youth micro-entrepreneurs, and their existing associations
iii) Landless, unemployed women heads of households
iv) Landless, unemployed youth (aged 18-30 years)
v) The ability of applicant to contribute a minimum of 15% in cash of grant amount will be a mandatory eligibility criteria.

206. Investment grants may be extended to individuals or a group of maximum three eligible individuals who have chosen to join forces to set-up or expand an enterprise/cooperative, and both new or current small-scale businesses may be eligible. Final selection of eligible grants' beneficiaries will be undertaken using a scoring system based on a number of technical criteria (business plan feasibility, market potential, etc.) and the potential for job creation. These criteria will be outlined in the PIM.

207. *Process*. Upon final selection of project villages, the PMU will hold information and awareness campaigns in order to inform the residents of selected localities about proposed project interventions and proposed application processes, ensuring the participation of producers' organizations, youth and women associations. Villagers' applications will be collected by the municipal/village councils and forwarded to the PMU, who will be in charge of reviewing the eligibility of applicants and of screening and ranking them in view of the selection of beneficiaries. The detailed criteria and ranking methodologies to be used under both component 1 and 2 will be detailed in the project implementation manual.

E. Gender mainstreaming

208. Recognizing that there is limited scope for reaching out to women and youth through land development activities, RELAP design includes a dedicated subcomponent (2.2) for these two specific target groups, while component 1 design has provision for supporting women in obtaining a land title.

209. To ensure that vulnerable women and youth are effectively reached and that their participation in project activities is fully beneficial, the PMU gender specialist shall prepare, no later than three months after project start a gender mainstreaming strategy. This document shall be a practical implementation guide aiming at ensuring that the specific constraints and needs of women and the youth will be duly considered at all stages of the project implementation process. For example, it will be important for the PMU to ensure that the information and awareness campaigns undertaken by the PMU and NGO implementers have the wider audience possible, and the PMU Gender Specialist shall play an active role during these campaigns. Women and the youth interested to benefit from the grants' scheme shall also benefit from specific support for the preparation of their application forms. During the first two years of implementation, the M&E officer and gender specialist shall also focus on ensuring that some of the detailed implementation approaches or modalities do not represent an obstacle for the participation of women and the youth in project activities; and if so, corrective actions shall be taken. For example, and in order to overcome the risk that husbands may not allow their wives to travel long distances, it may be important to ensure that BDS and other capacity building support are delivered at the village level. Mobility constraints by women and the youth shall also be duly taken by the PMU and BDS service providers while designing the BDS module, for example by ensuring that the training event location and timing are acceptable in view of women other duties, by organizing transportation to training location if outside of the village, or organizing in-house visits if required.

210. The gender mainstreaming strategy shall also define the specific tools and mechanisms through which the empowerment of women and the youth will be measured. For example, the gender specialist, with support from the M&E specialist, shall undertake specific qualitative surveys among women and young beneficiaries in order to understand project impact on their level of economic and social empowerment, or to document any positive intra-household changes in power relations or gender roles. To do so, a baseline study (qualitative) will be conducted upon women beneficiaries' selection. Also, the gender mainstreaming strategy will devise specific mechanisms to help ensure that project support to women is not being "captured" by their husbands, in particular under the grants scheme, for example by making sure, through regular field visits conducted jointly with the M&E officer, that the grant amount was used for the intended purpose by the intended beneficiary; or by re-

questing women beneficiaries to open a bank account at their exclusive name in order to deposit profit from sales. It will also be important the M&E specialist and gender specialist monitor the extent to which the participation of Women Associations and youth groups in MRPs' Executive Committees is active and that their views and specific needs and constraints are duly taken into account (this could be done during field supervision mission or by attending Executive Committees' meetings as observers.

Appendix 3: Country performance and lessons learned

211. IFAD has been engaged in Palestine since 1994, and the accumulated context-specific knowledge has informed the RELAP design. A summary of the IFAD portfolio, achievements and resources spent is presented a table on the next page. This table is followed by a summary of the main lessons learnt and how they will feed into the RELAP design process and future implementation.

212. RELAP will especially build on results and lessons learned from the PNRMP, on which there is a robust platform to learn and to scale up from. The RELAP design also builds on the experience gleaned from i) the experience of IFAD investment projects in NEN countries, ii) the PNRMP completion report, iii) the IFAD's Office of Evaluation ongoing performance evaluation of the PNRMP (draft available at the time of the detailed design), and iv) those of development partners who have been working on agriculture (including UNDP, EU, the Islamic Development Bank (IsDB), FAO, and governments of UK, Italy, Canada, Denmark, Australia, the Netherlands and Spain).

Table 17: Main achievements of the three IFAD financed projects in Palestine

Project	Objectives	Main activities	Major results/success	Notes
Rehabilitation and Development Project, Phase I (1994 to 2005) Gaza Strip and Jericho Governorate USD 10 million	Increase the incomes & living standards of small farmers in areas where there are few alternative income-generating possibilities by developing and managing the land & water resources of the project Area to conserve and enhance their productivity.	**Construction of community infrastructure** (classrooms, community centers, kindergartens, clinics, drinking water supply network, wholesale market, rural roads, etc.) **On-farm development activities** (water conservation, drip irrigation for intensive vegetable production, distribution of farm inputs **Fisheries development** including capacity building and input supply **Income generating activities (IGA)** (small scale commercial milk and meat production, honey, fruits, etc.). **Credit services and promotion of women saving and credit associations (SCA)**	**Modernization (50 km of piping, hydrants, pumps, etc.)** of the old irrigation system linked with the largest Jericho's springs, resulting in reduction in water losses (1.2 million m3 of water saved/year) and economic gains for farmers and the people of the Jericho area in general. **Establishment of a farmers' water users association** for the management of the new system. **1,585 loans issued for a total amount of USD 7.5 million**, of which USD 5.3 million for agriculture loans, USD 1,05 million for fishery, and USD 950 300 for women IGA (overall loan repayment rate of 97%, and total number of direct beneficiaries estimated at 17 200)	**Approved in 1994**, prior to the creation of the IFAD Fund for Gaza and the West Bank (FGWB, set-up in 1998) **Implemented by two NGOs:** the American Near East Refugee Aid (ANERA) and the Palestinian Economic Council for Development and Reconstruction (PECDAR)
Rehabilitation and Development Project, Phase 2 (2003 to 2008) Gaza Strip and Jericho Governorate USD 7 million	Same as RDP-I, with a focus on consolidation of RDP-I results	**Same type of activities as RDP-I**, with especially **i)** an expansion of the women saving and credit associations and further capacity building training for these associations, and **ii)** provision of business services, such as business development, entrepreneurship development training, skill development training through a women's Business Service centers (BSC).	**60 000 beneficiaries and a total of 28 community infrastructure completed,** providing some 54,000 person-days of local labour. **Creation of 12 women SCA**, with 7 799 members. Cumulatively, 7 530 loans were provided to members of which 33% for productive purposes, for a total amount of USD 13 181 466. The 12 SCAs have a membership exceeding 11 000 members, with total savings in excess of USD 2.7 million.	**Implemented by two NGOs:** the American Near East Refugee Aid (ANERA) and the Palestinian Agricultural Committees (PARC) **In September 2009, the EB approved to re-channel the unspent resources into the FGWB**
Participatory Natural Resources Management Pro-	Increase the incomes and living standards of smallholder farmers by	**Land development works,** i.e. land reclamation and improvement (including site clearing, removal of debris, leveling, plow-	**Full alignment with national priorities, the PNRMP helped driving policy reforms.** e.g. its model of land development	**Financed through the IFAD FGWB,** estab-

gramme (PNRMP) North of the West Bank (4 districts and about 260 villages) IFAD Loan (1998-2008, phase referred to as Phase I), which became an IFAD Grant ** (2010-2016, referred to as Phase II) About USD 13 million ** *Implementation stalled in 2008 as a result of the fiscal crisis facing the PA and the inability of the Authority to assume any further debt in the form of loan withdrawals. The PA requested IFAD to channel the unspent resources into a grant*	enhancing their productivity through the development and management of land and water resources.	ing, construction of terraces, fencing, cisterns, seedlings and access roads) **Micro credit activities**, from 2014, and only using Islamic finance.	was mainstreamed into the Agriculture Sector Strategy (2014-16). **The database maintained by the Project Coordination Unit/MoA** ensured that outputs delivered were followed up on, and all audit were found to be unqualified. **In terms of effectiveness and despite the fragile context, the PNRMP practically met all set targets across components (and many targets were exceeded)**: i) key budget-intensive activities of land reclaimed and rehabilitated were fully implemented and achievements were 119% and 138% of the targets; ii) out of all the targets, 8 indicators were achieved or exceeded (100-138%) and 5 were almost achieved (80-100%); iii) there was a clear increase in the production and sales of crops on land developed, and consequently increased incomes (incomes under the land development component increased between 12-19%, and asset increases were recorded for over 60% of beneficiaries); iv) there was an increase in the value of land developed (by 60% for land served by constructed roads, 61% for land rehabilitated, and 71% for land reclaimed); and v) for credit clients, net monthly incomes of enterprises supported by credit rose from about US$ 601/month to about US$ 888 (increase of 47%).	lished in 1998 **Phase I** implemented by UNDP in collaboration with the MoA. Only the land development component was implemented in Phase I **Phase II** implemented directly by the MoA, for the land development component, and by UNDP for the credit component

A. Main lessons learnt

Land development

213. *Land development remains a key priority*. Many donor agencies have been involved in land development activities in the West Bank. While some of them are now shifting their support to marketing oriented projects and programmes, the (new) national agricultural sector strategy 2017-2022 highlights that land development needs are still significant and delivery needs acceleration, particularly in Area C. Lessons from all land development projects also suggest that land development activities should be carried out in a more adaptive, more inclusive and more sustainable way.

214. *Testing and applying diversified land development models is needed.* Earlier land development models have proven effective in terms of putting more land into production and increasing beneficiary household production and income. Still, more needs to be done to develop alternative models and improved technologies which are i) less costly for the beneficiaries, ii) less invasive in the landscape, and iii) more adapted to climate change. Experience has also demonstrated that small-scale farmers are willing to adopt improved production technologies, but they need to see results first. To help small-scale farmers taking risks and investing in land development in a different manner, demonstrating and testing replicable mechanisms for climate change adaptation will be essential.

215. *Cost sharing and market terms should be preliminary requirements to land development works.* Firstly, 100% subsidies contribute to increasing Palestinian farmers' reliance on assistance and discourage many of them to invest in improving their agricultural holdings in hope of getting external assistance to do so. Cost sharing in investment – as it was already the case under the PNRMP – is key to ownership and sustainability. Secondly, all supported investments should be thought along with an analysis of the local market demands, as to ensure that land development activities do not only respond to the need of protecting the land, but also to local market terms.

216. *Water accessibility and adequacy is key to sustainable economic outcomes.* The need to further focus on water harvesting and management was constantly raised by the MoA and by farmers met during the RELAP detailed design mission. The experience of RDP I, RDP II and PNRMP has informed that farmers whose land had a better access to water had achieved better economic returns from their lands and were more likely to maintain their agricultural lands than others. The World Bank's economic assessment of the effects of the occupation on the agricultural sector also clearly identifies access to water as a key constraint (World Bank, 2008). Improving access to water for irrigation is thus a critical success element in any land development intervention.

217. *The villages/municipalities as entry point and community-based landscape approaches to maximize project impact.* PNRMP provided support for land development activities to relatively scattered individual farmers. To maximize project impact and reduce intervention costs, it is essential to maximize land development activities, as much as possible, at village or municipality levels.

218. In addition, the PNRMP PCR and the PPE found that adopting a community-based landscape approach would help enhance the sustainability and effectiveness of the land and water development interventions. This could also help reduce unit costs (by allowing intensive works to be focused on consolidated plots). Involvement of the local village councils/ municipalities will help mobilize community-wide resource management approaches/ plans. This has been reflected in the village selection criteria being developed for RELAP (with villages that offer larger including contiguous land plots to be rehabilitated being offered priority). Such a community-based landscape approach will enable the project to promote integrated activities: inter-cropping, community based water harvesting and other agro-ecosystem management.

219. *Other important lessons include the need to focus on wider consideration of rain water harvesting facilitate for supplementary irrigation.* Related is the need to maximize the impact of land development activities, by closely synchronising with other programme interventions to achieve the desired complimentarily wherever relevant and demanded. It is also essential to fully define maintenance arrangements of build facilities and also put emphasis on environmental assessment and operation of constructed/rehabilitated assets.

220. Thus, the main design considerations for land development activities are consequently:

- The need to develop and demonstrate replicable mechanisms for climate change adaptation, land development and environmental related investment to support commercial, market-oriented businesses in the project area;
- Specification of clearly defined, transparent and consistently applied investment selection criteria including technical feasibility and climate change vulnerability;
- When beneficiaries articulate their needs, sustainability and relevance is improved. Hence support should be provided on the basis of demand-driven investment opportunities available to individual farmers, village/municipal councils;
- Acceptance of the principle of cost sharing in investment (by government, municipal/village councils and farmers) and the adoption of climate change adaptation and market terms for all investments under consideration.

Inclusive targeting (including gender mainstreaming and youth inclusion)

221. *Targeting poorer farmers will require a reduction in the cash contribution required from farmers*. Land development activities, to which small-scale farmers have to contribute substantially (both in cash and in kind), may lead to the exclusion of the poorest ones. One of the key lesson learnt from PNRMP is that a cash contribution of 25% of the land development total cost, as previously applied, represents an investment which is too costly for the small-scale farmers. It is essential to reduce the cash contribution, while balancing with a higher in kind-contribution to labour intensive works. This will also ensure that the cost-sharing-for-sustainability principles outlined above can be maintained.

222. *Targeting the poorer segments of the rural population requires supporting the non-farm and off-farm sectors.* Experience has demonstrated that the inclusion/equitable access of small-scale asset rural stakeholders in projects' supported activities is a challenge. This is particularly true in the context of Palestine, where the poorest and most vulnerable rural smallholders are generally not landowners (particularly women and the youth). Their inclusion into development projects requires i) to promote the development of economic opportunities either in the off-farm sector such as apiculture, dairy processing and light consumer manufactures; ii) to develop incentives and mechanisms preventing as much as possible from leakages and directly targeting the most vulnerable through clear and verifiable selection criteria (quotas, age limit, etc.).The economic opportunities for the poorer sections will be managed through local councils/ municipalities, which are key stakeholders in the MRPs and the revitalization of the collection centres being targeted under component 2. Therefore, the new focus on community-based targeting encompasses not just the physical landscape but the economic and social landscape of the rural communities.

223. *Gender participation is not enough to ensure women's empowerment.* Specific activities for women's empowerment (and not just measures to enhance participation) are needed to effectively engage with rural women and the youth. The experience from the PNRMP and from the JICA financed Project on Improved Extension for Value Added Agriculture (2011/15) also demonstrated that it is necessary to make the project teams understand why gender mainstreaming is important in agricultural projects. PMUs shall comprise of a knowledgeable and skilful staff as "gender-in-charge" and provisions for capacity development and trainings for the PMUs shall be budgeted.

224. *Beyond supporting specific off-farm economic opportunities for the women and the youth, support can be provided to enhance their access to land.* Legislation provides women the right to inherit, own and dispose of property independently of men in their family. However, women are often obstructed from this right because of legal, cultural and social barriers. In the Palestinian patriarchal society, mainly adult men apply for and pursue certificates of succession at relevant courts and official departments. Lengthy, complicated legal procedures and court high fees, which women and the youth cannot afford, as well as lack of information, pose further restrictions. Tailored support can be provided to help men, women and the youth to obtain information on certificate of succession and/or how to claim their inheritance rights. This support could comprise of awareness raising campaigns, legal advices and services for those expressing an interest in claiming their rights, and financial and technical support to prepare the supporting documentation required for land registration and/or succession.

225. *Effective inclusion of the youth*. Whether in developing countries or in MICs, young people's access to land is influenced by the perception that young people have not reached "maturity" yet and by the shortage of land, the latter being further exacerbated in Palestine. Increasingly farming is not

perceived as an attractive profession by the young, as it involves hard labour and often unstable and low incomes. The youth in Palestine face several constraints with regard to employment and building sustainable livelihoods including lack of access to land/ capital, lack of collateral required to access finance. These will be addressed through RELAP. Youth will be supported through targeted economic incentives (benefiting from investment grants and capacity building from BDS) to develop or expand off-farm economic activities. While there are youth committees established in the north, south and central regions of the West Bank, the design mission found that these were not functional. Therefore, the entry point for the youth-focused activities would be the village councils/ municipalities (as stakeholders in the MRPs).

226. The strategies related to inclusive targeting (including the specifically customised activities for women and youth) respond to the PPE recommendation on developing differential targeting strategies. The use of village institutions for facilitating enterprise development and access to markets is also aligned to the PPE recommendation on employing community institutions.

Market access

227. In the West Bank, the barriers to entry a value chain serving export markets are often too high for poorer farmers, and in a context where imported food can be blocked with virtually no notice – and where IFAD previous engagement (PNRMP PCR, 2016) indicated that smallholders sell only about 25% of their products in formal markets – it is key to better understand local market requirements that are most relevant to small scale farmers and to use this understanding to better guide producers in making decisions that will optimise the use of available limited resources. To better serve local markets, it is important to pool agricultural production at local level, and provide farmers with support and advices to base agricultural production decisions on local market realities and demand.

228. Local women groups (evidenced from visited in Hebron, Bethlem, Nablus, Tulkarem governorates) have regularly been supported with the promotion of income generating activities - processed agricultural products and foods, processed milk, beekeeping, greenhouses, hydroponics etc. Although they are quite successful in terms of production capacities, access to reliable markets remain their bigger challenge. The MRP approach, the investment grants being delivered by RELAP build on lessons learned from other donor interventions including the DFID financed Palestinian Market Development Project (PMDP). The focus on collection centres and support to processing[103] have been developed based on findings that most of the smallholders supported by IFAD and other donors sell their products directly, and usually unprocessed, on the local market.

Investment grants

229. The PMDP is a 5-year (2013-2018) EU-DFID supported program that is implemented through a investment grant window as part of the tools to improve the private sector capacities in three main sectors: agriculture, ICT and tourism. PMDP based its involvement on a business development plan focusing on the supported part rather than a complex overall business plan covering the whole enterprise. PMDP developed a BDS roaster that can be accessed from Chambers of Commerce to assist applicants to develop their BDP. The level of matching varies according to the risk (low or high) and the nature of the activity (new or existing) from 25 to 75%. In order to ease investors' contribution, PMDP authorised a phased disbursement of the grant and contribution, aligned on the activity. A specific window was created for youth and women micro-entrepreneurs (below USD 25 000).

230. Proposals are reviewed on a permanent basis by a technical team and submitted on a weekly basis to the PMDP executive team. If the grant is awarded, the supported activity is implemented by the investor and once completed, reimbursement is done according to the agreed contribution. Main lessons that have informed RELAP are:

- to be flexible and phase (split) disbursement based on progress on business development plan;
- to recognise informal registration (village council, municipality…) as a valid indicator of the existence of a group and its willingness to share common activities;

[103] The key constraints to the agricultural sector include limited opportunities for agro-processing as highlighted by the UNCTAD study 'The Besieged Palestinian Agricultural Sector', 2015.

- to involve BDS available through chambers of commerce.

Institutional arrangements and coordination with other donors

231. *Integration of the project management unit in the Ministry of Agriculture (MoA)* has proven crucial in institutionalising capacity development and scaling up: One of the key positive PNRMP lessons was that ownership and accountability are higher when management is integrated in the MoA. The RELAP will therefore retain a similar arrangement, while expanding the PNRMP team to cover the various RELAP fields of intervention.

232. *Policy and institutional framework (including the framework for climate change adaptation).* IFAD has been one of the only donors developing projects for implementation directly through the P.A government structure (some other donors provide direct budget support, but all donor driven projects reviewed by the team were implemented by non-ministry/ PA actors, mostly NGOs). The benefits of the approach was also commended by the PPE (that highlighted the level of government ownership, institutional capacity building and the contribution of the project to government policies). RELAP will continue relying on permanent and legitimate institutions for implementation, further expanding the scope of the such partnerships forged by ensuring regular donor coordination meetings around the RELAP outcomes. RELAP will also expanded to include the Environmental Quality Authority (EQA) as one of the main stakeholders of the project (EQA is the nodal agency for the Green Climate Fund in Palestine, and is already deeply involved in the collaborative design process).

233. *Coordination with other donors*. Will need to be strengthened and increased, especially for the RELAP second component and linkages with ongoing market initiatives. On the next page, it a draft matrix on “who” is “doing what” in terms of support to marketing and processing activities. Specific linkages have been identified and are presented in the matrix below as well as in Table 2: Matrix of synergies between RELAP and FAO supported projects (see above).

Preliminary analysis of potentially complementary projects/initiatives/donors involved in the agricultural sector

Partner/ Donor	Project or Programme	Main focus	Project/Programme's main area(s) of intervention and geographical focus (where, what, possible synergies)	Status (starting date, completion date, total amount in US$)	Implementation modalities
Multi-donors (Denmark 50%, the Netherlands, SDC, EU, FAO)	• Project (to start) to **reform and develop markets, value chain and FOs**	• PS led agri-business development and improvement of competitiveness	• Support to investment business plans for SMEs • Water management new techniques • Matching grants to farmers (for more details see table 2 in main report)	• **Amount:** EUR 26 000 000 • **Duration :** 4 years • Under inception	• Coordinated by FAO with different NGOs
Canada and FAO	• Support economic growth through **optimising agriculture value chain (VC)** in the West Bank	• Marketing, VC, cooperatives	• All of the West Bank area. • Increased access to quality land and sustainable water resources (*pre-production*). No particular focus on land development. • Enhanced capacity of farmers to apply climate smart, costs effective , market oriented and quality based production practices (production) • Improved access to and use of energy efficient post-harvest infrastructure (post-harvest and processing) • Strengthened capacity of co-op members to develop business plan and apply their own quality management system to their farming operations (distribution and marketing) • Strengthened capacity of cooperative members and board to apply international cooperative practices to their business as well as the capacity of cooperatives umbrella to provide services to its member	• **Duration**: 2016-2022 • **Amount:** US$ 15 090 000, mainly financed by Canada	• Implemented by FAO and NGOs • Involvement of General Directorate of irrigation water (supervision). General Directorate of agricultural land part of the project steering committee.
WFP	• Nothing ongoing *in the agricultural sector* or with the MOA. Mainly food assistance, in collaboration with UNWRA, in refugee camps				
The Netherlands	• Inclusive access to and **sustainable management of land and water resources**	• Land development	• Jerusalem, Ramallah, Nablus, Tubas, Qalqiliyah, Tulkarem, Jenin, Jericho, Bethlehem, Hebron and Dura • Land and water sustainable use and development	• **Duration:** 48 months (4Y) starting from January 2017 • **Amount:** US$ 11 000 000	• Implemented by a consortium of Palestinian NGOs led by UAWC • General Directorates of (1) irrigation water and (2) agricultural land involved in supervision. • Resources managed by the consortium
	• Market oriented	• Marketing and	• West Bank and Gaza (https://goo.gl/mk62F2)	• **Duration :** 4 years	• Implemented by FAO

	and **sustainable high value crop** sector development project	value chains	• 1 700 female and male high value crop farmers targeted, organized into 27 active cooperatives (14 of these cooperatives are also targeted by the FAO/Canada) • Improve production, marketing capacities and access to markets for the targeted cooperatives, through the establishment of an umbrella company to establish central selling and distribution points in Hebron and Nablus, and to provide collective services.	• **Amount :** USD 9 300 000	
The EU	• Juthoor **Land, Water, and Human Resource Development** in Vulnerable Areas of the West Bank	• Land development, connectivity and water	• Area between Hebron and Bethlehem (South West Bank) • Agricultural roads, land reclamation and rehabilitation and water and range land management	• **Duration:** January 2015 to March 2017 • **Amount:** US$ 6 500 000	• Implemented by a consortium of Palestinian NGOs led by UAWC. • Resources channelled through NGOs • Joint supervision by the General Directorates of irrigation water, agricultural land, and forests and rangeland.
	• ENPARD (*in 8 countries*): European Neighborhood Programme for **Agricultural and rural development**	• Capacity building	• All west bank + 7 other countries • Capacity building for Government engineers in different topics	• **Duration:** November 2016 to December 2017 • **Amount:** EUR 4 million for 8 countries	• Supervised by the General Directorate of marketing and implemented by PARC NGO
	• Assistance to **agriculture** in the West Bank	• IGA	• All of the West Bank area • Assistance to farmers (through support to various income generating activities in relation to agriculture, i.e. land, water, animal husbandry, etc.) who are affected by the Israeli occupation	• **Duration:** 2015 -2020 • **Amount :** EUR 7 million	Direct centralised management between the EU and the Palestinian Authority.
Spain	• Improve **agricultural production** for the small and medium farmers	• Land development and water	• Tulkarim and Qalqilia Districts (North WB) • Water and land development	• **Duration:** 2015-2018 • **Amount :** US$ 1 700 000	• Directly implemented by PARC NGO • General Directorate of. irrigation water involved in supervision
PMZ,	• **Climate change Adaptation** Pro-	• Water and CC	• Tulkarim , Jericho , south Hebron(Dora), Jenin and Ramallah	• **Duration:** 2014-2018	• Directly implemented by

through GIZ	ject in the West Bank	adaptation	• Water shed management to be adapted with climate change • Need to find additional information since GIZ did not respond to the IFAD request for a meeting during design.	• **Amount:** US$ 4 000 000	PARC NGO • General Directorate of irrigation water involved in supervision
Islamic Development Bank (IsDB)	• **Land development** Project	• Land development and water	• Districts of Hebron ,Sulfit, Bethlehem and Jenin • Land and water development	• **Duration:** May 2105 to March 2017 • **Amount:** US$ 1 325 500	• Directly implemented by NGO(s) • General directorates of agricultural land and irrigation water involved
	• **Agricultural development** of Sanur Plain		• Suanur plain, Jenin District • Land and water development	• **Duration:** 2015 – 2017 • **Amount:** USD$ 3 million	
	• **Fisheries** project	• Fisheries	• All the districts of West bank and the Gaza Strip • Fish pools and fish raising	• **Duration:** August 2015 to August 2018 • **Amount:** US$ 1 000 000	• G.D. of Agricultural Extension
Alwaleid Eben Talal institution	• **Poverty reduction**	• IGA	• All the districts of West bank • Small agricultural income generating project (green houses, livestock, etc.)	• **Duration:** March 2014 to March 2017 • **Amount :** US$ 4 100 000	• G.D. of Agricultural Extension
UNDP/IsDB	Enhance agriculture sector by focusing on land, farming & irrigation to	• Capacity building	• Areas to be checked • Land, research and extension	• **Duration:** Will end in 2018 • **Amount :** US$ 1 000 000	• Financed by IsDB • Implemented by UNDP
Switzerland	• Improved **access to markets** for female and male for small scale producer	• Marketing, IGA	• All West Bank	• **Duration:** May 2016 to July 2017 • **Amount:** EUR 3 395 000	• G.D of marketing
USAID	• **Compete** Project	• PS investments, economic sectors including agribusiness	• West Bank and Gaza • Facilitation of connections between SMEs and larger traders and exporters	• **Duration:** 2011-17 • **Amount:** USD 44m	• Implemented by DAI / USAID
Australia	• Australia Middle East NGO collaboration Agreement (AMENCA III)	• Market approach, PS, value chains	• Promotion of market-based approach work through profit-based arrangements with PS entities to address gaps and blockages in product VC	• **Duration:** Started in Feb. 2016 until 20212 • **Amount:** USD 32 m	• Implemented by a consortium of Australian, international, Palestinian NGOs.

	• Innovative banking initiative	• Financial services, TA	• Support (capitalization fund) to the Union of Cooperative Associations for Credit and Saving in the fields of management and control of credit, financial consolidation, socio-economic empowerment • TA to the Palestinian Monetary Authority	• **Amount :** EUR 3 M for the capitalization fund and EUR 550 000 for TA	• Union of Cooperative Associations for Credit and Saving
Italian Co-operation	• Financial and non-financial services to MSEs	• Economic opportunities and finance	• All West Bank • Fund for employment and social protection, for non-financial services, and capacity building for the Fund • Capacity building • Micro-finance through Palestinian MFIs (credit line and credit guarantee fund)	• **Amount:** EUR 14 M for the credit line, EUR 3 M for the Guarantee Fund, USD 500 000 for non-financial services and 600 000 USD for capacity building	• Credit line to Palestinian NGOs • Management of the Fund
World Bank (WB) + consortium of international partners and the PA	• Hebron regional Wastewater management project, Phase I	• Waste water treatment and irrigation agriculture	• Hebron and Bethlehem Municipalities • Construction of a wastewater treatment plant to reduce environmental pollution from wastewater (cost US$ 39 million) (currently in procurement process for construction works and once access road completed, with financial support from USAID) • Sustainable Management and O&M of the plant (cost US$ 17 million) • Programme management, M&E and master plan implementation planning (cost US$ 4.75 million)	• **Duration:** Started in 2015 until December 2022 • **Amount:** About US$ 62 million	• DAI.com

Appendix 4: Detailed project description

234. RELAP will support key partners in accelerating resilient rural economic growth by both expanding the area under cultivation as well as increasing the productivity and profitability of rural production. Special attention will be given to ensure adaptiveness and inclusion of less advantaged segments of the rural population, in particular families with limited access to land, women and youth as well as promoting increased climate resilience through adapted land uses and agricultural practices, land and water governance and management. Against this background the RELAP will have the following goal:

To improve the resilience, land security and livelihoods of rural producers' households in selected villages of the West Bank.

235. RELAP will emphasize resilience of rural economic activities through three core outcomes, translated into components: Firstly, it will reduce food insecurity by increasing food production and improving affordability of key nutritional foods. This is particularly pertinent in a context where imported food can be blocked at any time. Efforts will aim at supporting farmers in implementing climate resilient and inclusive land development practices. Secondly, it will increase incomes of the rural poor from higher production volumes, more aggregation and from more efficient market integration that leverage value addition for higher profitability. Here special investment support schemes will be made available for youth, women and landless, that will aim to promote climate-adapted agri-businesses. Thirdly, the RELAP will support a systematic upscaling of smallholders adaptation capacities by strengthening public services in their delivery of agricultural tailored climate forecasting and early warnings and modelling of future climate change impacts on farming systems and land-use suitability. The capacities of public and private extension services providers will be strengthened to support farmers' respond to the increase in water stress and climate variability and speed up changes in farming systems and practices. Thus, the development objective will be:

To increase climate resilience, land productivity, agricultural production and marketing opportunities for smallholders and landless rural poor.

236. The underlying theory of change is thus one of strengthening resilience of farmers and the rural poor in a number of mutually and synergistically reinforcing ways that address the core challenges facing not only the target group, but the wider Palestinian nation. Thus the challenge of loss of land, high cost of land development and low productivity will primarily be addressed through component one where the interventions will aim at improving tenure (by demonstrating use and also legally and for women),catalyse upscaling of climate resilient, lower-cost and less invasive land development practices that will be more inclusive and more scalable. The challenge of 'broken' and non-inclusive value chains will be addressed in component two aimed at enhancing the added-value for farmers, both those supported under component one, as well as the most marginalised section of the rural population, with special focus on the women and youth. Finally, accelerating climate change is further aggravating the already severe water scarcity as well as increasing climate variability and the frequency of extreme weather events. Component 3 will provide farmers, extension services, private suppliers/services providers and agricultural researchers with better and more actionable climate data, as well as cost benefit analysis, guidelines and technical support to scale up the adoption by smallholders of proven adaptation options suitable for different farming systems. To sustain the scaling up effort, this component will also provide technical assistance to develop adaptation capacities among relevant public stakeholders, incorporating adaptation objectives and measures in planning and programming and linking them into regional and international climate change networks. A graphical presentation of the theory of change is found in appendix 6.

Component 1: Climate resilient land development

237. This component is designed to enhance farmer's and livestock keeper's access to productive agricultural land and water resources under increasing water scarcity through a range of investments in land development for different farming systems and livelihoods in area B and C. Main investments will be in agricultural roads, soil improvements and rain water harvesting facilities. These investments will be undertaken in close partnership with municipalities and villages and will strengthen small farmers' and livestock keeper's resilience to current and anticipated impacts of climate variability and change. The main selection criteria will be availability of at least 200 dunums of suitable land (not ad-

jacent to “hot spot areas”) in a village or a cluster of neighbouring villages of suitable land for development in Areas B or C, land-use suitability (such as minimum required annual average rainfall for water harvesting, top soil depth, reasonable land slopes and not more than 40% rocks). Further criteria include: availability of land certificate, opportunities for farming business and rural enterprise, while serving the largest numbers of beneficiaries, and in particular the poor rural households and the economically active rural smallholders and women.

238. In addition to poverty criteria, other selection criteria will assess environmental impact, potential adaptation benefits and land-use suitability, technical feasibility, beneficiary contribution and capacity to maintain rehabilitated or constructed assets. All selected proposals for investment will have to demonstrate the potential to enhance economic opportunities and improved livelihoods, allowing for future easier scaling-up by beneficiaries (including private sector), municipalities, villages or central government. The identification of areas for land development will be undertaken in a participatory and demand-driven manner to ensure that they meet target group needs. The PIM specifies the selection criteria in detail (appendix 11).

239. This component will also aim to strengthen small farmers’ resilience to current and anticipated impacts of climate variability and change, by financing capacity development including knowledge on climate impacts on different farming systems and different adaptation options drawing on modelling of historical and future trends supported in component 3. A testing and monitoring programme will be set up with farmers and livestock keepers participating in the different land development models to capture cost-effectiveness and how the different approaches and practices are contributing to increasing the resilience of their production systems and allow for systematic learning and adaptive changes.

240. There is a substantial need for major investments in agricultural land development in West Bank to increase steadfastness and smallholder incomes and healthy and affordable food availability in local markets as well as in improved rain water harvesting in soils and in facilities for supplementary irrigation for enhanced resilience. Any involvement in land development activities will be explicitly linked to their ability to catalyse sustainable and inclusive economic growth. The lack of adequate land and water resources and climate vulnerability negatively affect the further investment by farmers or the proprietors of small and medium-scale enterprises in agricultural activities.

241. The main types of investments eligible under the land development component will include land and farm development (reclamation, rehabilitation, improvement, and related capacity development for agronomic, soil, water and rangeland management), cisterns for rain water harvesting, tree seedling and planting, and agricultural access roads.

242. The outcomes for this component will be: (i) 70% of developed land reach a productivity per dunum at least 20% higher than the average for similar crops and livestock systems in the West Bank five years after the start of land development activities; (ii) 80% of beneficiary farmers reporting having reduced water shortage vis-à-vis production needs.

243. The land-uses and farming systems to be supported identified at the design phase (with the possibility of adding additional systems during implementation) are: Orchards, where relevant intercropped with annual crops, on terraces (10%-30% slopes); Orchards and annual crop systems on land improved with contour bounds, V-shaped or half-moon planting plots (<10% slope); planting trees (olive, fodder shrub trees etc.) directly between the rocks (>30% slopes); integrated crop (wheat, barley and fodder crop) and livestock systems under conservation agriculture (CLCA systems); cultivation of annual and perennial crops in wadis (seasonal river courses) using gabion structures for water and soil harvesting; and rehabilitation of rangelands. When and where possible, land development might be linked to wastewater treatment plants using treated wastewater for tree and fodder crops.

The process in stages in the selected villages

244. *Stage I*: A village engagement process will be implemented with selected village councils and mobilizing local production and economic actors including farmer’s and livestock keepers (where relevant) both individuals and organized in groups, women’s groups, local traders, and youth. All these stakeholders will be presented the RELAP objectives and approaches (including selection/targeting criteria) both for land development (component 1) and improved bulking of products and linkage to markets, and development of small entrepreneurships for vulnerable, landless women and youth (component 2). The stakeholders will be encouraged to select and organise into groups of participants interested in land development, bulking of produce and small entrepreneurships (self-selection and

direct targeting selection according to quotas and selection criteria for inclusion of women and youth). When possible these groups may build on already exiting groups. A visioning process will be facilitated of a shared land and market development process which will lead to the emergence of a rural multi-stakeholder platform (MRP) (see further description in component 2). The expected result is to produce a strategic vision charter owned by the local stakeholders and a village agreement for land development linked to improved bulking and marketing and targeted entrepreneurship development for vulnerable landless women and youth. This vision and agreement will serve as basis for components 1 and 2.

245. *Stage II:* Participatory mapping will be facilitated with the group interested in land development of the village landscapes including land-use suitability, development needs (resilience, economic, steadfastness, food security) and linkages to market opportunities. The exercise will include farmer's and livestock keepers informed and guided analysis of climate change and variability historical and future trends, the impacts on the different cropping and livestock systems and identification of different adaptation options for increased resilience. Land development activities and investments in rural agricultural roads will be planned based on the mapping exercise and a landscape management approach. Each farmer, livestock keeper, livestock management or producers' groups will be supported in the development of medium-term cropping, livestock rearing and business plans. In addition to works, equipment and inputs the planning should include farmers' and livestock keepers' own investments and needs for capacity building and technical assistance. The planning should also identify their interest in participating in the systematic testing and monitoring of the production, economic and resilience benefits of the land development approaches implemented.

246. *Stage III*: In this stage farmers and livestock keepers will be supported in the implementation of land development works, rehabilitation measures and capacity building and the related medium-term cropping, livestock rearing and business plans. As for the business part, this would be further supported under component 2.

247. The land development component will comprise of three sub-components:

248. **Sub-component 1.1: Testing and monitoring of resilience benefits of land development practices.** This subcomponent will support the systematic testing and monitoring of and learning with farmers and livestock keepers from the land development approaches and practices implemented in farmers' fields under subcomponent 1.2. This systematic monitoring with farmers of the different approaches implemented will document benefits and constraints, sharpen the learning, and identify the most suitable approaches and practices regarding adaptation benefits and climate resilience, cost-efficiency, socio-economic benefits and environmental sustainability. The resulting knowledge products will serve as basis for continuously improving land development activities under component 1.2 and an evidence based upscaling of diversified land development interventions and transformation to resilient production systems supported by component 3. The subcomponent will include 4 activities: i) a stocktake study of current land development practices; ii) the design of the testing and monitoring programme and its IT data platform; iii) the implementation of the monitoring programme with farmers; and iv) development of knowledge products based on the monitoring results relevant for learning, upscaling and policy reforms.

249. *Activity 1.1.1: Stocktake study*. Actors outside MoA and EQA, such as NGOs and individual experimenting farmers, have experiences with different practices increasing the resilience of smallholders production systems. This include changing in crops and animal rearing practices, rangeland rehabilitation and management, agro-ecological practices for soil improvement and water management, ancient wells rehabilitation, wastewater recycling, water harvesting and increased storage in soils through integrated soil and water management, conservation agriculture among others. As long as MoA participates in joint projects with these actors the information flows, but as soon as the project ends a lot of information is kept by NGOs with little sharing.

250. The project will therefore in its first year support a stock take study through a consultancy of climate resilient land development practices already used in the country and proven to be cost-effective and environmental sustainable. The study will cover the suitability of these practices for increasing local availability and consumption of nutritious food and income generation, coping with current and future climate challenges. The study will cover different land-uses and production systems (orchards, integrated cereal and livestock production systems, crop rotations including fodder crops, and rangeland livestock rearing). The study will identify and open up for more alternatives for climate

resilient land-uses and approaches to land development than the ones identified during the project design. These approaches can then be included in the engagement with villages on planning of their land development activities supported by subcomponent 1.2. Also the study will inform capacity building and training activities for upscaling of climate resilient practices to be supported by component 3.

251. *Activity 1.1.2: Design of testing and monitoring programme and its IT data platform.* Also, in the first project year, a NGO (selected competitively) will be contracted to design a testing and monitoring programme of the various land development approaches and practices implemented under subcomponent 1.2. The programme will be designed in collaboration with MoA's National Agricultural Research Centre (NARC) and the PMU. NARC and the PMU will from year two implement the programme with MoA local staff and a sample of subcomponent 1.2 beneficiary farmers and livestock keepers. The design of the sample of farmers should cover different land development practices, agro-ecological zones and production systems. The programme should be designed to monitor adaptation benefits such as contribution to household nutritious food consumption, income generation, diversification, stability and level of yields, improvements in soil quality, water harvesting capacity, and water use efficiency. The NGO will also build an IT platform for systematic data management and analysis and train local MoA staff in the implementation with farmers. Short term technical assistance will be provided to follow up on the data collection, entrance in the system and analysis.

252. A resilience scorecard will be developed (see draft in appendices 13 and 6) to be applied to at least all component 1 beneficiary households. The scorecard would be based on simple yes and no questions on the households' resilience capacities including in particular the adoption of project outputs meant to address vulnerabilities.

253. Activity *1.1.3: Implementation of testing and monitoring programme*. A baseline for the different variables to be tested and monitored by the programme will be established at a rolling basis when sample villages, farmers and livestock keepers have decided on the land and land development practices they will be implementing. Sample farmers and livestock keepers will be trained and accompanied by local MoA staff in collecting data and soil samples with the agreed frequencies and MoA staff will feed the data into the central IT platform. The resilience scorecard household survey will also be applied at the initiation of activities in each village and at the end of the project. NARC will analyse soil samples for fertility and chemical and physical characteristics in their laboratory and also support the PMU in the analysis of other data on yields, water harvesting and use efficiency, and links to income generation. NARC will also meet with farmers, livestock keepers, local MoA and PMU staff to discuss the results and any eventual adaptive measures to be taken in land development approaches.

254. Activity 1.1.4: From midterm and to the end of the project, testing and monitoring results will be used for systematic learning and preparation of knowledge products (policy briefs, documentation of practices eventually integrated in the WOCAT platform) and adjustment of land development guidelines. These knowledge products will inform the upscaling of adaptation practices on the ground supported by component 3 as well as policy processes adjusting/reforming the land development and related policies. The aim is to improve the policy framework for more sustainable land development and resilience to current and future climate challenges.

255. **Sub-component 1.2: Resilient land development.** This subcomponent will support the implementation of climate resilient land development approaches for different land-uses and farming systems in Areas B and C. During project design 6 different land-uses and farming systems have been identified but others may be added during project implementation as a result of the stock take study supported under subcomponent 1.1. As mentioned above the planning of land development activities will be done at village level through a participatory process and based on a land-use suitability and landscape management approach. The planning process will identify investments in agricultural roads and development of the medium-term cropping, livestock rearing and business plans with farmers and livestock keepers for land to be developed. NARC and ICARDA may support farmers in this planning process proposing and demonstrating resilient land development practices which have already been tried and validated by farmers in the West Bank including participatory selection of more resilient crop varieties and land and water management practices for land development using less machinery, lowering the costs and capturing and storing more water in the soils reducing reliance on cisterns. The targeting selection criteria for eligible farmers and their land for the different land-uses and development activities are detailed in appendix 2. Key criteria as well as specific adaptation practices are listed in the table below:

Table 18: Criteria for land development and adaptation practices

Land-uses and farming systems	Selection criteria	Adaptation
Orchards, where relevant inter-cropped with annual crops, on terraces (10%-30% slopes <40% rocks) Orchards and annual crop systems on land improved with contour bounds, V-shaped or half-moon planting plots (<10% slope) Planting trees (olive, fodder shrub trees etc.) directly between the rocks (>30% slopes).	Households with a maximum monthly income equivalent to the national poverty line plus 30/50% Households owning not more than 10 dunums (1 ha) in rain-fed areas and not more than 5 dunums (0.5 ha) in irrigated areas >300mm annual rainfall	Rainwater harvesting in cistern for complementary irrigation and increased soil water holding capacity to buffer against prolonged dry periods and unpredictable rainfalls. In addition drought resistant olive and fodder shrub varieties will be used on particular sloppy and rocky lands where planting between the rocks will preserve the rocks' capacity to retain and filter water to the roots of the trees.
Integrated crop (wheat, barley and fodder crop) and livestock systems under conservation agriculture	Households with a maximum monthly income equivalent to the national poverty line plus 30/50% Households owning not more than 10 dunums (1 ha) in rain-fed areas and not more than 5 dunums (0.5 ha) in irrigated areas	The mulching process and constant soil coverage slowly builds up the water retention capacity of the soil and allow cultivation under low and variable rainfall and water stressed conditions
Cultivation of annual and perennial crops in wadis/seasonal river courses using gabion structures for water and soil harvesting	Households with a maximum monthly income equivalent to the national poverty line plus 30/50%	The harvesting and storage of water and soil for viable agricultural production from wadis is an opportunity on the eastern slopes which is the area in the West Bank most affected by climate change in terms of a clear decrease in rainfall and increase in soil erosion and desertification. This model will thus have clear adaptation benefits for the most climate vulnerable part of the population.
Rehabilitation of rangelands	Government and communal land where the user group contains at least 70% households with a maximum monthly income equivalent to the national poverty line plus 30/50%.	The rangeland rehabilitation will also be on the eastern slopes and will have adaptation benefits for the most climate vulnerable people in the West bank. Building soil water retention capacities by rehabilitating top soils and fodder rich vegetation cover in areas agreed with the Bedouin and other herders communities and building their capacities for sustainable grazing governance and management, will provide for resilient rangeland productivity.

256. The subcomponent has 6 main activities: i) support for the land registration process; ii) orchard land development; iii) crop-livestock integration under conservation agriculture land development; iv) wadis land development; v) rangeland rehabilitation; and vi) construction of rural roads.

257. *Activity 1.2.1: Support for land registration process.* Only 5% of the land in Area B and 26% of the land in Area C have been registered under the Palestinian Land Authority (PLA).To increase the

land tenure security in particular for women this activity will provide training on the registration process and legal advisory services during the process.

258. As also stated in appendix 2, legislation provides women the right to inherit, own and dispose of property independently of men in their family. However, women are de factor often obstructed from this right because of legal, cultural and social barriers. In the Palestinian patriarchal society, mainly men apply for and pursue certificates of succession at relevant courts and official departments. Lengthy, complicated legal procedures and court high fees, which women cannot afford, as well as lack of information, pose further restrictions. In this sub-component, the RELAP will aim at establishing a systematic mechanism whereby both men and women (including the youth) get access to legal paperwork required for land development and get further protected from land loss/confiscation. This sub-component will have two core engagements, described below.

259. *Empowering women by helping them to obtain information on certificate of succession and/or how to claim their inheritance rights* : Firstly, awareness raising campaigns/sessions (based on focus groups and local village/community discussions) on women's right to land inheritance will be conducted at village level. Households will be made aware of women's right to land ownership and the process to claim for this right. This will be backed-up by access to legal advices/services for women who would express their interest in obtaining more information on how to claim their rights. Secondly, the RELAP provide will budget for trainings of trainers for rural women to advocate and lobby in the RELAP targeted areas. These women will be chosen from their communities (10 to 15 women) and will be trained on women's right to inheritance, claiming procedures as well as use of land. They will then conduct trainings (number to be determined) for men and women in the RELAP intervention areas and organize workshops which will be filmed to be used in other communities/villages and broadcasted. Thirdly, RELAP proposes to support the creation of women's solidarity groups, who will conduct campaigns and sensitization activities at community level.

260. *Helping men and women to officially dispose of and register their land*: Based on past evidence, not all sensitized men and women will be willing or able to further claim their right to succession or inheritance. However, it is expected that a number will be interested in doing so while not being able to financially afford the costs of legal procedures. These men and women would be supported financially and technically by RELAP to gather the supporting documentation required for land registration and to apply for registration or certificate of succession.

261. *Activity 1.2.2: Orchard development*. The main activities will include de-rocking of the land if needed, different types of terracing and soil and water containing infrastructure (depending on slope and the natural contours of the landscape could be bench terraces with dry stone masonry retaining walls, counter bounds, V-shape or half-moon), fencing, cisterns for rain water harvesting, land preparation and tree planting. These activities are planned to implement for an area of about 10,000 dunum. An important activity will be capacity development and technical support to farmers in understanding climate risks and adaptation options, soil and water management practices (e.g. use of compost, mulching practices to build up rich top soils and increase soil water filtering and storage capacities, conservation agriculture and crop rotation, intercropping with fodder crops) and in integrated pest management (IPM) and safe use of pesticides and how to comply with PALGAP (see component 2 below) requirements in farming practices . Emphasis will be on identifying the most cost-effective interventions taking into account landscape characteristics and the need for creating resilient and sustainable socio-economic benefits.

262. *Activity 1.2.3. Land development for crop-livestock systems under conservation agriculture*. In the northern and southern part of the West Bank farmers cultivate cereal integrated with goat and sheep rearing and sometimes fodder crops.[104] The majority of these systems are rain-fed in areas with down to 250 mm annual rainfall and as such vulnerable to rainfall variability. They have low productivity, due to poor soil conservation practices affecting its nutrient levels and water storage capacity. Also limited access to feed is a constraint. Conservation Agriculture (CA) principles (minimum tillage, crop residue retention and soil cover, and crop rotation/intercropping) have been proven to be effective interventions for increasing soil water retention capacities, enhancing crop productivity and improving resource-use efficiency and soil health under low rainfall conditions including in some pilot

[104] Around 17% of the agricultural land in the West Bank was cultivated with wheat in 2012/13 according to MoA presented in "Palestinian Agricultural Production and Marketing between Reality and Challenges". Applied Research Institute-Jerusalem, 2015.

areas in the north of the West Bank (barley-livestock systems) and in the south (wheat-livestock systems). However, for small farms in dry areas, the lack of technical options, such as suitable farm implements, and the use of crop residues as animal feed, are major constraints for the adoption of CA, where crop residues should be left on the field for mulching. By integrating high nutritious feed crops in crop rotation plans, experimenting and finding the optimal balance between crop residues use for mulching and for feed, and by implementing complementary irrigation from rainwater harvesting or reusing treated wastewater where possible, the use of CA principles can be very efficient in increasing system resilience and productivity of crops as well as livestock.

263. The project will therefore train interested small crop-livestock farmers in how to implement and manage balanced CLCA systems and further improve soil fertility and physical quality by adding compost in an estimated 3500 dunums. The project will also support the modification of two sowing machineries to minimum-tillage conditions and support the transfer of the machines to cooperatives responsible for their management. Where possible the project will also co-finance works for rainwater harvesting and equipment for complementary irrigation systems. This activity may receive support from ICARDA facilitated by linking RELAP through south-south exchange to a recently approved IFAD inter-regional grant to ICARDA for conservation agriculture in crop livestock system in NEN (Tunisia and Algeria) and LAC (Nicaragua and Bolivia).

264. *Activity 1.2.4: Wadis land development.* Wadis (creeks and river courses) with seasonal water flows in erosion prone areas have high potentials for harvesting of sediments and runoff water for reclamation of new land for agricultural production. This is done by constructing small soil and water retention gabions (stone walls preferably in wire cages) eventually combined with water collection, storage and distribution systems. There are few pilot experiences in the West Bank that shows that already after two years enough soil has been build up behind the walls to allow for cultivation of tree crops and also barley and vegetables. The project will therefore work with interested groups of farmers willing to provide co-financing and support feasibility studies, the design and works for the establishment of wadis land reclamation systems in an estimated 1000 dunums. One challenge for the sustainability of these system that needs to be addressed is the effective maintenance and operation of the systems and eventual governance of water allocations if a water storage and distribution system is used in particular in years with low rainfall. The project will therefore support the formation and training of wadis users' associations, development and implementation of an operation and maintenance plan, eventual regulations for water allocations, and a fee or in-kind contribution system to support recurrent maintenance works and costs.

265. *Activity 1.2.5: Rangeland rehabilitation.* The eastern slopes of the West Bank are in area C and home to Bedouin communities constantly under pressure for losing access to their communal grazing land for their livestock (mainly sheep and goats) and increasing vulnerable to the impacts from climate change in terms of decreasing rainfalls and increasing temperatures. Out of the 2,000,000 dunums of grazing land, the Israeli now uses 1,200,000 dunum as military zone. Because of the eviction from and rupture of the Bedouin communities management of their land, the remaining 800,000 dunums are to varying degrees suffering from overgrazing, lack of management and consequently degradation. However, the Rangeland and Forestry Department (RFD) under the MoA in collaboration with NGOs has successful experiences in rangeland rehabilitation with Bedouin communities on communal land doubling the annual dry matter production from around 25 to 50 kg per dunum in the south and from around 40 to 80 kg per dunum in the north. This means also a doubling of the animal production which is an important incentive for the Bedouin communities to set aside land, engage in the lengthy rehabilitation process and organize subsequent rangelands' governance and management.

266. Building on these experiences and recognizing that livestock rearing on rangeland is the most resilient livelihood and land-use in these areas with annual rainfalls below 200 mm, the project will support Bedouin communities and other livestock keepers in rangeland rehabilitation on an estimated 3500 dunums of communal lands bringing also nutrition benefits in terms of increased access to animal proteins to these communities. This will include agreements with the communities for selection of suitable areas for fencing and rehabilitation. The recovery can take 3-5 years and consists in rehabilitation of top soils, assisted and natural reseeding of native grass species, the planting of shrub species in planting pits with high fodder qualities, and rehabilitation of wells or construction of rainwater harvesting facilities and cisterns for irrigating the plants the first year and later for animal water points. The communities will contribute with labour and the RFD will hire youth from the communities as rangers. The RFD will co-manage the rehabilitated areas with the communities in the beginning and

gradually build their capacities to establish and implement bylaws and fully take over the rotational management carefully monitoring and respecting the rangeland carrying capacity. Support will also be provided for the communities to establish operation and maintenance rules and management systems for animal water points.

267. As a means to address the severe water constrained conditions for agriculture, increase water use efficiency, and avoid the high fees charged by Israel for wastewater coming from the Palestinian wadis to Israel the Palestinian Water Authority (PWA), MoA and various municipalities supported by different donors has embarked on constructing treatment plants and irrigation infrastructure for reusing treated wastewater for tree and fodder crops. In areas where these plants will be operating the next years there is an opportunity that RELAP land development investments can be linked to these plants financing the irrigation infrastructure and last mile pipes instead of rainwater harvesting and cisterns. RELAP would also support the strengthening of Water Users Associations (WUA) including their fee collection and implementation of operation and maintenance plans for the irrigation systems. This will give famers opportunities to producing high yielding cash tree and fodder crops.

268. One plant already operating is the Nablus West treatment plant supported by KfW that has an Euro 10 million approved project to invest in land development with farmers and infrastructure for providing treated wastewater for 3,000 dunums surrounding the plant. This project will be implemented by the Municipality of Nablus in collaboration with the farmer's WUA and the MoA using 7,000 m^3 of the 11,000 m^3 of treated water the plant is currently providing per day. In 2018 more neighborhoods will be connected to the plant and it will reach its maximum capacity of producing 14,000 m^3 per day. PWA mentioned to the design mission that the additional 7,000 m^3 can be used for South Jinin, where the RELAP could eventually be investing in the connection pipeline, irrigation system and land development. In the future there could also be similar opportunities for RELAP investments related to treatment plants in Nablus East, Tubas and Hebron. While the opportunity for linking RELAP investments to the Nablus West plant could materialise before the midterm review of the project the implementation of the other plants should be monitored and RELAP opportunities revisited at midterm.

269. The Strategic Water Resources and Transmission Plan &, Water Sector policy and Strategy 2014 considers treated wastewater as one of the most important water sources for agriculture. The regulatory and monitoring framework for the use of treated wastewater is in place but needs to be further strengthened and adjusted as the different schemes are getting rolled out and lessons are learned. This include the treated wastewater standard parameters required for different crops, water tariff setting, and establishment of WUAs for them to operate and maintain the schemes under full cost recovery. RELAP involvement should contribute to the strengthening of the framework through a robust monitoring and learning system linked to the RELAP investments.

270. **Sub-component 1.3: Investment in Agricultural Roads.** This sub-component will focus on agricultural roads and ancillary structures that will underpin the land development activities under the sub-component 1.2, by assuring reliable access to and from the lands developed for agricultural production. The roads to be constructed will comprise mainly of opening and placement of stabilised gravel layer. Eligible investments will include also road ancillaries such as drainage facilities (side channels and culverts) and required retaining walls to ensure climate resilience of constructed agricultural roads. When possible rainwater harvesting for agricultural use from the roads may be built into drainage structures.

271. Based on review of similar works implemented by the MoA including under the recently completed IFAD funded PNRMP (de-rocking of the land, different types of terracing and soil containing infrastructure such as bench terraces with dry stone masonry retaining walls, counter bounds, V-shape or half-moon) the indicative cost for per dunum land development of USD 1,320 is considered, including water harvesting facilities and tree planting. An average per dunum cost of USD 875 is considered for developing of wadis with soil and water retention walls, water storage and distribution systems. The estimated cost per dunum for rangeland rehabilitation is USD 624, and crop–livestock conservation agriculture systems have an estimated dunum cost of around USD 190. Construction/improvement of agricultural roads of 6 m wide with 2 m shoulders (mainly opening and placement of stabilised gravel layer) may vary between USD 20,000 up to USD 30,000 per km depending on the status of the road and complexity of drainage structures and retaining walls. An average cost of USD 25,000 per km may be considered a conservative estimate, with an average length per road of about 2 km. The cost of the civil works listed above include Value Added Tax (VAT) of 16% as per the applicable legislation of the P.A. Details of unit cost estimation are provided in the annex 1. The cost of

communications, information campaigns, staff salaries and allowances and equipment and vehicle operational costs will be incorporated into entire project operating budget.

272. The above figures are *indicative only*, based on the estimated costs of relevant activities. There will be no pre-defined allocation for different types of interventions, nor will the number of villages to be financed in each governorate or priority area be pre-determined. The investment proposals ranking criteria will ensure that funds are allocated where the goal of improving livelihoods and economic growth in disadvantaged targeted villages/municipalities and reducing climate change vulnerability.

273. The anticipated outputs from the component implementation are expected to be: i) 18,000 dunum of land are developed for agricultural production; and ii) 50 roads with total lengths of about 100 km are constructed/improved to ensure access to the developed agricultural lands. It is estimated that investments would reach a total of about 4 500 rural households in 60-80 villages/municipalities from the 6 governorates targeted by components 1 and 2, providing opportunities for improved livelihoods and economic growth and reducing projected climate change vulnerability risks.

274. Beside the reducing the overall risk from the projected climate change vulnerability by increasing water storage capacity in the oils and providing facilities for rain water harvesting the development and improvement of agricultural land will benefit households in increasing their production opportunities, local access to nutritious food and hence livelihood conditions. The main benefit will be in terms of sustainable and efficient natural resources management (water and land) and increased secure and quality agriculture production.

275. In addition, the construction works associated with the component will have a direct impact in terms of temporary employment generation, as it is a common practice in the West Bank land development projects that all the labour-intensive works for land development are implemented through farmers, who are paid 70% for labour intensive works estimated to be 70% of total investment cost,. The remaining 30% of labour investment cost or 20% of total investment cost is considered as in-kind contribution by farmers in addition to required 15% cash contribution of machine works cost estimated to be about 30% of total investment cost. Thus, the estimated investment cost by farmers for land development activities is about 25% of total investment cost, including some 5% in cash and 20% in-kind.[105]

Table 19: Contribution to land investments, including access rural roads

Type of investment	RELAP contribution	Beneficiaries' contribution	Arrangements for O&M
Land development	• 75% cash contribution of total investment cost	• 5% cash contribution from farmers to total investment cost (or 15% of machine works estimated at about 30% of total investment cost) and 20% in kind contribution from farmers to total investment cost	• Private lands will be under the responsibility of farmers. • Public lands will be under the responsibility of municipalities and village councils.
Roads	• 90% cash contribution of total investment cost	• 10% cash contribution of total investment cost from Municipalities or Villages Councils' budget	• Municipality and village councils.

Component 2: Market linkages for the rural poor

276. The outcomes for this component will be (i) increased production and marketing of agricultural produce by 30% and (ii) the development of 6,650 micro-enterprises that will better harness market opportunities, amongst whom at least 900 managed by women and youth will have upgraded their productive capacities. The component will comprise of two sub components: 1) Rural clustering of agricultural products, and 2) Inclusive entrepreneurship development. The subcomponents will be implemented through an on-going permanent support that can be subdivided into four stages logically linked to one other. These four stages are firstly broadly described before to detail how activities will be run throughout.

[105] Seedlings, fencing, etc. are included in the estimation of USD 1,300 per dunum

The process in four stages

277. Within each site, the intervention process can be summarised into a succession of four stages that will be undertaken to allow all stakeholders to have fully understood their common and individual interests and respective roles.

278. *Stage I (6 to 9 months)*: Visioning and Planning- The expected result is to produce a **strategic vision charter** owned by local stakeholders. This first step is to be jointly conducted for component 1 and 2, as described above, and will consist in: i) engaging with communities, ii) presenting RELAP objectives and approaches, iii) selecting and organising participants (self-selection and direct targeting selection, see appendix 2), iv) mobilising economic actors (emergence of the MRPs), v) visioning of a shared land and market development process, vi) planning of economic infrastructure, vii) strengthening of commodity groups, and viii) sensitizing for youth involvement.

279. *Stage II (12 to 18 months)*. Building of infrastructures and sustainable plan of management - The expected results are the improvement of the economic **infrastructure context** (common and individual) and of **technical skills** (entrepreneurship, marketing). During that stage, social mobilisation continues (consolidation of MRPs and of specific groups, where needed; creation of infrastructure management bodies, linkages with other marketing projects, etc.), civil engineering starts (design and building of collection centre), inclusive entrepreneurship support (investments grants).

280. *Stage III (9 to 12 months)*. Ensuring economic viability - The expected results are **increased volumes of marketed agricultural products**. The third stage consists of making use of economic infrastructure towards the development of economically viable set-up through better access to commercial outlets (urban central wholesale markets, business to business contracts, linkages with agro-industry through private sector and cooperatives), access to finance (individual investment, matching grants), and branding products and the area (marketing linkages, promoting Palestine good agricultural practices).

281. *Stage IV (up to 6 months)*. Exit strategy - The expected results are the existence of **robust linkages between rural economic actors and development partners** that will accelerate inclusive economic growth. This last stage focuses on exit strategy activities and the way forward is defined, together with development partners (access to rural finance with financial institutions, linkages and involvement with district commodity associations and cooperatives, branding products of geographical origin with MoA, link with authorities...) to consolidate the sustainability of the intervention's outcomes.

Table 20: Phasing of intervention in the targeted sites

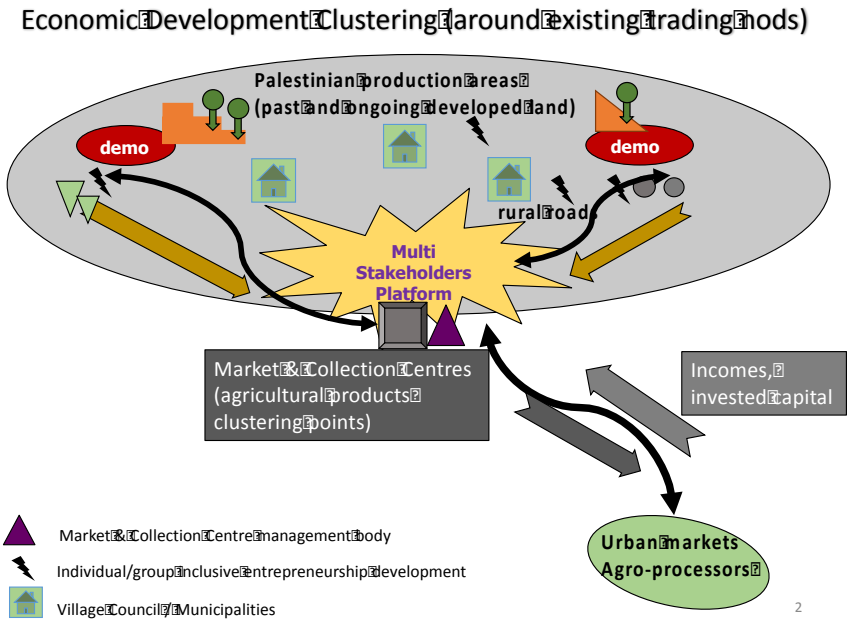
Phasing of activities per site	year 1	year 2	year 3	year 4	year 5	year 6	Total
phase I : social engineering, visioning, planning	**10**	**10**	**10**				**30**
phase II : social engineering, economic infrastructure building, individual investment		**10 (5)**	**10 (5)**	**10**			**30**
phase III: economic support, individual investment			**10 (5)**	**10 (5)**	**10**		**30**
phase IV: exit activities				**10 (5)**	**20 (5)**		**30**

282. Note that from the 30 MRPs formed, all 30 will focus on subcomponent 1 activities, only 10 will also add component 2 activities regarding infrastructure development (numbers in brackets).

283. **Subcomponent 2.1. Rural bulking of agricultural products.** Increasing local trade of agricultural produce relies on two complementary pillars: i) mobilisation of all market stakeholders including the local authorities to develop a shared vision on agricultural product clustering and facilitation of market linkages, ii) improvement of common economic infrastructure as well as adapted local regulations to determine the access to and use of the infrastructure. Local bulking will also be enhanced by the rehabilitation/building of agricultural roads linking developed lands to villages (subcomponent 1.3).

284. The subcomponent will comprise two interwoven activities: i) Establishment of local multi stakeholder rural platforms (MRPs), and ii) Rehabilitation/construction of village collection centres.

Figure 4: Clustering model



285. *Activity 2.1.1: Emergence of multi-stakeholders rural platforms*. The expected output of this activity is the establishment 30 multi stakeholder platforms (MRPs), aiming at enhancing market led farming activities through commonly adopted initiatives. The enterprises may include business in trading, processing, packaging and provision of input supply such as efficient irrigation equipment, seeds and seedlings, compost and quality soil.

Implementation Process

286. Rural people, mostly small-farmers but also women and youth who may be landless, have the ambition to engage, both individually and together, to better produce and trade towards the main urban centres, locally recognised and appreciated agricultural products - olive oil, small ruminants, milk, almond, grapes, fruit and vegetables, honey, aromatic herbs, to name the main ones- to generate regular incomes at various levels of the value chains.

287. It is foreseen to establish thirty multi stakeholder rural platforms (MRPs) based on the number of "clustered sites" of intervention for land development activities whose roles are described in the subcomponent 1.1 and 1.2. Out of them, ten will also be involved in piloting the rehabilitation/construction of ten market and collection centres. Implementation will be phased into two batches of five market & collection centres in the targeted governorates. Increasing local trade of agricultural produce relies on two complementary pillars: i) Mobilisation and involvement of all market stakeholders (producers and their organisations, traders), including the local authorities to develop a shared vision on agricultural product bulking and facilitation of market linkages; and ii) Improvement of common economic infrastructure as well as adapted local regulations to determine the access to and the use of the infrastructure.

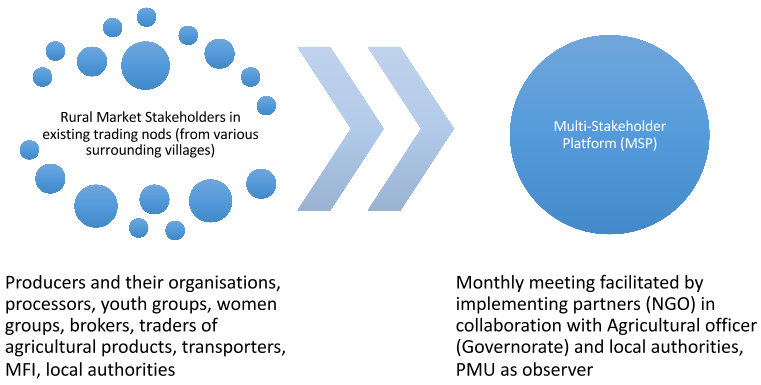
288. RELAP will identify existing trading nodes that already aggregate products from neighbouring villages to achieve economies of scale and attract traders. Consequently, local economic actors, that may be already organised in group or not, will improve horizontal linkages and constitute a multi-stakeholders rural platform once they are brought together[106]. The MRPs' aim will be to regularly exchange information concerning their practices and skills and eventually to express a common stand to influence decision making instances within the territory covering several villages. A MRP is a framework of communication between existing market stakeholders amongst whom existing farmers' organ-

[106] As opposed to relying on rather a purely vertical integration of a value chain within one sole actor (that often results in failure in terms of outlets as it has been observed during the mission).

isations (groups, associations, cooperatives) are part of. A MRP may also facilitate the emergence or the maturation of specific organisations to fulfil newly identified roles and services particularly with regards to the management of economic infrastructure.

289. MPs will be facilitated in RELAP sites of intervention (30) and will comprise all agricultural market stakeholders - producers (including current and past land developers, and agro pastoralists when present) and their organisations, local traders, brokers, transporters, women association, youth clubs, etc.

Figure 5: Process of the rural multi-stakeholder platform



290. The MRP will not be an institution per se but a flexible set-up among market stakeholders aiming at i) upgrading their capacities (to do better than what they currently do; ii) developing synergies with other market stakeholders and iii) upscaling their impact[107]. MRPs will also represent a space/sphere of influence and decisions for those actors that are usually excluded or not represented, particularly the women and the youth. MRPs are communication tools aiming at strengthening synergies between local organised actors; their sustainability will evolve with stakeholders' needs. Their role lies in their ability to influence decision makers, either at production, marketing or institutional level. More information on MRPs' different roles is presented in Table 21 below.

291. MRPs will be the main interface with the project/MoA (on the various RELAP sites of intervention and more particularly with those selected for rehabilitation of economic) and eventually other development business partners (e.g. financial institutions, other projects and programmes and particularly the FAO/MAP). Their main role will be to facilitate relationships and linkages amongst its members to ensure a proper use and the sustainability of the investments. If demanded, the MRPs will support their constitutive groups to become formally registered (cooperatives, unions) and proactively involved in the various value chains.

292. MRPs will also be a point of entry to promote PALGAP (Palestine good agricultural practices) with both producers and urban clientele with the support of the Palestinian standards Institute (PSI)[108]. The MRPs will directly interact with municipality and village councils for logistical improvement of market and collection centres.

293. In term of governance, representatives from various involved stakeholders (producers' groups, traders and transporters, women groups, youth) will have to represented. MRPs are led by a coordinating committee elected by the various representatives ensuring that (i) all main stakeholders are represented, (ii) at least 40% are women and (iii) at least 40% are youth. MRP's main role will be to convene regular MRP meetings and follow-up recommendations with the concerned parties. Since the MRP's recommendations are not binding, the steering committee powers reside in its influencing capacities. It will meet on a regular basis to review progress of the various activities. Each MRP will develop its own charter and bylaws to function.

[107] Adapted from Cees Leeuwis, Reconceptualising Participation for Sustainable Rural Development: Towards a Negotiation Approach, Development and Change Vol. 31 (2000), 931±959. # Institute of Social Studies 2000. Published by Blackwell Publishers, 108 Cowley Road, Oxford OX4 1JF, UK

[108] Through a MoU with Palestinian Standards Institute (PSI)

294. The key functions of the MRPs will be: i) to identify and address the main constraints affecting marketing of agricultural products (from the area to the main urban markets); ii) to collect and share market intelligence (price, volume, opportunities) and to act as interface with other existing broader platforms/programmes at governorate or national levels supported by government and other donors(FAO-Canada project, multi-donor agricultural project, AMENCA III, etc.), and iii) to organise/participate in events promoting trading of local agricultural products (e.g. bulked and processed) as well as promoting Palestine good agricultural practices (PALGAP) on markets.

295. In collaboration with the project, the MRPs will produce a strategic vision of marketing for agricultural markets for the area. The MRPs will directly interact with the municipality and village councils for logistical improvement of village collection centres.

296. The MRPs may form committees to monitor specific activities when necessary (e.g. per product, youth mentorship, local audit of economic infrastructure management and business plans technical review). The MRPs also constitute, de facto, a peer accountability forum where the various project beneficiaries will openly share progress and achievement to encourage synergies.

297. In addition to being an instrument to strengthen beneficiaries' business oriented activities the MRPs will also serve as an effective entry point for social building and awareness creation. They will be used to bring about information and awareness on thematic areas such as gender and nutrition.

Table 21: MRPs' various roles as listed according to stage of intervention

Stage of intervention	Expected outputs	Process
Stage I : social mobilisation, visioning, planning	Strategic vision and its support documents (maps, matrix) Secured site to build/rehabilitate market and collect centre (with local authorities)	- Meetings with local authorities, public meetings, formation of the multi-stakeholder rural platform, - Mapping of the area identifying production catchment areas and agricultural products flows, - securing site location for market and collection centre, - Organisation of economic actors,
Stage II : social mobilisation, economic infrastructure building, individual investments, technical skills	Regular recommendations to drive the development process (civil works and social engineering)	- Regular meetings with tailored technical support, - Selection of a MarCol centre building committee, - Facilitation of the emergence of commodity platforms - Sensitisation to potential investors to apply to existing opportunities (RELAP MEF, FAO/MAP..) - Local communication activities
Stage III: economic support, individual investment, technical skills	Market led and well managed economic infrastructure	- Monitoring collection centre management; - Facilitating business interactions between traders and producers; - Monitoring dissemination of quality standards to reach markets opportunities (PALGAP)
Stage IV: exit activities	Local actors interact with no project linked partner anymore	

298. *Activity 2.1.2: Supporting value chains and business oriented farming enterprises.* The expected output for this activity is the following one: 1,675 producers and other rural micro-enterprises have developed market led business plans. The enterprises may include business in trading, processing, packaging and provision of input supply such as efficient irrigation equipment, seeds and seedlings, compost and quality soil.

Implementation Process during stage 1 and 2

- Since the MRPs will develop a vision to improve marketing set-up in the area, it is also the proper forum to discuss what opportunities may emerge at individual level to take advantage of the new context that will catalyse both group and individuals' initiatives (greenhouse, hydroponics, cold storage, processing, storage, trade...).
- *Groups*: training / supporting rural micro-enterprises in groups to be involved in agricultural products value chains. Such groups aim at adding value to their products to increase the price paid to producers. The economic viability will have to be ensured through the implementation

of a hand-on business development plan taking into account all costs to be covered to provide the needed services This is particularly crucial to assess if the service is viable and how it actually impact on the price paid to producers.

- *Individuals*: training individuals to develop business plans that take opportunity of the conducive context created by RELAP. Specific discussions will be facilitated to go beyond short term activities and propose mid-term investment in line with development of value chains in the area. The training will be based on actual cases for each investor. At the end of the training process, the investor will have produced his/her business development plan and financing plan in a presentable form to be submitted to a financial institution of her/his choice, if bank finance is needed.
- Training in business plans should be developed by the implementing partner that can outsource trainers/practitioners having experience of this matter. A training module manual will be developed and approved by PMU that will have to ensure that quality is ensured. Collaboration with other programmes/donors will be crucial and facilitated through the PMU permanent liaison with them.
- Training Manual should describe how the training will be organised on the basis of two two-day modules separated by a practical period when each trainee develops a business plan related to his/her own activities that can be reviewed during the second module. 60 beneficiaries per MRP are targeted during the years 2,3,4 and 5 of the Project. Planning will take into consideration the planned call for proposals by the FAO/MAP (mid-2019 for the second call) to encourage RELAP micro-entrepreneurs to apply.

299. *Activity 2.1.3: Rehabilitation/construction of marketing and collecting centres.* It is foreseen to pilot the rehabilitation/construction of 10 market and collection centres.

300. In each of the governorates of intervention, the MoA / RELAP will identify one or two sites already renown as trading node between several villages benefiting from rehabilitation and reclamation investments (component 1). In agreement with local authorities (village or municipalities), these sites will be rehabilitated/upgraded as market and collection centres to allow all local market stakeholders to better trade and match supply with a demand of bulked agricultural products.

301. In each area, sites to be selected will have to be accessible from the main road to easily access urban centres (connected with outlets as wholesale markets, niche and retail markets, agro-processing industry), and to continue to serve as a trading node bulking agricultural products from the smallholder farmers. A market and collection centre will consist in a dedicated space with enough parking for trade vehicles and fenced transaction areas, small scale buffer storage facilities ventilated and/ or cold storage to allow few days storage, packaging/weighing equipment, a small administrative office and sanitary facilities. Proper drainage for collection and storage facilities will be constructed to prevent flooding from heavy rainfalls.

302. Municipality / village councils, in close collaboration with the MRPs, will provide a suitable area on their own costs and will be the owners of the infrastructure considered as a public goods.

303. They will transfer the collection centres' management to a legally registered managerial body that might be an existing associations/groups belonging to MRPs and that will recover its running and maintenance costs from the collection of affordable user's fees[109] (tentatively 2%) as it is currently done in the various wholesale central markets (4% in average). Since FOs are part and parcel of MRPs as all local market stakeholders, they participate to design the more adapted management set-up and, may either participate in the creation of the new company (as shareholders) or directly manage the centre if legally registered and MRP / local authorities are satisfied and support it.

304. A draft PIM in appendix 11 will provide some details – but the full PIM will be prepared during the first year of project implementation).

Implementation Process

305. *During stage 1:* Location for the collection centre will be identified by the MRP with the aim to aggregate the main agricultural produce in the area and attract traders (private or cooperative) to se-

[109] Market fees varies in the various urban wholesale central markets from 2 to 7% (4% in average)

cure flows of marketed products towards urban outlets. Market and Collection centres are considered as common goods and financed at 100% by RELAP investment grants. The focus will be on infrastructure giving better access to urban markets to small-scale family farmers.

306. Discussions within the MRPs will be facilitated by the programme implementing partners (NGOs) under the supervision of the PMU during the first stage of the intervention in the area. Selection criteria for investment would include: stakeholder commitment (including co-financing or construction of complementary infrastructure such as storage or post-harvest and handling in the planned collection centre area); access to main roads; and up-scaling opportunities) (see following table).

307. For each site, the existing context is discussed along the tentative list of criteria to evaluate how conducive it is to ensure the economic success of the dynamic market and collection centre. A grade from to 1 to 3, representing a low, medium or highly conducive context, is given for each location. The prioritisation exercise is to provide an open local space for discussions. Each criterion will generate a discussion to also assess how stakeholders will be concerned and committed to manage and insure a financially viable use of the collection centre once in operation.

Table 22: Tentative prioritisation matrix to build marketing & collecting centre

Location of the trading nodes **Main characteristics to assess**	**1**	**2**	**...**	**n**
Sufficient agricultural product available in the catchment area				
No other existing similar infrastructure around				
Linkages with urban trade outlets (wholesale markets, agro-industry...)				
Existing access to main roads				
Possibilities of expansion (in term of space)				
Linkages with existing cooperatives / producers' associations				
Proactive local market stakeholders (traders, processors, producers, cooperatives, associations, women groups, youth)				
Collaboration with and support from village / municipality council				
Access to financial services (existing MFIs)				
Access to other public services (water, electricity …)				
Total				

308. Market and Collection centres for agricultural products will be used as semi-wholesale markets that bulk local agricultural products from small-scale producers. They aim at attracting traders on a regular basis. Such centres present the same characteristics as a semi-wholesale market: easy access for both traders (from main road) and for small-scale producers (from agricultural roads), parking for trade vehicles, fenced transaction areas, small scale buffer storage facilities, packaging/weighing equipment, small administrative office and lavatories.

309. *During stage 2*: Design and construction of the collection centre. The MRPs will appoint their own construction advisory committee (CAC) to provide inputs to the design and construction process which will be implemented by contractors selected under the Project procurement guidelines under the technical supervision of MoA engineers (see component 1.3). CAC will nominate two delegates who will participate to site meetings[110] as observers, in this capacity, they will be in a position i) to inform MRP about progress made and ii) to contribute to the quality of the infrastructure with eventual unforeseen improvements. CAC has an advisory role to the municipal / village council that is final decision making body.

310. The location, type and capacity of the required collection centre in each site will be assessed through comprehensive discussions within the MRPs to confirm the optimal location in terms of trading and appropriateness of required structures, to ensure the full utilization of constructed facilities. MoA engineers will provide necessary engineering design, procurement and construction supervision support to the PMU which will be responsible for contract management (see component 1.3).

[110] As per contract, site meeting gathers the enterprise (contractor), the PMU (client), the Governorate engineer (consultant); during site meeting, minutes are established and signed by the three parties and work certificates are established and assessed by consultant as a basis for contractor to produce invoices accordingly.

Table 23: Estimated number & sequencing of collection centre to be built

Stage of intervention	number of sites						
	Y1	Y2	Y3	Y4	Y5	Y6	Total
Stage I : mobilising, visioning, planning	5	5					**10**
Stage II : economical infrastructure building, individual investment, technical skills		5	5				**10**
Stage III: economic support, operation and management cost recovery, individual investment, technical skills			5	5			**10**
Stage IV: exit activities				5	5		**10**
Total	**5**	**10**	**10**	**10**	**5**		

311. It has been estimated that each market and collection centre can deal with an annual volume of transactions reaching 4,200 tons of fruit and vegetables and 720 tons of olives and almonds. It is estimated that each market can trade up to 7 five-tons vehicle par market day (3 per week), which is equivalent to 40 to 50 tons of agricultural products per market. Estimates of the surfaces are based on that assumption. These figures are based on discussions with officials from the MA and discussions with stakeholders. These estimates will form the basis for discussions in each MRP and with concerned local authorities to adapt to local context, needs and specificities.

Figure 6: Tentative scheme map of a market and collection centre

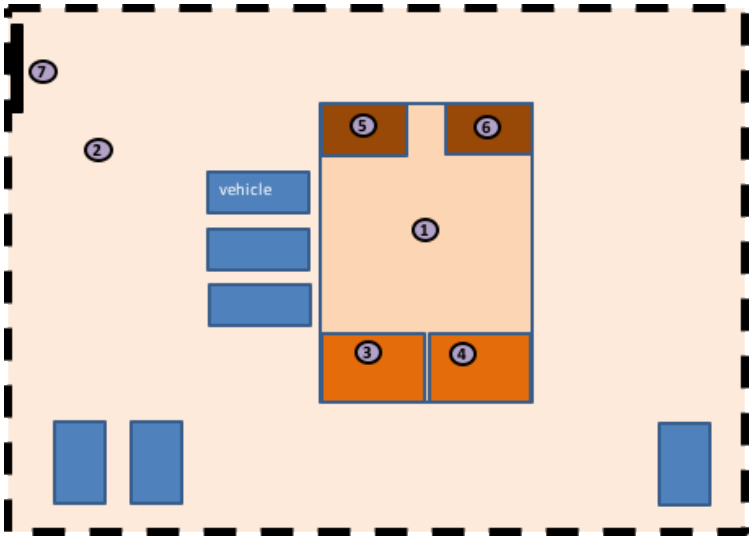


Table 24: Infrastructure cost of market and collection centre

#	Elements	Unit	Quantity	Unit price (NIS)	Estimated amount (NIS)	Unit Price (USD)	Estimated amount (USD)	Description
1*	Transaction and packaging area (shaded)	sq. metre	162	800	129 600	213	34 560	terraced (concrete), shaded open area
2	Parking and access	sq. metre	1 152	400	460 800	107	122 880	terraced (concrete or tarred)
3	Ventilated storage	sq. metre	40	1000	40 000	267	10 667	4 walls, ventilated, 10 tons storage
4	Cold storage	cb. metre	100	2500	250 000	667	66 667	equipped with cold ventilation (2°C)
5	Office	sq. metre	32	1200	38 400	320	10 240	4 walls, ceiling
6	Toilet	sq. metre	32	1300	41 600	347	11 093	2 units (male, female)
7	Grilled fence	metre	150	300	45 000	80	12 000	fenced with one 6 metre entrance gate
	Total				1 005 400		268 107	

* Numbers 1 to 7 in this table refer to numbers indicated in figure 6 above

Table 25: Tentative list of equipment per market & collection centre

Elements	Unit	Quantity	Unit price in NIS	Estimated amount in NIS	Unit Price in USD	Estimated amount in USD	Description
Weighing bridge	unit	1	60 000	60 000	16 000	16 000	movable weighing bridge capacity 30 Tons
Scales	unit	1	12 500	12 500	3 333	3 333	capacity 300 kgs
Vegetable washing basins	unit	1	12 500	12 500	3 333	3 333	
Sorting/ packing conveyor	unit	1	20 000	20 000	5 333	5 333	
Cooling water tank	unit	1	20 000	20 000	5 333	5 333	
Computer	unit	2	5 000	10 000	1 333	2 667	
Hygrometer, thermometer…	unit	4	500	2 000	133	533	
Printer	unit	1	4 000	4 000	1 067	1 067	
Steel sorting tables	unit	6	1 000	6 000	267	1 600	
Carriers	unit	3	1 000	3 000	267	800	
Total				150 000		40 000	

312. The list of equipment presented above will be adapted to each situation. However, it is important to consider as compulsory equipment the scales and weighing bridges that will provide a sound basis to measure transactions in a fair way.

313. *Activity 2.1.4: Training /supporting market and collection centre management bodies*. The output for this activity will be that the 10 public owned market and collection centre are managed by autonomous bodies (companies, associations or cooperatives) entrusted by the village/municipality council through a local public private partnership agreement to recover all costs through market fees.

Implementation Process

314. *During stage 2*: The MRPs will discuss how an autonomous, legally registered, market and collection centre management set-up is to ensure the sustainable and financially viable use of the centre, while ensuring inclusive access to all stakeholders. In most cases, it will rely on revived or newly created people' organisations (cooperatives, associations, women groups, companies). Their mandate will specifically stipulate that the management will ensure a permanent access to all users regardless of their membership and to ensure that private traders can use the infrastructure at an agreed user fee (around 2% of the value of the transactions).

315. All necessary support services will be listed (security, weighing point, tax clearance, clean and shaded spaces, price and volume information, easy access and parking for vehicle, availability of taskforce for specific tasks – unloading, packing, loading…). As a common economic infrastructure, market and collection centre falls under the local authorities' mandate. A specific agreement between local authorities and the managing body will be signed to allow an effective and efficient functioning of the centre while insuring the collection of market fees that include management and operational costs and local taxes to be reversed to the local authorities (local public private partnership). The managing body will establish annual action plan to be presented to the MRP and to the village / municipal council. It will specifically provide estimates of incomes (from the collection of market fees from users), operational and management costs as well as petty maintenance costs (see following tables).

316. On the basis of the estimates described in the previous paragraphs, the following income and expenditures budget has been established. It shows that with an annual volume of transaction increasing by 30% thanks to the quality of the infrastructure, and with a market fee equivalent to 2%, together with another specific fee when using temporary storage facilities, each market and collection centre can cover its operational and management with a 40% gross benefit while managing to also support depreciation costs and remaining with a 20% net benefit. This model is tentatively built to emphasize the importance to discuss about market fees since the very beginning on concrete basis. However, the aim is to provide the best quality service at the best price, therefore, during operation, it might be decided to lower market fees.

Table 26: Tentative cost & expenditures for market and collection centre

Market and Collection Centre Management Organisation						
Income and expenditures	**month**	**quantity**	**unit price**	**amount**	**%**	**categories**
Expenditures						
Market director	12	1	3 000	36 000	43%	Salaries
Accoutant	12	1	2 500	30 000		
Cleaning	24	1	1 500	36 000		
Security	12	3	1 500	54 000		
Contribution to management board costs	12	7	100	8 400	2%	Allowances
Water	12	1	200	2 400	9%	Running costs
Electricity	12	1	1 000	12 000		
Communication	12	1	100	1 200		
Stationaries	12	1	100	1 200		
Petty maintenace	1	1	1 000	1 000		
Transportation cost (market promotion)	12	1	300	3 600		
Audit	1	1	10 000	10 000		
Open days	2	100	100	20 000	5%	Publicity
Total expenditures				**215 800**	59%	
Incomes						
Market management fee				183 456		Market & storage fees paid by traders
storage fees (>1 week)				183 456		
Total incomes				**366 912**	**100%**	
Net margin	investment	years	depreciation	151 112	41%	
Depreciation building	1 000 000	25	40 000	40 000		
Depreciation equipment	150 000	5	30 000	30 000		
Benefit				81 112	22%	

317. *During stage 3:* Apart from its legal obligation (annual audited accounts, annual report of activity approved by members), the managing body will provide regular information to the MRPs on the generated activities and emerging challenges. The MRPs, as consultative bodies, provide recommendations that have to be confirmed by the highest authority of the management body to be enforced. Training will comprise: legal aspects, linkages with village/municipalities councils and taxes, establishment of a user fee to ensure an economically viable management, strategic planning, business and investment plan, book-keeping, infrastructure maintenance, price and volume information, settlement of disputes. This training, to be done along ToR developed by PMU, will be facilitated by the implementing partner (NGO) that may mobilise external experts, when necessary. As for all activities, the PMU, through its agribusiness unit, will supervise and assess the quality of service delivery.

318. MRPs will also permanently assess the impact of the market and collection centre on the local economy and how the various actors benefit from it. In the current tentative RELAP model below, the impact is well distributed on the various actors more than half of the price remains in the hand of the producers.

Table 27: Impact of market & collection centre rehabilitation

RELAP	Palestine							
Impact of market rehabilitation on main stakeholders			MARKET AND COLLECTION CENTRE					
in NIS	Quantity			Value		variation		comments
Price variation hypothesis	**before**	**unit**	**after**	**before**	**after**	**variation**	**%**	
Vegetable mean purchase price in UWC market				3 500	3 675	175	5,0%	increase purchasing price due to PALGAP
Vegetable mean purchase price in rural MCC				2 000	2 100	100	5,0%	increase purchasing price due to PALGAP
Olive mean purchase price in UWC market				15 000	15 750	750	5,0%	increase purchasing price due to PALGAP
Olive mean purchase price in rural MCC				7 000	7 350	350	5,0%	increase purchasing price due to PALGAP
Producers	**before**	**unit**	**after**	**before**	**after**	**variation**	**%**	
Vegetables products (local transactions)(see MCC u	4 200	Tons	5 460	8 400 000	11 466 000	1 260	130%	yield increase, more surface
Olive products (local transactions) (see MCC users)	720	Tons	936	5 040 000	6 879 600	216	130%	yield increase, more surface
Total amount paid to producers	**4 920**		**6 396**	**13 440 000**	**18 345 600**			
Market dockers	**before**	**unit**	**after**	**before**	**after**	**variation**	**%**	
weighing/conditionnning/loading	5	workers	15	**750**	**2 250**	1 500	200%	increase of volume
cost			0	**100**	**150**	50		increase of salaries
number of market per year	144	markets / year	144			0	0%	stability of market days
volume per market	34	Tons per mark	44			10	30%	increase of volume
number of vehicle	7	vehicle (5 T)	9			2	30%	increase of vehicles
number of dockers/vehicle	0,73	per vehicle	1,69			-0,96	-131%	better services (weighing, packing…)
Total amount paid to dockers				**108 000**	**324 000**	216 000	200%	increase of labour
Revenues for local government	**before**	**unit**	**after**	**before**	**after**	**variation**	**%**	
Transactions	4 920	mT	6 396		18 345 600	18 345 600		see total amount paid to producers
market fees from sellers			0,5%		91 728	91 728		new`income for LA to support rural road maintenance
total revenues LG					**91 728**	**91 728**		
total levies per market					637	637		
Market management organisation	**before**	**unit**	**after**	**before**	**after**	**variation**	**%**	
market management fee	0		1,0%		183 456	183 456		new income to ensure sustainability of services and infra
storage fees (>1 week)	20%	/tonne/extra we	5%	**0**	183 456	183 456		new income to ensure sustainability of services and infra
total market fees					**366 912**	**366 912**		
Transporters	**before**	**unit**	**after**	**before**	**after**	**variation**	**%**	
number of vehicle (5 tons)	7	5000	9			2	30%	increase of vehicles
number of market per year	144	markets / year	144			0	0%	stability of market days
cost per vehicle	1,00	NIS /kg	5000	**4 920 000**	6 396 000	1 476 000		
total transporters					**6 396 000**	**6 396 000**		
Traders (purchasers)	**before**	**unit**	**after**	**before**	**after**	**variation**	**%**	
Transactions	4 920	MT	6 396					
loss (physical)	10%		5%					better handling, packaging
Vegetables products (urban transactions)	3 780	mT	5 187	13 230 000	19 062 225	1 407	130%	
Olive products (urban transactions)	756	mT	889	11 340 000	14 004 900	133	130%	
Total transactions	**4 536**		**6 076**	24 570 000	33 067 125	8 497 125		
purchased value				- 13 440 000	- 18 345 600	- 4 905 600		see producers
dockers costs					- 324 000	- 324 000		see dockers
market fee (local authority)				0	- 91 728	- 91 728		see local authority
market management organisation				0	- 366 912	- 366 912		see market management organisation
transport costs				- 4 920 000	- 6 396 000			see transporters
total traders : gross margin				**6 210 000**	**7 542 885**	**1 332 885**	**21%**	

Table 28: Repartition of added value amongst main economic actors

Added value by stakeholders	Before (1)		After (2)		Impact (2)/(1)	
	in NIS	%	in NIS	%	in NIS	%
Producers	13 440 000	54,5%	18 345 600	55,5%	4 905 600	137%
Dockers	108 000	0,4%	324 000	1,0%	216 000	300%
Local authorities	0	0,0%	91 728	0,3%	91 728	
Market management	0	0,0%	366 912	1,1%	366 912	
Transporters	4 920 000	19,9%	6 396 000	19,3%	1 476 000	130%
Traders (including transport cost)	6 210 000	25,2%	7 542 885	22,8%	1 332 885	121%
Total	**24 678 000**	**100,0%**	**33 067 125**	**100%**	**8 389 125**	**134%**

319. *Activity 2.1.5: Organisation of promotional events*. In order to facilitate exchanges and sharing of information, the MRPs will be involved in the organisation of fair/festival, farmers' exchanges and study tours. Promotional events will be planned at a governorate level to encourage synergies between the MRPs and marketing and collecting centres. During these occasions, specific communication campaigns will be organised to popularise PALGAP with producers and with the customers.

320. It may also include study tours in neighbouring governorates, specific market identification trips in urban areas particularly the various central wholesale markets. Study tours will be organized considering also the opportunities for women and youth groups to travel and learn.

Summary of the detailed activities (quantities)

321. IPs will be contracted to support RELAP in each targeted governorate.

322. IPs will provide a dedicated agribusiness development unit staffed with 4 experts posted in the concerned governorates (1 agro-economist and supervisor, 3 site officers with complementary competencies in extension, entrepreneurship support, agri-business and marketing, communication).

323. Local expenses to support 5 MRPs per governorate will be included in the IPs contract on the basis of supporting a 30 people regular meetings (participants transport costs, refreshments, renting hall, stationaries, contingencies) during 3 years (stage 1, 2 and 3).

324. Training of rural micro-entrepreneurs will be included in the IPs contract on the basis of 60 persons per MRP for a 4-day training (that may be done in several sections) (participants transport costs, refreshments, renting hall, stationaries, contingencies) during 2 years (stage 2 and 3). Trainers cost are included in IPs salaries. If IP mobilise external trainer, it should be approved by PMU with no external cost for RELAP.

325. Training of collection centre management bodies will be included in the IPs contract on the basis of 10 persons per collection centre (one per governorate) for a monthly four-day training during 2 years (stage 2 and 3). Trainees may also include village council / municipality. If IP mobilise external trainer, it should be approved by PMU with no external cost for RELAP.

326. Organisation of promotional events, farmers' exchanges, study tours will be included in the IPs contract on the basis of an annual lump sum per governorate for 4 years (stage 1, 2, 3 and4). Tentative events are to be detailed in the proposal.

327. An overall 15% cost applicable to the above listed activities will be eligible to cover all over investment and management cost to be borne by the implementing partner.

328. In order to ensure that IPs earmarked to facilitate social engineering activities described in the above parts, PMU will organise a specific training workshop to share the various concepts and review the PIM. A technical assistance has been budgeted for to support that process in year 1.

329. Building of collection centre will be done with a procedure aligned on the one described in 1.4 (roads). A lump sum has been allocated to build one collection centre per governorate once PMU is satisfied with the location. In order to fulfil all necessary studies and design, an architectural firm will be recruited on a competitive basis. An amount equivalent to 5% of the infrastructure cost has been budgeted to that effect. ToRs will be adapted from those described in component 1.4 (regarding roads). During the works contract implementation, another consulting firm will be recruited on a competitive basis to supervise and certifies works progress according to the bill of quantities agreed upon in the contractors' contract. The same 5% amount has been budgeted to this effect.

330. Since the rehabilitation/construction of market and collecting centre is a new investment, a specific short term technical assistance in architectural design of rural wholesale markets has been provided for during the two first years to support the selected firms to design the expected centres in line with expected standards.

331. **Subcomponent 2.2. Inclusive entrepreneurship development support.** It is expected that 900 individual /group rural micro-entrepreneurs develop their productive/business capacities to improve their incomes from the relevant value chains through investment grants.

332. The subcomponent will have a clear focus on rural women, unemployed youth, their organizations, and the poor landless at the village level, who, belonging to the same villages, will also be encouraged to participate in the MRPs. The support will address the key constraints of these groups, including: i) the lack of capital and the lack of collateral (including land) required by financial institutions to obtain credit; ii) the high real interest rates available from MFIs; iii) the mobility constraints and the unreliability of job opportunities in Israel, especially for rural youth; and iv) the lack of business advice/technical assistance

333. The RELAP inclusive entrepreneurship development support will be provided through a micro-enterprise facility (MEF) delivering entrepreneurship grants, together with tailored technical assistance provided by business development services (BDS) providers registered under Chamber of Commerce, to ensure that the target groups or individuals develop or expand climate-smart and market oriented micro and small businesses generating incomes. The MRPs will have a catalytic effect on local and agri-based enterprises in the villages and municipalities. Both new and current small-scale businesses will be eligible to the RELAP support with the ultimate objective of improving net incomes. Proposals with a demonstrated job creation effect as well as proposals contributing to increased production of agricultural products will be given priority. Investment grants could be awarded in instalments, depending on size and business plan (to be decided on a case-by-case basis).

Implementation Process

334. *At Stage 2*: Individual investments will be determined by the rural micro-entrepreneurs themselves with regards to opportunities that will emerge within the area covering several neighbouring villages. These individual investments shall be determined and assessed on the basis of economic viability duly documented in an action plan comprising of the business development and financial plans (established during the training support see subcomponent 2.1).

335. *At stages 2-3*: The investor (producer or small entrepreneur) is to benefit from an investment grant (85%) to complete its financing plan. It is estimated that around 75 individuals per governorate can benefit from an investment grant respecting target priorities. However, this number is indicative and the grants are to be firstly allocated according the quality of the proposals.

336. A *non-exhaustive list* of potential individual investment comprises: greenhouses, hydroponics, drip irrigation systems, processing equipment, dry or cold storage facilities and packaging equipment. Quantities and type of productive infrastructure are indicative and will be driven by a demand that will change with the evolution of the context impacting on rural micro-entrepreneurs' choice.

337. This subcomponent only accounts for the most vulnerable rural micro-entrepreneurs who are targeted to benefit from the RELAP micro-entrepreneurship facility (MEF). Other individuals and group rural micro-entrepreneurs will benefit from RELAP training (see subcomponent 2.1) to eventually access financing by the IFs and other projects / programmes.

Detailed activities (quantities)

338. The MEF is directly managed by the PMU that will create a database to monitor the attributed grants (on average 75 per governorate). A USD 5 000 ceiling has been fixed per individual beneficiary. See more information in appendices 2 and 11.

339. IPs and PMU will facilitate linkages with Chambers of Commerce to identify willing BDS (registered at the Chamber of Commerce) who will be selected by the applicant on the basis of a written offer. The PMU (Agribusiness unit) will reimburse BDS once the business development plan is submitted to the applicant and based on an invoice that will not exceed 10% of the total proposal amount.

Table 29: Contribution to economic infrastructure investments

Type of investment	RELAP contribution	Beneficiaries' contribution	Arrangements for O&M
Marketing and Collecting Centres	100% of investment cost	Contribution from local authorities (land)	PPP between local authorities and autonomous private/coop on the basis of the collection of market fees (4% of the transactions' value)
Micro-Entrepreneurship Facility	85 % of the proposal (in cash)	15% of the proposal (in kind or cash)	Based on a viable business plan developed with BDS support

Component 3: Improved public services for climate resilience agriculture

340. To achieve the transformation to resilience of farmers and their farming systems to climate change impacts, this component will strengthen their capacities in absorbing climate risk through its anticipation, adoption of new practices through access to knowledge, and transformation of livelihood strategies supported by facilitating public services. This component will support the upscaling in all governorates of the West Bank of climate resilient land development practices implemented in subcomponent 1.2 and proven to maximize adaptation benefits as evidenced by the monitoring and systematic documentation and learning system in subcomponent 1.1. The component will strengthen public information and extension services to facilitate the upscaling and support Palestinian farmers in taking timely and effective action to protect their crops and animals from increasing rainwater variability and water scarcity, extreme weather and climatic conditions, and changing pressures from pests and diseases.

341. To overcome current critical challenges in Palestine for a transformative change in dealing with climate change impacts on agriculture, this project component aims to i) promote public services that enable farmers to take timely and risk-informed actions, ii) consolidate capacities of the MoA, EQA, Meteorology Department (PMD) and other related actors for provision of quality public service, continuous documentation and learning and programming on climate change adaptation and mitigation in agriculture. In support of the project subcomponent 1.2, this component will develop capacities required in MoA to guide climate adaptation in farm-level interventions for land development. The component 3 will upscale good adaptation practices and approaches through the incorporation in national programming and decision-making using the evidence created in subcomponent 1.1 of the resilience benefits of different land development approaches and practices. The project will build on and reinforce existing initiatives and capacities (such as the MoA component of the Climate Change Capacity Development Program Phase I) and addresses critical gaps for upscaling (such as institutional bottlenecks and scattered expertise to implement national climate adaptation goals).

342. The outcome of this component will be: i) number of farmers using advanced agro-climate information and extension services for farming decision making; ii) number of national plans and other initiatives in agriculture mainstreaming climate resilient approaches and goals.

343. **Subcomponent 3.1. Improving agro-climate information and extension services to farmers.** The objective of this subcomponent is to enable the generation of practical and timely agro-meteorological information to support farmers in taking decisions on agricultural practices and measures to reduce and mitigate negative impacts of weather extremes and increasing water stress on crops and livestock. Activities under this sub-component will include:

344. *Activity 3.1.1: Improving agrometeorological observations network covering the main agro-ecological zones in the West Bank.* In the first project year capacity assessments and feasibility studies will be updated to specify the design of the upgrading of the current meteorological station network to an agro-meteorological observations network and instruments needed (extra sensors for measuring atmospheric and soil environment parameters (e.g. soil moisture and temperature) according to specifications) will be procured. The current meteorological network consists in 14 stations and 114 very simply ad less reliable rain gates in the West Bank and during the design it was estimated that 12 of the 14 stations should be upgraded to agro-meteorological stations. The Palestine Meteorological Department (PMD) has with technical support from GIZ recently established a database and website that automatically shows updated weather data 24 hours a day. Likewise they have in collaboration with the PWA established an interface between the PMD server and database and a PWA server and database, that allows PWA instant access to weather data and analysed water parameters important for the delivery of PWA's domestic water services and strategic planning and modelling. This activity would support a similar interface between PMD and MoA including detailed design and establishment of a Climate Database Management System for archiving, storing, processing and analysing agro-climatic data. This will allow MoA to provide actionable information to farmers and strengthen their strategic planning and modelling for agricultural water and extension services to farmers on climate impacts on different farming systems and adaptation options. On- the-job coaching on the functioning of the Climate Database Management System, agro-met instruments, day-to-day maintenance and calibration checks will also be provided

345. *Activity 3.1.2. Development of Agro-climate information bulletins and recommendations for early actions.* An assessment of existing information and communication technology in PMD and MoA will be conducted as well as an end-user needs survey to specify the use of possible Information and Communications Technology (ICT) and communication strategy for agro-climate information bulletins. Communication equipment (e.g. generator, computers, communication devices, high-speed internet facilities, data collection, storage and analysis systems and software and modem - specification to be further clarified in detailed project design) will be procured. A training package for MoA will be deliverd in developing agro-climate bulletins, using the water balance concept to assess irrigation water requirement and flood risk, the use of climate information for preparation of strategies and plans and the use of climate forecast information for identifying farm-level climate resilient agriculture practices. Agro-climate information bulletins including forecast products (to be issued ideally on a 10 daily but at least monthly basis) will be designed using the identified most effective means of communication in the end-user survey. National, governorate and local level consultations will be facilitated to agree on detailed roles and responsibilities of all actors involved in the development and issuing of agro-climate information and define standard operating procedures (SOPs) for their communication flow and dis-

semination to village councils and farmers. Finally, the issuing of the bulletins will be tested and a feedback sample survey will be conducted to validate or adjust the format of the bulletins.

346. *Activity 3.1.3. Modelling climate change impact on main farming systems.* Data gaps will be assessed on climate data and agriculture production and available historical data sets will be digitalized and consolidated. A server to run climate change impact models for agriculture crops will be procured. Trainings will be provided to MoA staff on climatology, agro-meteorology, spatial information products, information technology and database management, crop yield forecasting, and crop impact modelling. The databases of PMD will be harmonized and linked with agriculture production data and agro-meteorological monitoring by MoA and high spatial-resolution climate projections, crop yields and water resources projections at subnational level will be produced. These projections will be applied to develop a model for future climate change impacts on key crops, and farming systems and map the related vulnerabilities of groups of farming households under various climate change scenarios. In the modelling on projecting impacts the activity will build on current regional processes on downscaling of climate models. Finally, upscaling potentials of different adaptation practices and under climate change scenarios will be modelled using results from demonstrations of climate resilient agriculture practices under component 1 and other field data available..

347. *Activity 3.1.4. Training of a pool of trainers for upscaling the adoption of climate resilient practices in agriculture.* Exiting technical guidelines and handbooks will be reviewed, improved and update as needed with validated climate resilient agriculture practices building on the evidence on adaptation benefits of different land development practices documented in subcomponent 1.1 and the climate impact modelling. A training curricula and manuals will be developed for the Climate Change Unit at MoA, focal points at governorate level, extension staff and national NGO partners. In addition a toolbox will be developed and managed on extension material with technical guidelines, videos, e-learning material, studies and other didactic self-learning material for Palestinian farmers. A series of training of trainers will be provided to significantly strengthen field capacities to guide farmers in the adoption of climate resilient agriculture practices. Training topics will include priorities area for MoA as identified in the Climate Change Capacity Development Programme Phase I on e.g. adaptation cost assessment, climate change economic/cost-benefit analysis, community-based climate change adaptation, awareness raising, climate resilient and low-carbon agriculture. Trainings provided under this activity will strengthen capacities of MoA to provide support to farmers under component one as well as provide support for the further upscaling to other non RELAP beneficiary smallholder farmers in the wider area of the West Bank.

348. **Sub-component 3.2: Strengthening institutional and technical capacities for the implementation of agriculture adaptation goals in the National Determined Contributions (NDC).** The objective of this sub-component is to facilitate the implementation of the “Action Plan for improving the Institutional Framework for Climate Change in Palestine” (ref. to National Climate Change Capacity Development Programme) and achieve the NDC adaptation goals for the agricultural sector . The subcomponent will support the horizontal and vertical institutionalization of climate change adaptation in agriculture, including efficient mechanisms for the operationalization, partnerships and progress monitoring of national goals. Under this sub-component the project foresees the following activities:

349. *Activity 3.2.1. Raise awareness and plan with Agriculture institutions at national and decentralized level how to integrate climate change actions in their operations.* Awareness raising events will be conducted at governorate level on existing national policy frameworks for climate change adaptation in agriculture. Linked to this awareness raising a consultative dialogue will be facilitated at governorate level to identify strengths (what is in place), needs (what should be in place) and priorities (options how to meet the needs) for implementing national goals on addressing climate change in the agriculture sector at the local level. A series of planning sessions will be facilitated at national level and in all governorates in the West Bank to develop efficient working/operational procedures for MoA on climate change adaptation and related areas such as disaster risk reduction and natural resources management for increased resilience. This will include to define clear and feasible responsibilities for decentralizing and integrating climate change adaptation into annual planning, budgets and programmes, monitoring and evaluation at national and governorate level.

350. *Activity 3.2.2. Programme for upscaling for climate change adaptation.* Data on validated agriculture practices for climate change adaptation and resilience building in support of the NDC implementation will be compiled and analysed starting with the evidence and knowledge products produced under subcomponent 1.1. Potential aggregated benefits and impact of climate resilient agriculture

practices will be modelled to inform investments planning and barriers for public and private investment in climate resilient agriculture production systems will be identified. This will be used as inputs for facilitating a consultative process and design of a programme/plan for upscaling validated climate change adaptation practices involving public and private stakeholders in agriculture.

351. *Activity 3.2.3. Establishing national and international partnerships and initiatives on climate change with the participation of Palestinian agriculture stakeholders.* National and international partnerships and initiatives on climate change in agriculture relevant for Palestine will be identified and prioritized. MoA and EQA will be assisted in the active participation in international knowledge and technology conference/workshops/events/platforms and the establishment of MoUs with national and internationals academic institutes and think tanks to promote applied research and information exchange. Support will also be provided for South-South cooperation and organization of study visits for governorate and extension staff of MoA to other countries implementing climate resilient agriculture and the Climate Change Unit on agro-climatology information, NDC implementation, NAPs etc.

Appendix 4, annex 1

Summary of unit cost estimation for land development

352. Below is summary of unit costs review for main land development activities implemented under the recently completed PNRMP. The costs include VAT (16%).

Table 30: Land Reclamation (Slope 10-30%)

Activity	Unit	Aver-age of unit per dunum	Unit cost (USD)	Cost per dunum
Bulldozer	hours	4	60	240
Large hummer	hours	4	110	440
Small hummer	hours	3	42	126
Cistern for water harvesting & irrigation	cub.m	10	90	900
Retaining walls	sq.m	50	8	400
Fencing	meter	50	15	750
Land cleaning	trailer	10	22	220
Land plowing	hours	3	27	81
Fruit trees seedling and planting	seedling	40	5	200
TOTAL (100% all activities)				**3,357**
TOTAL ESTIMATED (with 40% of fencing only and minimum retaining walls requirement)				**2,567**

Table 31: Land Rehabilitation (Slope 10-30%)

Activity	Unit	Average of unit per dunum	Unit cost (USD)	Cost per dunum
Small hummer	hours	5	42	210
Cistern for water harvesting & irrigation	cub.m	10	90	900
Retaining walls	sq.m	30	8	240
Fencing	meter	50	15	750
Land cleaning	trailer	5	22	110
Land plowing	hours	2	27	54
Fruit trees seedling and planting	seedling	40	5	200
TOTAL (100% all activities)				**2,364**
TOTAL ESTIMATED (60% of Machine works, 50% cistern, 40% retaining walls, 30% fencing, 30% new trees planting)				**880**

Table 32: Contour Bounds, V-shape or Half-moon (Slope <10%)

Activity	Unit	Average of unit per dunum	Unit cost (USD)	Cost per dunum
Small hummer	hours	5	42	210
Cistern for water harvesting & irriga-tion	cub.m	10	90	900
Fencing	meter	50	15	750
Land cleaning	trailer	5	22	110
Land plowing	hours	2	27	54
Fruit trees seedling and planting	seedling	40	5	200
TOTAL (100% all activities)				**2,224**
TOTAL ESTIMATED (40% fencing and minimum machine works)				**1,425**

Table 33: Tree planting between the rocks (Slope >30%<40%)

Activity	Unit	Average of unit per dunum	Unit cost (USD)	Cost per dunum
Fencing	meter	50	15	750
Fruit trees seedling	seed-ling	40	5	200
TOTAL (100% all activities)				**950**
TOTAL ESTIMATED (30% fencing and minimum land preparation)				**380**

353. The anticipated main scope of works for an area of about 10 000 dunum will include: (i) 15% for reclamation and 45% for rehabilitation on slopes between 10 to 30%; (ii) 30% for area will be for investments on slopes below 10%; and (iii) the remaining 10% will be for trees planting only, on slopes between 30 to 40%.

354. Based on the assumption above the weighted average unit cost for land development will be USD 1 380 per dunum including VAT. For the budgeting purposes an average base unit cost of USD 1 300 per dunum is considered.

Rangeland rehabilitation, wadis and crop-livestock conservation agriculture system development.

355. The cost per dunum for rangeland rehabilitation, developing the wadis with soil and water retention gabion and stone walls implemented under the MOA is about USD USD 625 for rangeland rehabilitation and USD 875 for wadis development respectively. The cost per dunum for introducing crop-livestock CA system in cereal (wheat, barley) livestock systems is estimated about USD 190. It is estimated that some additional 8 000 dunum will benefit from these activities with an average investment cost of less than USD 500 per dunum.

Table 34: Agricultural roads

Activity	Unit	Unit cost per km	% for implementation to be required	Actual Unit cost per km
Opening of road (6m)	km	10,000	100	10,000
Sub-grade from selected materials with depth 40 cm after compaction (6m)	km	17,000	0	0
Stabilized gravel (12 cm), compaction	km	15,000	100	15,000
Culverts	3 units per km	1,500	100	1,500
Concrete side channel	400 m per km	4,000	70	2,800
Retaining wall	400 sq.m per km	3,200	50	1,600
TOTAL		**50,700**		**30,900**

Appendix 5: Institutional aspects and implementation arrangements

356. This section describes the project approach and its organization framework, including the governance of the project and the role/responsibilities of the main implementing partners.

A. Approach

357. A key ambition is to promote institutional development among the core partners. The RELAP will contribute to institutional development and outcomes in several ways, including: 1) further evolution of the Project Management Unit (PMU) in the MoA, which will have overall responsibility for implementing RELAP (see below); 2) promotion of adaptive and inclusive land development practices 3) development and establishment of institutionalised support and advisory services for the promotion of the rural poor's market integration, bulking and clustering; 3) capacity development of participating MoA and other stakeholders in utilising climate information; and 4) support to and expansion of public-private-NGO partnerships (PPNP) in climate adaptive infrastructure.

B. Organizational framework

358. The *Ministry of Finance and Planning (MoFP)* will be the recipient representative, responsible for the negotiation and signature of the financing agreement (FA) with IFAD, the management of donor funds and government contribution (including tax exemption), and the reporting to IFAD, in particular the submission of annual audited financial statements.

359. The *MoA will be the Lead Agency*, responsible for the RELAP implementation, through direct and regular consultation with the EQA. The general directorate of the agricultural land/MoA will be responsible for ensuring that all aspects of implementation are carried out in accordance with the project FA and agreed annual work plans and budgets (AWPB).

360. A *project steering committee (PSC)* will be established at national level to: i) provide policy guidance and strategic directions, ii) ensure alignment/complementarity of RELAP with projects financed by other donors in the West Bank, and iii) approve the project AWPB. The PSC will be established by a PA decree and will be chaired by the MoA (by the Minister or the Deputy Minister). The PSC members will include: i) All MoA General Directors involved in RELAP implementation or monitoring, ii) the Minister's Advisor for climate change and national focal point for UNFCCC and IPCC/EQA, iii) Representatives of the Ministry of Social Affairs, the Ministry of Women Affairs, the MoFP, and NARC/MoA, as well as iv) ad-hoc technical resource persons (representing e.g. NGOs) to be invited by the MoA as and when needed. The PSC will meet at least once a year to approve the AWPBs and to take stock of their implementation in the middle of each year. The project director will be the Secretary of the PSC, responsible for preparing the minutes of the PSC meetings.

361. A *PMU* will be established in Ramallah and will be responsible for overseeing implementation of the RELAP, in coordination with its implementing partners and service providers (mainly FAO, NGOs and private contractors). The PMU will produce the AWPBs and the associated PPs to be submitted to the PSC for review and approval, and subsequently to IFAD for no objection. Likewise, the PMU will take the lead in the procurement of civil works for sub-component 1.3 and for contracting partner NGOs under components 1 and 2. The PMU will be integrated into the MoA and will be led by the general directorate of agricultural Land, and will be vested with financial and technical autonomy. Its staffing, as well as time allocation for the seconded staff, have been discussed and agreed upon with the MoA, based on a careful assessment of activities to be carried out (especially regarding supervision of the NGOs' work and coordination required with trade and marketing projects/programmes of other donors). The proposed staffing (presented in the table below) has been agreed with MoA. When not seconded, the staff in question will be recruited externally.

Table 35: Staffing of RELAP

At central level	
Project director (seconded)	Part time at 60%, from the general directorate of agricultural land/MoA
Deputy project director	Full time, with a specialization in land & water management and climate change adaptation
Land development engineer (seconded)	Part time, at 30%, from the land reclamation department/MoA
Agricultural road engineer (seconded)	Part time, at 50%, from the agricultural roads department/MoA
Rangeland specialist	Part time, at 30%, from Rangeland Department/MOA
Soil conservation specialist	Part time, at 40%, from Survey and Soil Classification Department/MOA
Natural resources researcher	Part time, at 20%, from National Agricultural Research Center/MOA
Extension officer (seconded)	Part time, at 20%, from the extension directorate/MoA
Climate change specialist (seconded)	Part time, at 30%, from the agricultural water and irrigation directorate/MoA
Agribusiness market specialist (seconded)	Part time, at 30%, from the marketing directorate/MoA
Finance officer	Full time
Accounts and admin assistant	Full time (to be cancelled if no the GCF cofinancing)
Procurement officer	Full time
M&E/KM officer	Full time
Agribusiness expert	Full time
Gender specialist	Half time
Driver (seconded)	Full time, seconded from the MoA
At governorate/district level	
6 MoA district coordinators (seconded)	Part-time, at 40% (same arrangement as for PNRMP, which has proven successful)
6 drivers (seconded)	Part-time, at 30%

362. The draft TOR of the PMU staff are prepared and presented in annex 1 of this appendix. Below are the component specific implementation details.

Component 1: Climate resilient land development

363. The overall implementation coordination of the adaptive land development component will be under the responsibility of the PMU to be established under the MoA. For subcomponent 1.1, the PMU will assume overall responsibility and supervision of activities, will define scope of collaboration with NARC, and will recruit the partner NGO who will design (with NARC support) and train MoA staff in implementing the monitoring and testing programme. The actual field implementation of activities for land development for orchards under the sub-component 1.2 will be the responsibility of NGOs to be selected on a competitive basis, while the PMU will be responsible for implementation of activities related to wadis land reclamation, conservation agriculture in crop-livestock systems, and rangeland rehabilitation contracting technical assistance from NGOs and individual experts as needed. The PMU will also be responsible for implementation of the sub-component 1.3. The table below provides an overview of the roles and responsibilities:

Table 36: Roles & Responsibilities for component 1

Sub-component 1.1: Land development modelling, evidencing and upscaling	
Role of the PMU	• Overall responsibility and supervision of activities • Define scope of collaboration with NARC (memorandum of understanding) • Recruit of partner NGO, with NARC support, who will design and train MoA staff in implementing the monitoring and testing programme in year 2.

	• Monitor and supervise the NGO' work, with NARC support
Role of MoA local staff and farmers	• Implementation of the monitoring and testing programme, with farmers and supported by NARC • Still to be discussed with MOA: where the platform for data collection and analysis will be housed
Role of the NARC	• Support to PMU in preparing the TOR for partner NGO • Monitor and supervise the NGOs' work (in support to PMU)
Role of the NGOs	• Design the monitoring and testing programme • Train MOA local staff in the implementation of the programme with farmers
Sub-component 1.2: Land development for inclusion and adaptation	
Role of the PMU	• Carry out information campaigns • Select and contract partner NGOs, monitor and supervise their activities • Carry out preliminary screening and selection of villages/municipalities of received proposals for investments • Review and approve final list of proposals for land development • Obtain approval of PSC and IFAD for final selected list of proposals • Lead activities for wadis land reclamation, conservation agriculture in crop-livestock systems, and rangeland rehabilitation • Monitor and supervise activities of partner NGOs
Joint role of the PMU, NGOs, municipalities and village councils	• Undertake field verification of pre-qualified proposals to ensure environmental mitigation measures (if required) • Handover completed works • Ensure provision of required cash contribution
Role of the NGOs	• Carry out baseline data collection and feasibility study of pre-qualified proposals • Evaluate and rank eligible proposals • Submit ranked proposals for PMU review and approval • Develop engineering designs for land development for orchards and water cisterns • Carry out procurement of works and supervise works • Provide extension services/capacity development and technical support to farmers (climate risks, adaptation options, soil/water management practices) • Provide legal assistance in obtaining land titles (as it would be required)
Sub-component 1.3: Connectivity for optimizing impact of land development	
Role of the PMU	• Select proposals for agricultural roads investments • Review and approve designs provided by the selected villages/municipalities • Carry out procurement of works for roads investments • Supervise works through private consultants to be selected on competitively • Handover completed works
Role of the municipalities and village councils	• Develop engineering designs of the roads • Budget for required cash contribution • Takeover rehabilitated assets in balance sheet and adequate maintenance.

364. Given the dispersed nature of interventions to be carried out, a programmatic approach will be adopted where component works will not be pre-identified before the start of the operation, but will be selected on a periodic (annual) basis on specified criteria and demand. The investment proposals selection criteria and scoring procedure for ranking of investment proposals are also provided in appendix 11. All the proposals for land development and agricultural road investment funding award will be approved by the PSC. The PMU will review recommendations of NGOs related to land development proposals and develop consolidated recommendations including agricultural roads applications and provide recommendation to the PSC for funding award. To ensure competitiveness the PSC meetings will be held once a year (preferably at the end of the year), to review and approve proposals for the next year funding award. The number of investments proposals for each year will depend on the size of each investment and budget allocation for particular year. More details on the PMU main tasks, selection of participating NGOs, arrangements for operation and maintenance are outlined in the PIM.

365. Besides the general activities related to conducting information campaign, component M&E and progress reporting, the tasks of the PMU will be:

366. *For the sub-component 1.2*: i) preliminary screening and selection of villages/municipalities of received proposals for investments; ii) final approval of investment proposals; (iii) selection and supervision of participating NGOs. The staff involved in sub-component 1.2 will consist of a Land Devel-

opment Engineer, and a Water Management and Irrigation Engineer from the relevant departments of the MoA. Estimated involvement of aforementioned MoA staff in the component activities will be some 30% of their working time. Draft Terms of References are provided in the annex 1.

367. *For the sub-component 1.3*: i) selection of proposals for agricultural roads investment; ii) review and approval of designs provided by the selected villages/municipalities; iii) procurement of works for roads investment; and iv) supervision of works through private sector consultant to be selected on a competitive basis. The staff involved in sub-component 1.3 will consist of an Agricultural Road Engineer from the MoA with estimated involvement in the component activities of 80% of working time. Draft Terms of References are provided in the annex 1.

368. The main tasks of the participating NGOs will be: i) following the preliminary screening of investment proposals (selection of villages and municipalities) by the PMU to conduct field visit verification and qualification of the proposals; ii) baseline data collection, feasibility study and ranking of qualified proposals and providing to PMU the list of selected proposals for final approval; iii) following the approval by PMU proceed with agreement signing with selected municipalities/villages and farmers; iv) development of detailed designs and engineering estimates for selected investment proposals; (v) procurement and supervision of civil works; and vi) provide technical assistance to beneficiary farmers in agricultural and irrigation practice, and legal assistance in obtaining of land titles as it would be required. More details on selection of participating NGOs are outlined in the PIM.

369. All the proposals for land development and agricultural road investment funding award will be approved by the PSC. The PMU will review recommendations of NGOs related to land development proposals and develop consolidated recommendations including agricultural roads applications and provide recommendation to the PSC for funding award. To ensure competitiveness the PSC meetings will be held once a year (preferably at the end of the year), to review and approve proposals for the next year funding award. The number of investments proposals for each year will depend on the size of each investment and budget allocation for particular year.

370. Details can be found in the draft PIM (appendix 11).

Component 2: Market linkages for the rural poor

371. The overall implementation of component 2 will be under the responsibility of the PMU. An agribusiness expert will be recruited from the market to join PMU. S/he will be also supported by a marketing officer from the Directorate of agricultural marketing who is to be part-time seconded (30%) in the PMU. Terms of reference are enclosed in annex 1.

372. **Subcomponent 2.1. Rural bulking of agricultural products.** The main implementers will be NGOs, contractors and consultants (subcontracted by IPs), Other implementation partner will include: marketing and extension officer MoA (Governorate level), civil engineers (village council / municipality), as well as business development services (Chambers of commerce certified).

373. Terms of references (annex 2 of this appendix) will be detailed in the tender document to recruit implementation partners on a competitive basis and to be supervised by the PMU. The following matrix provides a list of results to be achieved. For each result, three milestones have been earmarked to assess progress and evaluate performance based on results.

Table 37: Component 2 - List of results to be achieved

	Sub-Component/Activities	**Unit**	estimates to be revised each year						
	Milestones		PY1	PY2	PY3	PY4	PY5	PY6	**Total**
	Inception report								
2.1.1.1	***MRPs formed / capacity built***	**MRP**	**5**	**5**					**10**
	MRP formed (committees and board) with charter, by-laws, road map								
	Proper site selected with land made available by Local Authorities								
	transactions volumes matrix (used for road selection)								
2.1.1.2	**Market and Collection centre concept design**	**MRP**	**5**	**5**					**10**
	First draft Concept design and linkages with other Projects (MAP)								
	Reviewed concept design with civil engineers / architects								
	Investment plan for private sector including FOs								
2.1.2.3	**Market construction sub-committee**	**MCSC**		**5**	**5**	**5**	**5**		**10**
	Market construction sub committees are formed								
	MCS illustrated monthly shared reports (6)								
	MCS illustrated monthly shared reports (6)								

2.1.2.4	**MRP operates**	**Forum**	**5**	**10**	**10**	**10**	**10**	**10**	**1**
	MRP minutes established with a board and a road map								
	MRP bimonthly meeting (2)								
	MRP bimonthly meeting (2)								
2.1.2.5	**Agribusiness development training support**	**Micro-enterprises**		**600**	**600**	**300**	**175**		**1675**
	Training manual developed and tested								
	50% trainees developed business plans								
	50% trainees developed business plans								
2.1.2.6	**Establish / built capacities market and collection centre management committee**	**MCC**			**5**	**10**	**10**	**5**	**10**
	Review of legal status for market management framework								
	Registration of market management set-up								
	Establishment of PPP with local governments								
2.1.2.7	**Market and collection centres operate**	**MCC**			**5**	**5**			**10**
	Operational business plan for market management								
	Communication plan on market services (in and out)								
	Market reports of activities (showing volumes and value of transactions, tax payed, nb of markers users)								
B.1c	**Palestine Good Agriculture Practices operates (PALGAP)**	**PSI**	**25**		**25**				**1**
	Develop plan of action aligned with PALGAP								
	Develop training modules with inspectors and supervisions								
	organise campaign during market days in market and collection centres								
	Audited reports								

374. Linkages with MRPs and other platforms/forums/commodity councils will be facilitated by the PMU extension and marketing officers, in coordination with district officers, and municipality and village councils. Collaboration will be done with projects and programmes specifically focusing on marketing (mentioned earlier). Especially, FAO being a partner of most of the ongoing marketing initiatives, the PMU will coordinate with FAO, who also implement RELAP component 3, on a regular basis to identify fields of collaboration and synergies.

375. **Subcomponent 2.2. Inclusive entrepreneurship development support.** The main implementer will be the PMU. Other implementation partners will include: Village municipality councils, marketing and extension officer MoA (Governorate level), and business development services (Chambers of commerce certified)

376. The microenterprise facility will be administered by the PMU, and grants will be awarded by a MoA chaired "inclusive entrepreneurship committee" (details to be provided in the PIM).

377. Applications (shared with the MRP for increased accountability) will be channelled to the PMU through the municipality and village councils and municipalities that will confirm applicant's' compliance with eligibility criteria. The PMU will then confirm the feasibility as well as eligibility, and grants awarding will be decided upon by an independent committee (comprising of MoA, the PMU marketing officer, Ministry of Social Affairs and EQA) that initially meets on a regular basis[111]. The microenterprise facility will involve municipality and village councils and municipalities at the targeting stage to reach out to vulnerable and landless people, while the award committee will be based at the MoA. The eligibility criteria for the investment grants (maximum of USD 5 000) will be:

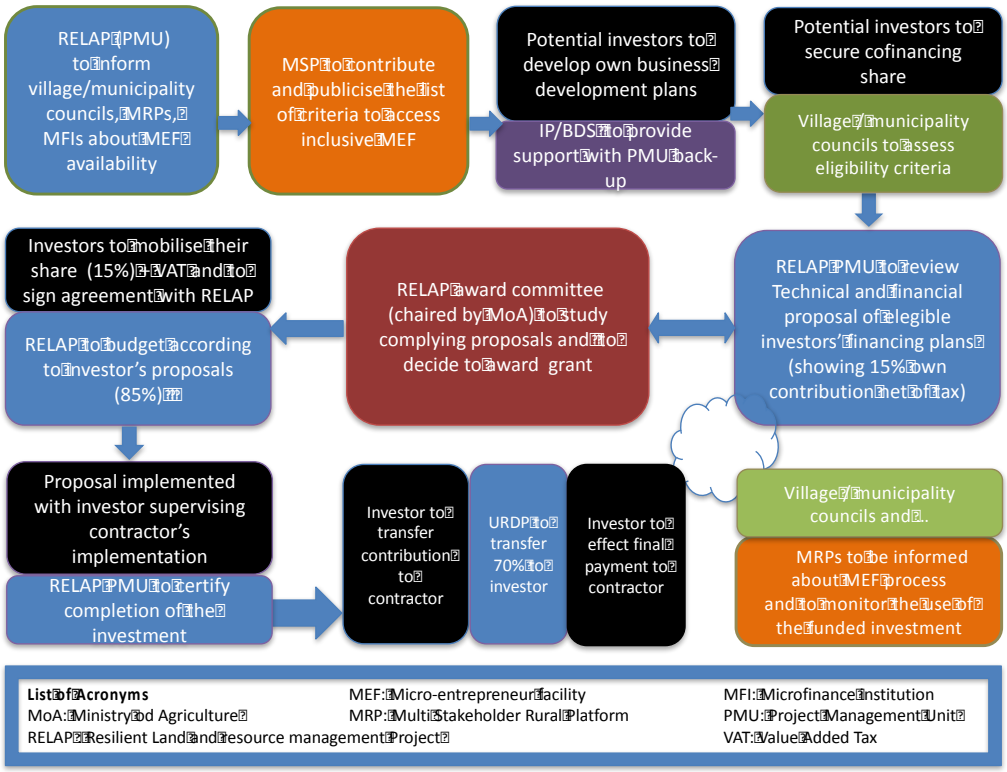
a. Only micro-enterprises owned by women or youth (below 30 years) will be eligible. These could include individual projects (especially those requiring investments on a lower scale) and group/collective projects (managed by cooperatives or youth clubs). Formal business registration will not be a requirement, but the micro-enterprises should be recognized by the municipality and village council. In all cases, the applicant must demonstrate that the key ownership and decision making is under the control of a woman/youth.

b. All applicants should demonstrate the ability to contribute to the investment with a minimum of 15% in cash (to be used as investment or working capital).

378. The award of the grants will be decided based on criteria to be developed in the project implementation manual (and in consultation with the MoA and local stakeholders). These will include, among others: potential for job creation, agricultural production, and introduction of climate adaptive technologies.

[111] While the comparable Palestinian Market Development Program (PMDP) awards grants (to larger businesses) on a weekly basis, such a frequency for RELAP would be too cumbersome and the available amount for investment grant would not be sufficient.

Figure 7: Management process of component 2



379. The roles and complementarities of the main RELAP implementation partners for component 2 are summarised in the following table.

Table 38: Roles & responsibilities for component 2

Sub-component 2.1: Bulking of agricultural products	
Role of the PMU	• Overall responsibility and supervision of the activities; • Recruitment of partner NGOs and monitoring and supervision of their work; • Liaison and coordination with trade and marketing projects financed by other donors.
Role of the village and municipality councils	• Participation to MRP regular meetings at "multi-village" level, together with NGO (and PMU as observer); • Allocation of the sites to be selected to build village collection centres, in consultation with the MRP stakeholders; • Approval of local rules and regulations for the management and use of village collection centers (including delegation of management through a specific contract with the identified structure); • Ensure the long term maintenance of the infrastructures.
Role of the NGO	• Facilitation of MRP regular meetings at "multi-village" level, in collaboration with village and municipality councils (and PMU); • Selection of private contractors for construction/rehabilitation village collection centers and supervision of their work (see component 2.2); • Strengthening and building entrepreneurship capacities for stakeholders groups (training, accompaniment, study tours); • Support to MRP to organize promotional events; • Providing M&E information and documenting for upscaling the approach.
Role of the MRPs	• Organization of regular stakeholders meetings (visioning, planning, capacity building identification, local progress monitoring, dissemination of information); • Elaboration of local rules and regulations to manage and use collection centres to be approved by village/municipalities (through selected groups of stakeholder, who will recover their running costs from the collection of affordable user's fees); • Organization and participation in promotional events.

Sub-component 2.2	
Role of the PMU	• Overall responsibility and supervision of activities; • Elaboration of the grant manual; • Management of the MEF: reviewing eligibility and economic feasibility; organization of the award committee (every second month), signature of an inclusive entrepreneur's partnership with beneficiaries, ensuring timely fund transfer, assessing the effectiveness of the financial support; • Liaise with local MFIs to crowd beneficiaries in the existing financial services.
Role of the village and municipality councils	• Collection of applications for investment grants; • First screening of the applicants to ensure eligibility criteria; • Transmission of all applications and recommendation reports to the PMU; • Witness the signature of inclusive entrepreneur agreements between PMU and beneficiaries.
Role of the NGO	• Dissemination of information and information campaigns;
Role of the BDS	• Provision of technical assistance (development of business development plans) to selected applicants for investment grants.
Role of the MRP	• Dissemination of information and support application • Progress monitoring

Component 3: Improved public services for upscaling climate resilient agriculture.

380. The following table summarizes the main implementation arrangements for component 3, implemented by FAO.

Table 39: Roles & responsibilities for component 3

Sub-components 3.1 and 3.2	
Role of the PMU	• Establish mechanisms to ensure linkages and synergies between the three technical components of the project • Facilitating information sharing with stakeholders and the Steering Committee • Coordinate project interventions with other related ongoing activities • Supervise of progress and support coordination of activities
Role of FAO	• Overall responsibility for implementation of activities • Provide technical guidance on the implementation of activities and partner institutions and the PMU • Select and contract partner institutions • Procure goods and services required for the project component 3 • Provide the PMU/MoA with narrative and financial progress reporting as per the project financing agreement

Annex 1, Appendix 5 : Draft terms of reference for the PMU staff

PMU LAND DEVELOPMENT ENGINEER

Responsible to: PMU Director

Qualifications and Experience

A higher degree or an equivalent qualification in Agricultural Engineering with sound knowledge of contemporary issues in land and water resources management in the West Bank. A minimum of ten years working experience with projects for land development including design and construction of required engineering facilities with proven ability to work in a multi-disciplinary team and with rural population. Familiarity with land development and improvement models applied in Palestine, as well as with the similar projects implementation procedures applicable under foreign donors' funded projects in the West Bank. Computer literate. The selected candidate will have a pragmatic, creative and energetic approach to problem solving and decision-making and the capacity to operate effectively with NGOs, contractors and rural population.

Job Description

- Under the direct supervision of the PMU Director the Land Development Engineer will be responsible for overall guidance and supervision of the partner NGOs related activities under the subcomponent 1.2 of the Resilient Land and Resource Management Project (RELAP) in accordance with the Project Implementation Manual (PIM), and regulations and procedures for supervision of design and civil works as per the applicable legislation of Palestine. Within this overall role, the following tasks would be the specific responsibility of the PMU Land Development Engineer.
- In cooperation with the PMU relevant staff to participate in information workshops and sensitize rural communities about the component, its objectives and eligibility criteria, and application and selection procedure.
- Prequalify villages and municipalities applied with proposals for land development investments in accordance with the criteria and procedure described in the PIM and develop recommendations for partner NGOs for follow-up screening and qualification.
- Review the qualification list provided by the partner NGOs and prepare recommendations for the land development component fund award for PSC review and approval.
- Assess whether the proposed land development models proposed by NGOs are required or other, more appropriate and cost-efficient models may be more suitable.
- Review proposed works in relation to other possible alternatives.
- Participate in Bid Opening and Evaluation Committee in evaluation of bids for selection of NGOs.
- Ensure the compliance of land development planned works and construction works with the technical requirements as well as the overall quality of works.
- As a member of the PMU, prepare annual work plans and budgets for the RELAP sub-component 1.2, provide reports and information on land development investment operations as necessary to the PMU Director and contribute to progress reports.

PMU CLIMATE CHANGE SPECIALIST (*TORS TO BE UPDATED AT START*)

Responsible to: PMU Director

Qualifications and Experience

A higher degree or an equivalent qualification in Irrigation Engineering with sound knowledge of contemporary issues in land and water resources management in the West Bank. A minimum of ten years working experience with projects for water management and irrigation development including design and construction of required engineering facilities such as cisterns for rain water harvesting, springs, wells and drip irrigation network; and with proven ability to work in a multi-disciplinary team and with rural population. Familiarity with subjects of crop-water requirements, irrigation scheduling, modern irrigation techniques, as well as with the experience in irrigated agriculture in the West Bank. Computer literate. The selected candidate will have a pragmatic, creative and energetic approach to problem

solving and decision-making and the capacity to operate effectively with NGOs, contractors and rural population.

Job Description

- Under the direct supervision of the PMU Director and in close cooperation with the PMU Land Development Engineer the Water Management and Irrigation Engineer will be responsible for overall guidance and supervision of the partner NGOs related activities for water resource development activities under the RELAP sub-component 1.2 of and introduction of irrigation networks for supplementary irrigation of land developed. Within this overall role, the following tasks would be the specific responsibility of the PMU Water Management and Irrigation Engineer.
- In cooperation with the PMU relevant staff to participate in information workshops and sensitize rural communities about the component, its objectives and eligibility criteria, and application and selection procedure.
- Participate in prequalification of villages and municipalities applied with proposals for land development investments in accordance with the criteria and procedure described in the PIM and develop recommendations for partner NGOs for follow-up screening and qualification.
- Review the qualification list provided by the partner NGOs, in particular from the proposed water resource development point of view and contribute in preparation of recommendations for fund award for PSC review and approval.
- Assess whether the proposed water resource improvement investment proposed by NGOs are required or other, more appropriate and cost-efficient options may be more suitable.
- Review proposed works in relation to other possible alternatives.
- Participate in Bid Opening and Evaluation Committee in evaluation of bids for selection of partner NGOs.
- Ensure the compliance of water resource development planned works and construction works with the technical requirements as well as the overall quality of works.
- As a member of the PMU, contribute in annual work plans and budgets for the RELAP sub-component 1.2, provide reports and information on water resource development investment operations as necessary to the PMU Director and contribute to progress reports.

PMU AGRICULTURAL ROAD ENGINEER

Responsible to: PMU Director

Qualifications and Experience

A higher degree or an equivalent qualification in Civil Engineering with sound knowledge of contemporary issues in the agricultural road infrastructure of Palestine in particular. A minimum of five years working experience with projects for road construction/rehabilitation including design and construction supervision with proven ability to work in a multi-disciplinary team and with rural population. Familiarity with engineering design requirements and construction supervision procedures of Palestine, as well as with the procurement procedures applicable under foreign donors' funded projects. Computer literate. The selected candidate will have a pragmatic, creative and energetic approach to problem solving and decision-making and the capacity to operate effectively with contractors and rural population.

Job Description

- Under the direct supervision of the PMU Director the Agricultural Road Engineer will be responsible for overall guidance and management of the investment related activities under the RELAP sub-component 1.3 in accordance with the Project Implementation Manual (PIM), and regulations and procedures for supervision of design and civil works as per the applicable legislation of Palestine. The Agricultural Road Engineer will be responsible for supervising and guiding activities consultants involved in design and supervision of works that due regard is given to the quality and quantity of works to be implemented throughout PMU operations in the framework of the sub-component 1.3. Within this overall role, the following tasks would be the specific responsibility of the PMU Agricultural Road Engineer.

- In cooperation with the PMU relevant staff to participate in information workshops and sensitize rural communities about the component, its objectives and eligibility criteria, and application and selection procedure.
- In cooperation with Land Development and Water Management and Irrigation Engineers screen and rank the proposals in accordance with the criteria and procedure described in the PIM and develop recommendations for infrastructure fund award for PSC review and approval.
- Develop Terms of Reference for development of engineering designs for selected proposals for village and municipal councils.
- Review detailed engineering designs provided by the village and municipal councils in terms of sound technical solutions, quality and identified scope and volumes of works.
- Participate in Bid Opening and Evaluation Committee in evaluation of bids for civil works.
- Act as Contract Manager for all contracts for works procured by the PMU for the implementation of the land development component, including approvals of contractors' submittals (payment certificates, variation orders, completion certificates, etc.) and notifications to the contractors (defects, penalties, etc.) and any other issues as specified in the conditions of contract.
- Participate and contribute in discussions with applicant, design companies and other interested parties in decision making during the construction stage.
- Supervise the implementation of civil works and coordinate activities of site supervisors in accordance with agreed procedure and standard formats.
- Ensure the compliance of design works and construction works with the technical requirements as well as the overall quality of works.
- Organize the handover of completed agricultural road facilities to the relevant village/municipality according to stipulated procedures.
- As a member of the PMU, contribute in preparation of annual work plans and budgets for the land development component, provide reports and information on agricultural roads investment operations as necessary to the PMU Director and contribute to progress reports.

PMU FINANCE OFFICER

Reporting line: Project Director

Main responsibilities:

- Develop and maintain a sound project accounting and financial management system, including reliable internal controls procedures and guidelines for financial reporting and recordkeeping, so as to ensure the efficient management of project resources; prepare and update the project's financial and administrative procedures manual; ensure all records are maintained in a form appropriate for audits.
- Participate in the preparation and update of the Annual Work Plan and Budget (AWPB, in coordination with other PMU staff); monitor the financial execution of the AWPB, including analyses of budget-to-actual variances on a monthly basis;
- Review all expenditure requests to ensure inclusion in the AWPB and funds availability;
- Review/validate payment requests and transaction vouchers before submission to the MoA Finance Department and MoFP Controller; input transactions in BISAN system;
- Manage the project bank accounts, approve and co-sign disbursements;
- Review monthly bank reconciliations prepared by the Accounts & Admin Assistant
- Prepare monthly reconciliations of the initial advances on the designated accounts;
- Prepare monthly financial reports for project management and MoA, quarterly interim financial reports (as required by IFAD) and annual financial statements on a timely basis;
- Prepare/verify withdrawal applications for submission to IFAD after required approvals;
- Prepare and update cash flow forecasts on a regular basis;

- Monitor the financial execution of contracts;
- Develop and maintain a system of financial control over all expenditure incurred by the implementing partners, including the validation of their financial returns;
- Perform physical inventory of fixed assets each year;
- Prepare required documents and reports, and provide assistance to the internal and external auditors as well as to IFAD missions as needed; ensure timely submission of audit reports;
- Supervise PMU office, assets, logistics and other administrative matters; and
- Undertake any other activities assigned by project management.

REQUIRED QUALIFICATION, EXPERIENCE AND SKILLS:

- Bachelor's degree in accounting, business administration or finance from a recognized institution; a master degree in a relevant discipline will be an advantage.
- A minimum of 5 years progressive work experience in accounting and finance, preferably in donor funded-projects.
- Work experience in an audit firm will be added advantage.
- Proven capacity to perform financial analysis.
- Working knowledge of an accounting software.
- Computer literacy with proficiency in Microsoft Office applications.
- Fluent knowledge of English language (written and spoken)

KEY COMPETENCIES:

- Proven capacity to work under pressure and in coordination with high-level multi-sector staff;
- Demonstrated ability to set priorities, plan, coordinate, monitor work performance;
- Very good integrity and high ethical standards;
- Self-starter and self-motivated; and
- Result-oriented.

WORKPLACE: Ramallah with occasional field trips

PMU PROCUREMENT OFFICER

REPORTING LINE: Project Director

MAIN RESPONSIBILITIES:

- Establish and update procurement procedures for the project based on the IFAD Procurement Guidelines for input in the finance and administrative procedures manual;
- Prepare and update the annual procurement plan (in coordination with relevant staff of the PMU) based on the Annual Work Plan and Budget;
- 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;
- Supervise the bidding processes including advertisements, bid opening, bid evaluation, negotiation and selection of contractors; prepare bid opening minutes and bid evaluation reports;
- Draft contracts for signature by authorized project representatives and contractors;
- Manage the procurement monitoring database system; prepare periodic reports on the status of procurement for the project;
- 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;
- Monitor the administrative implementation of contracts in coordination with the Finance Officer;
- 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;

- Maintain close liaison with IFAD on all issues pertaining to procurement;
- Participate in project management meetings and IFAD supervision missions, including the preparation of all information required, in particular the procurement records for facilitating post-procurement reviews;
- Train MoA Procurement Department staff on procurement issues; and
- Carry out any other activities that are assigned by the project management.

REQUIRED QUALIFICATION, EXPERIENCE AND SKILLS:

- Bachelor's degree in a relevant discipline such as law, engineering, business management, or related field from a recognized university; a master's degree in a related discipline will be an advantage.
- Certification in Procurement or other qualifications specifically related to procurement.
- Minimum of 5 years progressive work experience in the procurement of goods, works and services, preferably in donor-funded projects.
- Fluent knowledge of English (written and spoken).
- Computer literacy with proficiency in Microsoft Office applications.
- Knowledge of procurement or other database applications will be an asset.

KEY COMPETENCIES:

- Demonstrated ability to set priorities, plan, coordinate, monitor work performance;
- Proven capacity to work under pressure and in coordination with high-level multi-sector staff;
- Very good integrity and high ethical standards;
- Self-starter, self-motivated, and result-oriented.

WORKPLACE: Ramallah with occasional field trips

PMU M&E AND KM OFFICER

Responsible to: PMU Director

Main responsibilities:

- Develop and maintain a simple but comprehensive M&E system to be fully described in a comprehensive M&E Manual (as part of the PIM), including detailed methodologies, tools (standard data collection forms and analysis tables), processes and responsibilities for the monitoring of project implementation (activities, outputs) and the measurement of results (outcomes, impact).
- Develop and maintain a simple MIS (Excel or Access-based) for the recording of M&E data and the preparation of standard consolidates tables for the tracking of activities, outputs and outreach.
- Provide inputs for the finetuning of the targeting strategy (in particular for the definition of adequate selection criteria) and ensure that the M&E system will help track targeting and outreach performance (e.g. number and profile of beneficiaries, types of benefits received).
- Prepare the TOR for the baseline, mid-term and completion surveys, including the description of the proposed survey methodology (sampling frame and sample size, draft questionnaire) and provide the appropriate guidance to the selected service providers in order to ensure timely and reliable survey reports.
- Provide the necessary initial training and continuous guidance and technical support to all PMU staff and grassroots implementers in charge of data collection in order to ensure data quality and reliability.
- Organize periodic field visits in order to verify the quality and validity of M&E data submitted by grassroots implementers and collect formal and informal feedback from project beneficiaries on their satisfaction with project activities.
- Prepare quarterly, half-yearly and annual progress reports, as well as more regular summary performance tables and other dashboards; and prepare and update digital maps showing all project sites and interventions.

- Design and conduct periodic outcome surveys and other qualitative surveys in order to collect data and evidence of early outcomes or feedback from beneficiaries.
- Prepare consolidated RIMS tables and other data tables to be submitted to IFAD and the MoA.
- Identify implementation problems, bottlenecks or delays and inform Project Management about the need for corrective actions.
- Prepare a KM Plan to identify the key topics worthwhile studying during implementation (e.g. women participation in agriculture, women access to legal land titles, applying climate smart agricultural techniques, etc.), the key tools and processes for the collection of required data, information and evidence, and the key tools and processes for the documentation and sharing of knowledge, lessons learned and best practices.
- Ensure that lessons learned and best practices are properly identified and documented through various means (studies, videos, case studies, print and web articles) and that they are regularly shared to the relevant audience (project partners, policy makers, development partners) through appropriate means (including the participation in relevant meetings and events).
- Organize and facilitate knowledge sharing workshops and events.

Key competencies:

- University degree (economics, humanities, rural development, etc.)
- At least 7 years of experience in the operation of M&E systems of development projects
- Computer literacy, with proficiency in Word, Excel, PowerPoint and data management software (Access, SPMS)
- Rigor, intellectual honesty and sense of organization
- Ability to work under pressure and within a multidisciplinary team.
- Strong managerial and communication skills (including conflict resolution).
- Perfect command of English.

Work station: Ramallah, with frequent field trips

PMU GENDER OFFICER

- At project start, conduct a gender analysis to understand the specific needs and constraints of targeted female beneficiaries and youth (e.g. gender division of labour, access to and control of resources and technologies, women's and youth needs and preferences, and opportunities and constraints for women's and youth participation in project activities). On this basis, review the project design document in order to ensure that the gender dimension is properly integrated into the Logframe indicators and all implementation modalities.
- Develop a youth and gender mainstreaming strategy (or plan of actions) that identifies opportunities and entry points for mainstreaming gender into project implementation (fine-tuning of implementation modalities, definition of gender responsive targets and indicators, etc.).
- In collaboration with the M&E Officer, ensure the collection of sex-disaggregated data, as well as data and evidence to monitor the specific socio-economic impact of project interventions on women beneficiaries and the youth.
- Identify government agencies, NGOs, community-based organizations and women's associations or groups whose work focuses on gender/youth and the specific areas of project interventions and which can be utilized during project preparation and implementation. Assess their capacities.
- Develop appropriate training material on the practical dimensions of gender-responsive programming and implementation, and train implementation partners at all levels.
- Organize and participate in field visits in order to monitor the extent of women's and youth participation in the planning of project activities (e.g. their participation in MRP Management Committees) and get feedback on their satisfaction with project interventions.
- In collaboration with the M&E Officers, design and conduct specific surveys and case studies in order to document project results in empowering economically and socially targeted women and youth.

- Liaise with the MoA Gender Unit and participate in knowledge sharing, training, policy advocacy or other relevant events.

Key competencies:

- Postgraduate university degree in Social or Natural Sciences or other relevant discipline, preferably with a specialization in gender and project cycle management
- A minimum of 5 years of practical experience in the field of gender equality and gender mainstreaming.
- Formal training in gender analysis and gender planning and demonstrated expertise in mainstreaming gender in projects and programmes, especially in specific area of intervention.
- Thorough understanding of the gender context in rural areas in the West Bank, and experience working with government institutions and international or non-governmental organizations supporting gender and development work in the specific area of intervention.
- Familiarity with gender analysis tools and methodologies in the specific area of intervention.
- Strong communication skills, and ability to liaise with various stakeholders.

Work station: Ramallah, with periodic field trips

PMU AGRIBUSINESS AND MARKET OFFICER

Responsible to: PMU Director

Job Description:

The Agro-business officer (ABO) will (i) support implementing partners (NGOs) staff in charge of facilitating and accompanying multi-stakeholders rural platforms (MRP) that will emerge in each area (list to be determined) for MRPs to play a proactive role in the governance and use of collection centres; (ii) participate to the collection/dissemination of data / results related to these markets; (iii) assess IPs and BDS to support rural micro-entrepreneurs development (groups and individuals) to access inclusive micro entrepreneur facility to finance business plans; (iv) to liaise with other project / programme / donors involved in the promotion and development of marketing of agricultural for them to engage with MRPs. The ABO will perform the following tasks

Main responsibilities:

- Participate in the planning and monitoring of IPs' RELAP related activities and to provide technical and methodological support;
- Ensure that market site activities are gender and youth inclusive;
- Monitor collection centres management bodies to deliver expected quality services (weighing/measuring, security, maintenance) in an economically viable way to ensure sustainability;
- Design and develop training modules adapted to rural micro-enterprises to build capacities including action plan, business and financing plans, business monitoring (in collaboration with IPs)
- Supervise, regularly monitor and annually assess IPs performances;
- Lead and participate in the production of information notes related to market stakeholders activities (value chain information on prices and volumes, organizational support to market oriented groups);
- Support other business development services providers (including FOs) to provide quality services to rural micro-enterprises and farmers groups (sound business plans, marketing strategy, suppliers and outlets linkages) for them to access financial services including RELAP inclusive micro-entrepreneurs' facility;
- Identify needs and eventual external support;
- Collect and consolidate IPs reports and to write quarterly progress reports to the Project Coordinator, PMU

- Facilitate technical/expert support mission mobilized within RELAP framework to improve implementation;
- Facilitate review, assessment and evaluation missions organized by RELAP, MoA, and IFAD;
- Implement any other agribusiness related activity that may be required by the Project Director.

Key competencies:

- Diploma of MSc or equivalent in agribusiness/agriculture/rural economy with knowledge in agricultural extension, sociology, and adult education
- At least 5-7 years effective experience in domains linked to family farming agri-business with direct support to business oriented farmers' groups (cooperatives, producers' groups, post-harvest handing activities)
- Experience with projects, FOs, agribusiness actors in the targeted district is an asset

Work station: Ramallah, with regular field trips/visits.

ACCOUNTS AND ADMINISTRATIVE ASSISTANT

REPORTING LINE: Finance Officer

MAIN RESPONSIBILITIES:

- Assist the Finance Officer in the implementation and maintenance of a sound financial management and reporting system;
- Prepare transaction vouchers and input all transactions into the project accounting system after approval by the Finance Officer and Project Director;
- Prepare monthly bank reconciliations for all project accounts on a monthly basis;
- Prepare withdrawal applications and submit to Finance Officer for review;
- Verify the financial returns submitted by implementing partners;
- Maintain a well-organized and up-to-date filing system for accounting/financial records;
- Prepare financial reports, funds reconciliations and expenditure statements as requested;
- Assist the Procurement Officer in handling project procurement as needed;
- Maintain a roster of individual consultants and an electronic directory of PMU partners/suppliers;
- Monitor project assets (tagging, maintenance of fixed assets register, etc.) in liaison with MoA;
- Carry out all project administrative tasks and logistics (office administration, correspondence, organization of meetings and workshops, travel and logistical arrangements, monitoring of vehicle schedule and fuel consumption, monitoring of office supplies, filing/archiving, etc.);
- Undertake any other tasks assigned by project management.

REQUIRED QUALIFICATION, EXPERIENCE AND SKILLS:

- First degree in accounting, business administration or finance from a recognized institution; a bachelor's degree in a related field will be an advantage.
- A minimum of 2 years work experience as an accountant/administrative assistant.
- Working knowledge of an accounting software.
- Excellent oral and written communication skills.
- Excellent clerical skills.
- Computer literacy with proficiency in Microsoft Office applications.
- Fluent knowledge of English language (written and spoken)

KEY COMPETENCIES:

- Demonstrated ability to set priorities, plan, coordinate, and monitor work performance;
- Ability to organize and host meetings;
- Self-starter, self-motivated, and a team player.

WORKPLACE: Ramallah

AGRIBUSINESS OFFICER (NOT PART OF PMU BUT TO BE RECRUITED BY PARTNER NGOs)

Work station: selected sites in the any of the 6 governorates of component 1 and 2

Description of the post

Agribusiness and Market officers (AMO) will (i) support the emergence and set-up of the Multi-stakeholders rural platform in each site identified by RELAP for MRPs to play a proactive role in the governance and use of these markets; (ii) ensure that the local concertation process involving all market stakeholders (producers, traders, transporters, dockers, local authorities…) is effective in the concerned market site; (iii) support the market stakeholders to be well organized within MRP as organized market oriented professional groups able to effectively use market premises (including collection centres) and contribute to market governance and the concentration of transactions; (iv) ensure that all performed activities are gender & youth inclusive.

Roles and duties: Under the overall supervision of PMU / Agribusiness unit and the direct responsibility of the Agri-Business Officer, IPs will perform the following tasks:

- to list the different existing rural market stakeholders (groups and individuals) in the targeted village and surroundings and diagnose their roles (SWOT);
- to facilitate the emergence of multi-stakeholders rural platform involving all different identified groups;
- to contribute to prepare and convene regular MRP meetings related to thematic issues pertaining to the overall rural marketing development process;
- to participate in the identification of market stakeholders felt needs to strengthen their capacities
- to facilitate peer exchanges and host peer visits;
- to strengthen each categories of market local stakeholders (particularly producers) to be able to stand for their interests in the market governance structure and beyond to become pro-active leaders;
- to support market oriented farmers' groups to identify action plans and to link them up with BDS to develop business plans to access the RELAP inclusive micro entrepreneur facility;
- to ensure that market site activities are gender and youth inclusive;
- to participate to collection centre site meetings and liaise with local authorities;
- to produce monthly reports;
- to work in team with other RELAP IPs in the area;

Requirements: at least MSc in agribusiness / agriculture / rural economy with knowledge in agricultural extension, adult education AND

Experience: at least 3-5 years effective experience in domains linked to family farming agri-business with direct support to business oriented farmers' groups (cooperatives, producers' groups, post-harvest handing activities).

Appendix 6: Planning, M&E, learning & knowledge management

381. The PMU shall establish and operate a functioning M&E system in order to ensure the proper management of project implementation and to measure results. To this end, the project Logframe shall serve as the key reference document (table 33 below), together with the underlying theory of change summarized at the end of this appendix.

A. Planning

382. Towards the end of each fiscal year, the PMU will prepare a results-oriented annual work plan and budget (AWPB) for the next fiscal year that will clearly identify, for each component, the following (see appendix 11 for suggested AWPB template):

- the detailed outputs to be produced, together with related physical targets;
- the key activities, sub-activities and inputs required in order to deliver planned outputs;
- the timetable for implementation of key activities;
- the PMU staff or implementers responsible for each activity and sub-activity;
- the financial resources required for implementing planned activities and acquiring inputs.

383. The key reference for the preparation of the AWPBs will be the detailed project log-frame attached in annex 1 (which quantifies the detailed results to be achieved by the project completion date); the detailed description of project activities found in the project design document; the cost tables (which provide an indicative project budget broken down by years and activities); while the detailed recommendations of the latest supervision mission will also be given due consideration. The PDR and cost tables shall not, however, constitute a rigid blueprint[112], and the original log-frame targets and financial envelopes may need to be revised at mid-term, upon the recommendations of the mid-term review[113] and IFAD's approval.

384. If the first AWPB will be prepared during the start-up workshop, the preparation of subsequent AWPBs shall follow an iterative process, starting around the month of September each year with the consultation of concerned NGO and municipality staff, local MoA staff and other implementers. Facilitated by the PMU, these consultation workshops will provide project implementers and local stakeholders with the opportunity to reflect on past performance, discuss implementation issues and identify preliminary annual targets for component 1, 2 and 3.

385. On this basis, a consolidated AWPB will be prepared by the PMU and submitted to the PSC for approval. After approval by the PSC, the tentative AWPB (accompanied by the procurement plan) shall be submitted to IFAD for no-objection no later than 60 days before the end of the fiscal year (i.e. by 31st October each year). In case IFAD would want to introduce some changes to the AWPB initially submitted, the PMU shall inform the PSC about such changes[114].

386. The final, approved AWPB will constitute a binding document that will govern, throughout the year, IFAD's decisions related to funds' release or procurement matters. The approved AWPB and Procurement Plan may be amended in the course of the year at the request of the PMU if proper justification is provided for proposed changes, and upon IFAD's no-objection.

B. Monitoring and evaluation

387. **Purpose and scope.** The PMU M&E officer will be responsible to establish a M&E system the main purpose of which will be to provide project management, the government and IFAD with reliable

[112] Cost tables should be considered as the best estimates by project designers, at the time of project design, of the various expenditures that will be required in order to deliver certain goods and services and achieve certain results. As implementation progresses, these expenditure estimates tend to become increasingly outdated, in particular unit costs, and some planned activities may need to be changed or new ones added.

[113] In case of significant design problems, IFAD and the government may decide to organize an anticipated mid-term review.

[114] PSC approval may also be sought and granted as a final step, after IFAD's no objection is granted. This also means that, in the event when the PSC would recommend changes to the AWPB, IFAD's no objection on revised AWPB will have to be sought again,

and timely information on project execution performance and results, so that corrective actions may be taken on a timely basis to ensure that implementation remains both efficient (i.e. results are obtained at reasonable costs) and effective (i.e. expected goods and services are delivered and intended outcomes are achieved).

388. More precisely, the M&E system established and managed by the PMU M&E Officer will aim at:

- *Monitoring project execution*: M&E activities will track project activities and outputs against planned, physical targets (as identified in the AWPB), and monitor of the quality of the products and services being delivered. In so doing, M&E activities will help monitor the rate of physical targets and verify compliance by all implementers with agreed calendars, deadlines and contractual requirements. The monitoring of project execution will also help inform all log-frame output indicators, including 1st level RIMS indicators and MoA *Agriculture Sector Strategy's* output indicators.
- *Monitoring outreach:* M&E activities will play a critical role in: (i) ensuring that the right target groups are being reached through effective targeting mechanisms (i.e. ensuring that primary beneficiaries are smallholders, poor/landless female and young micro-entrepreneurs and that there is no leakage of project benefits); (ii) keeping track of the number of households who are receiving project goods and services; and (iii) documenting their profiles at the time of selection. Outreach data shall be disaggregated by gender and age categories ("below 30 years" and "above 30 years").
- *Measuring and evaluating project results:* Through periodic surveys and other tools, M&E activities will help measure the effects and early impact of project activities on beneficiaries, assess their satisfaction with project services and ensure that project implementation does not have unexpected, negative consequences. In so doing, the M&E system shall help inform all log-frame outcome and impact indicators, including RIMS 2nd level indicators and MoA *Agriculture Sector Strategy's* outcome indicators.

389. The key reference for the setting-up of the M&E system will be the detailed logframe presented in annex 1 of this appendix, which includes the detailed list of output, outcome and impact indicators that will need to be tracked and monitored for the efficient monitoring of implementation progress and results. The shorter logframe included in the PDR, on the other hand, will serve as a key reference during IFAD supervision missions and will be basis for annual reporting to IFAD. The M&E system shall also be developed considering the reporting requirements of the Green Climate Fund, including for the monitoring of resilience and the reporting requirements of the MoA M&E Department.

390. Given that the detailed project log-frame found in annex 1 includes all relevant indicators from the Agriculture Sector Strategy 2017-2022, on the one hand, and all relevant IFAD RIMS indicators on the other, the M&E system will help fulfil the results' information requirements of both institutions.

391. The detailed M&E tools, processes and responsibilities, as well as data requirements, will be described in the M&E Manual (or part II of the project implementation manual), to be finalized by the M&E officer within 3 months of project start (see appendix 11 for the M&E manual outline). To ensure quality and timeliness of data collection processes, and addition to the organization of M&E training workshops, the PMU M&E officer will also provide periodic technical backstopping to field-level implementers and other M&E actors.

392. **Tools and processes.** Monitoring of project execution and outreach. Under all components, the primary responsibility for collecting the data required for the monitoring of project execution (activities and outputs) and outreach (number and profile of beneficiaries reached), will be vested with each project implementer (NGOs, local MoA staff and FAO). Such responsibilities shall be clearly outlined in their respective contracts or ToR, together with clear information on reporting requirements and the frequency of data submission. These contracts shall also clearly mention that the key reference for evaluating implementing partners' annual performance will be the AWPB prepared every year by the PMU, as approved by the PSC and IFAD.

393. Standard data collection forms and reporting templates will be the key tools used by project implementers for data collection and submission. All standard data collection forms and reporting templates will be described (and annexed) in the M&E manual; while relevant data collection forms and reporting templates will also be annexed to the project implementers' contracts or ToR. The origi-

nal completed forms will be archived at the implementers' offices so that they may be consulted by the PMU or IFAD for data verification purposes

394. Once a month, or at agreed-upon intervals, the primary data collected using handwritten completed forms will be compiled and consolidated by the respective implementers, and consolidated data will be sent electronically to the M&E Officer through monthly activity reports. These standard reports will present the list of activities undertaken as per the AWPB, together with consolidated outreach tables, while supporting evidence will be attached (e.g. copies of signed list of training participants).

395. For transparency purposes, all key outputs (rehabilitated land holdings, roads, market infrastructure) and capacity building support provided under each component shall be geo-referenced and mapped digitally, using a simple GIS technology. The need for GIS tracking of key interventions will be stipulated in IP's contracts, while the M&E officer will centralize these data at the PMU level.

396. The M&E Officer will use a central, Excel-based database to record and manage all the data necessary to monitor project execution and outreach. Using the implementers' monthly activity reports, this central database will be updated every month for the periodic preparation of consolidated tables comparing physical achievements with planned targets (see appendix 11 for the suggesting template for the monitoring of project execution). The digital maps showing all project sites and interventions will be updated every three months, also using GIS information sent by project implementers.

397. In addition to the above tools, and under component 1.3, the roads feasibility studies will represent an additional, useful tool to collect outreach data (such as the number of landholdings served by the rehabilitated or newly constructed road, or the expected number of road users). Similarly, the application forms used under component 1.2 and 2.3 will be developed in such a way that they include important baseline information on selected beneficiaries' profile (age, sex, main occupation, annual income, poverty status, etc.).

398. In order to verify, randomly, the data submitted by the various actors and monitor the quality of delivered outputs, the M&E officer will participate in monthly field visits, alone or jointly with other PMU staff or project implementers. Such field visits shall also provide an opportunity to interact with beneficiaries, assess their satisfaction with services received or document stories from the field (i.e. for the preparation of knowledge material).

399. Measurement and evaluation of project results: Using comprehensive baseline data of the socio-economic situation of project beneficiaries prior to their participation in project activities, the measurement of project results (outcomes and impact) will seek to quantity the changes in the resilience[115] and incomes of direct beneficiaries, as well as the changes in land productivity, agricultural production and marketing opportunities that can be directly attributable to project interventions. For women and the youth, an additional focus will be on measuring changes in their social status or sense of empowerment. With the objective of measuring the socio-economic situation of project beneficiaries before and after project interventions, the following tools will be used:

- *Baseline surveys:* Upon selection of project villages and *in each* of these villages, project implementers will conduct baseline surveys in order to collect: (i) key data, from secondary sources (municipal offices, local MoA offices) on the general characteristics of the population[116] in these villages, as well as key agriculture and livestock production data[117]; (ii) key primary data from a sample of 50 households involved in agriculture and livestock production in these villages[118].

  For component 2.1, the village-level baseline information thus collected will not only be used as a reference against which project results and impact will be measured, it will also help plan detailed project interventions based on documented marketing constraints and opportunities.

- *Other important baseline data* on the specific socio-economic characteristics of actual beneficiary households prior to their participation in project activities will be collected upon the

[115] The final design will aim at further defining the concept of resilience and the ways in which changes will be measured.
[116] E.g. the number of households and female-headed households, key sources of incomes, access to services, mobility constraints, etc. See Chapter C for more details.
[117] E.g. total village land size, number of holdings, key crops grown, average yields, number of livestock owners. See Chapter C for more details.
[118] These 50 households will be randomly selected from municipalities lists. They may, or not, become project beneficiaries.

final selection of each beneficiary (partly using the data contain in their application forms, partly through a quick interview conducted by NGO staff, using a standard questionnaire). The baseline data thus collected outside of the baseline surveys mentioned above will concern the entire universe of component 1.2, 1.3 and 2.1 direct beneficiaries. They will be used as a reference against which results and impact will be measured at mid-term and completion.

- *Under component 1.1*. a specific M&E system will be established with the support from a partner NGO, in collaboration with the PMU and the National Agricultural Research Center (NARC), in order to measure in a scientific way adaptation benefits, stability and level of yields, improvements in soil quality, as well as any other pertinent aspects, among selected households practicing climate resilient land development and management. The partner NGO will also be expected to build an IT platform for systematic data management and analysis. Towards mid-term and completion, the results will be used for the preparation of knowledge products which will then be disseminated among MoA staff, policy makers and other stakeholders in order to inform the dialogue on land development policies and practices.
- *Monitoring of changes in beneficiary household resilience* is a particular feature of the monitoring of the impact of the project at goal level, which will also be done supported by subcomponent 1.1. Monitoring of household resilience is complex because of its multi factor characteristic. For the measurement of household resilience a resilience scorecard will be used inspired by the DFID KPI4 Methodology[119]. This methodology has a pragmatic approach to address the multifactor complexity. It only focuses at monitoring the risk and vulnerability aspects the project seeks to address or is likely to influence. It does not monitor absolute resilience but changes in resilience of the beneficiaries compared to the baseline. The questions proposed to be included in the resilience scorecard are presented in appendix 13 section G.2 linked to the project supported activities addressing climate risks and vulnerabilities. The draft resilience scorecard, that needs to be finalized during project start up, is presented in annex 2 to this appendix.
- *Outcome surveys*: These surveys will be conducted among a small sample of actual project beneficiaries (some 200 households) by local MoA and PMU staff, under the supervision of the M&E officer, on an annual basis starting project Year 1. They will help document beneficiaries' satisfaction with project support and interventions (which will be the focus of year 1 and year 2 surveys), as well as the direct outcomes of project interventions (starting year 3). These surveys will thus be the principal tool to help inform IFAD RIMS 2nd level indicators, while they will be a useful basis for informed project management decisions.
- *Farmers' and entrepreneurs' records*: Beneficiary farmers and small entrepreneurs will be requested to keep records of key data related to production, expenditures, sales and net profit, using standard templates. The primary objective will be to help beneficiaries develop a more business-oriented mindset, so that they can make informed investment decisions based on a good understanding of what are the most profitable activities. Also, as this information will be collected on a sample basis and analyzed at mid-term and completion, it will be an important source of information to measure project impact on beneficiaries' incomes and triangulate the findings of the mid-term and completion surveys. Furthermore, this information will also be used during supervision missions by IFAD consultants in order to assess the profitability of supported income-generating activities.
- *Gender studies:* Qualitative surveys shall be conducted periodically by the gender specialist, with support from the M&E specialist and the MoA gender focal point, among women and young beneficiaries in order to identify any possible factors that may hinder their participation in project activities; and, at a later stage, to document any positive intra-household changes in power relations or gender roles and project impact on their level of economic and social empowerment.
- *Mid-term and a completion surveys:* These surveys will be outsourced to a competent service provider and conducted under the overall guidance of the M&E officer. Using a before/after evaluation design, they will be conducted among a representative sample of project

[119] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328254/BRACED-KPI4-methodology-June2014.pdf

beneficiaries prior to the mid-term and completion reviews, and will document changes in beneficiaries' socio-economic situation, as compared to baseline data, allowing for the measurement and quantification of project impact. To this end, the questionnaire used for both surveys should be consistent with available baseline information.

400. Ideally, a quasi-experimental evaluation of project impact would require a counterfactual, with the implication that the mid-term and completion surveys should include a control group in an attempt to compare the with/without interventions situation. Further, a robust control group would include households from the same localities who share the same socio-economic characteristics as the beneficiary households, who would have been eligible to benefit from project interventions and would have been genuinely interested and able to participate in project activities. Therefore, the best control group would be composed of households who applied for project support and who were found eligible, but who could not be selected because of budget constraints. The PMU will reflect on the extent to which using these households to create a reliable control group is ethical, and on this basis, may proceed with the inclusion of such a control group in the design of the mid-term and completion survey. Worthwhile noting, at the time of RELAP design, IFAD's policy is to require quasi-experimental evaluation designs for only 15% of its portfolio, while all other projects are no longer required to measure impact through baseline and impact surveys.

401. **Data requirements.** To properly monitor project execution and outreach, on the one hand, and be in a position to measure and evaluate project outcomes and impact, on the other, the tables below present the key data that will need to be collected, recorded and analysed, together with suggest data collection methods and tools. This initial dataset and methods will be fine-tuned in the M&E Manual.

Table 40: Required baseline data

Type of data	Data required	Data collection tool / Data source
For component 1.1		
Testing and monitoring of climate adapted land development approaches *(to be detailed during year 1)*	– Land use data (production systems, practices) – Patterns of household food consumption – Income sources and income level – Food security status – Yields, per crop type – Soil quality – Water harvesting capacity, – Water use efficiency – Carbon sequestration benefits – Access to weather forecast services – Use of weather forecast services for production-related decisions – Access to agro-climate information – Use of agro-climate information for production-related decisions – Access to quality and regular agricultural and livestock extension services – Awareness of negative impact of climate change – Awareness on climate-smart production techniques	Baseline survey among selected beneficiaries, upon their selection
For component 1.2, 1.3, 2.1 and 3:		
Village socio-economic characteristics	– Number of households and households' members – Number of female-headed households – Unemployment rate – Total village area – Area of cultivable land and land cultivated – Grazing land area – Number of smallholdings – Number of households practising farming – Key crops grown – Number of livestock owners – Number of active producers' associations/cooperatives and membership – Number of active women and youth associations and membership	Secondary data from municipalities or local MoA Offices
Incomes, production and marketing data from *random sample* of land and livestock owners in	– Primary and secondary sources of income – Amount of annual income – Food security status – Size of land owned, cultivable, irrigated and actually cultivated	Village-level survey. Sample of 50 households involved in agricultural and livestock

Type of data	Data required	Data collection tool / Data source
project villages	– Time needed to reach agricultural land – Irrigation water availability *versus* production needs – Volume of annual production – Volume of annual production self-consumed and sold – Amount of annual income from sales of agricultural production – Type and number of animals owned – Amount of annual income from livestock production – Membership in a producers' organization/cooperative – Key production constraints – Marketing channels used – Key marketing constraints – Access to weather forecast services for production-related decisions – Use of weather forecast services for production-related decisions – Access to quality and regular agricultural and livestock extension services – Awareness of negative impact of climate change – Awareness on climate-smart production techniques	production randomly selected from municipality lists
Incomes, production and marketing data from all *actual* project beneficiaries	– Primary and secondary sources of income – Amount of annual income – Food security status – Size of land owned, cultivable, irrigated and actually cultivated – Time needed to reach agricultural land – Irrigation water availability *versus* production needs – Volume of annual production – Volume of annual production self-consumed and sold – Amount of annual income from sales of agricultural production – Type and number of animals owns – Amount of annual income from livestock production – Membership in a producers' organization/cooperative – Key production constraints – Key marketing channels – Key marketing constraints – Access to weather forecast services for production-related decisions – Use of weather forecast services for production-related decisions – Access to quality and regular agricultural and livestock extension services – Awareness of negative impact of climate change – Awareness on climate-smart production techniques	Data collected from all *actual* beneficiaries (once selected) by NGO partners and implementers, through: – Applicants' application forms – A short standard questionnaire

Table 41: Data required for the monitoring of project execution (key activities & outputs)

Project activities	Data required	Data collection tool / data source
Component 1:		
Testing and monitoring of climate adapted land development approaches	**Monitoring of activities:** – Number of information or awareness raising campaigns organized, per locality (planned and realized) – Number of applications received and approved – Number of holdings under trial (planned and realized) **Output monitoring:** – Size of area under trial – Types of crops grown on trial holdings – Number of participating farmers – Number of holdings under trial – Geographic coordinates of participating farmers – Average duration of farmers' participation in trials – Number of initial participating farmers who have dropped participation in the course of project implementation	NGO monthly progress reports (from NGO records)
	– Beneficiaries' satisfaction with project interventions – Beneficiaries' satisfaction with frequency, relevance and quality of extension services received	Annual outcome surveys

Project activities	Data required	Data collection tool / data source
Information and awareness raising campaigns	– Number of meetings held by locality and date – Number of participants	Implementers' monthly progress reports (from own records)
Land rehabilitation *(For each type of scheme):*	**Monitoring of activities:** – Date of scheme approval – Geographic coordinates of scheme – Feasibility study start and completion date (planned and realized) – Date of contract award (planned and realized) – Date of contract signing (planned and realized) – Date of contract start (planned and realized) – Date of pre-reception and final reception (planned and realized) – Total costs (planned and realized) – Amount of beneficiary cash contribution (estimated and actual)	– PMU Engineer records – PMU Procurement Specialist records – PMU Accountant records
	– Start and completion dates (planned and realized) – Quantities, material, labour, equipment and costs (as per contract and as deployed/realized) – Works' execution rate at agreed intervals – Completion date of key rehabilitation steps (planned and realized)	– Feasibility Study – Implementers' or contractors' contracts and monthly activity reports
	– Dates of supervision visits by Municipal and PMU Engineers – Date of post-reception and final inspection visits by PMU Engineer	– Municipal Engineers reports – PMU Engineers records
	Outputs monitoring: *(Private land rehabilitation/reclamation):* – Size of land area developed (planned and realized) – Cistern capacity (planned and realized) – Number of trees planted (planned and realized) *(Communal land rehabilitation):* – Size of land area developed (planned and realized) – Expected number of users (herding households) – Grazing capacity (maximum number of animals)	– Feasibility Study – Implementers' or contractors' monthly progress reports (from own records)
	– Beneficiaries' satisfaction with project interventions – Beneficiaries' satisfaction with frequency, relevant and quality of extension services received	– Annual outcome surveys
Provision of extension services	– Number of beneficiary households receiving extension services	– MoU Extension staff records – NGO implementers' records
	– % of beneficiaries reporting satisfaction with the relevance, frequency and quality of extension services received.	– Outcome surveys
Roads construction/rehabilitation *(for each scheme)*	**Monitoring of activities:** – Date of scheme approval – Geographic coordinates of scheme – Feasibility study start and completion date (planned and realized) – Date of contract award (planned and realized) – Date of contract signing (planned and realized) – Date of contract start (planned and realized) – Date of pre-reception and final reception (planned and realized) – Total costs (planned and realized) – Amount of beneficiary cash contribution (estimated and actual)	– PMU Engineer records – PMU Procurement Specialist records – PMU Accountant records
	– Start and completion dates (planned and realized) – Quantities, material, labour, equipment and costs (as per contract and as deployed/realized) – Works' execution rate at agreed intervals – Completion date of key construction steps (planned and realized)	– Feasibility Study – Implementers' of contractors' contracts – Implementers' or contractors' monthly progress reports
	– Dates of supervision visits by Municipal and PMU Engineers; – Date of post-reception and final inspection visits by PMU Engineer	– Municipal Engineers reports – PMU Engineers records

Project activities	Data required	Data collection tool / data source
	Output monitoring: – Road length in km (as per design and actual) – Nb of agricultural holdings served by the road scheme (planned and actual) – Nb of landowners served by the road scheme – Size total agricultural land area served	– Feasibility Study – Implementers' or contractors' monthly progress reports
	– Road users reporting satisfaction with project interventions	– Annual outcome surveys
Component 2:		
Establishment of multi-stakeholders' rural platforms (MRP) *(For each MRP)*	– Nb of monthly meetings organized – Nb of persons receiving management and business development training	– NGO implementers' records
	– % of MRP participants reporting satisfaction with project interventions	– Outcome survey
Market infrastructure and village construction centres *(for each scheme)*	– Date of scheme approval – Geographic coordinates of scheme – Feasibility study start and completion date (planned and realized) – Date of contract award (planned and realized) – Date of contract signing (planned and realized) – Date of contract start (planned and realized) – Date of pre-reception and final reception (planned and realized) – Total costs (planned and realized)	– PMU Engineer records – PMU Procurement Specialist records – PMU Accountant records
	– Start and completion dates (planned and realized) – Quantities, material, labour, equipment and costs (as per contract and as deployed/realized) – Works' execution rate at agreed intervals – Completion date of key construction steps (planned and realized)	– Feasibility Study – Implementers' of contractors' contracts and monthly progress reports
	– Dates of supervision visits by Municipal and PMU Engineers – Date of post-reception and final inspection visits by PMU Engineer	– Municipal Engineers reports – PMU Engineers records
	Output monitoring: – Type of infrastructure – Capacity of infrastructure – Number of expected infrastructure users	– Feasibility Study – Implementers' or contractors' monthly progress reports
	– Market infrastructure users' satisfaction with project interventions – Market infrastructure users' with improved marketing opportunities	– Outcome surveys
Business skills training *(per locality)*	– Number of BSF training sessions (planned and realized) – Training topic and duration (in days) – Number of trainees (planned and realized) *versus* number of grant recipients	Implementers' progress reports
Provision of matching grants to smallholder producers	– Number of grants' proposals received, by types of recipient and purpose – Number and value of grants approved and disbursed, by types of recipient and purpose – Geographic coordinates of grants' recipient – Number of grants disbursed according to original schedule	Grant Manager records

Table 42: Data required for monitoring outreach & targeting effectiveness

Project activities	Data required	Data collection tool
Component 1		
Testing of climate adapted land dev. approaches	– Number of participating households – Sex and age of beneficiary land owner	NGO/implementers' records
Information campaigns	– Number of participants	NGO/implementers' records
Land rehabilitation and reclamation	*(Per type of interventions):* – Number of beneficiary households – Total number of members in beneficiary households – Sex and age of beneficiary land owners *(For each beneficiary household*): – Total number of members in beneficiary households	– Feasibility studies – Beneficiaries' application forms

	– Sex and age of beneficiary land owner – Sex and age of head of beneficiary household – Primary, secondary and tertiary household's income sources – Amount of annual household's income – Percentage of annual income derived from agriculture/livestock – Percentage of annual income from assistance	
Grazing land development	– Number of actual grazing land users – Number of animals using grazing land	– Feasibility studies – Local MoU staff records
Roads construction/rehabilitation	– Number of expected user households – Of whom, number of user households also supported under Component 1.2	Feasibility studies
Component 2:		
Establishment of multi-stakeholders' rural platforms (MRP) *(For each MRP)*	– Number of MRP participants – Occupation, age and sex of MRP participants – Nb of persons receiving management and business development training – Sex, age and occupation of persons receiving management and business development training	NGO implementer progress reports
Market infrastructure *(For each locality)*	– Number of expected infrastructure users – Number of actual users, by type of occupation (e.g. producers / traders/ brokers / processors) – Number of infrastructure users also supported under Component 1	Infrastructure technical feasibility studies
Provision of matching grants to smallholder producers	*(Per grant amount category):* – Number of grant recipients – Average grant size – Expected purpose of grants (by sectors) *(For each beneficiary household*): – Total number of members in beneficiary households – Sex and age of grant's recipient – Sex and age of head of beneficiary household – Primary, secondary and tertiary household's income sources – Amount of annual household's income Percentage of annual income from assistance – Expected purpose of grant	
Component 3:		
Capacity building for PCU, Government staff and other stakeholders	– Number of trainees – Trainee' age, sex, and employing institution – Training topic and duration	Trainers' records

Table 43: Data required for the measurement of outcomes and impact

Project activities	Data required	Data collection tool
Component 1:		
Testing and monitoring of climate adapted land development approaches	– Annual income, per source of income – Annual yields, per crop type – Expenditures, sales and net profit per crop type – Food security status	Annual outcome surveys
	– Land use practices/ production systems – Household food consumption patterns – Soil quality – Water harvesting capacity – Water use efficiency – Carbon sequestration benefits – Annual income, per source of income – Annual yields, per crop type – Expenditures, sales and net profit per crop type	Mid-term and completion surveys
	– Annual yields, per crop type – Annual volume of crops harvested, per crop type – Annual expenditures, sales and net profit per crop type	Farmers' records
	– Irrigation water availability *versus* production needs – Annual volume of production, per crop type	– Annual outcome surveys – MT and completion

	– Annual income from sales of agricultural production, per crop type	surveys
Land rehabilitation/reclamation *(private land)*	– Primary and secondary sources of income – Amount of annual income – Food security status – Size of land owned, cultivable, irrigated and actually cultivated – Security of land ownership – Time needed to reach agricultural land – Irrigation water availability *versus* production needs – Size of rehabilitated/reclaimed area under cultivation – Annual volume of production, per crop type – Annual volume of production self-consumed, per crop – Annual volume of production sold, per crop – Annual income from sales of production – Type and number of animals owned – Amount of annual income from livestock production – Membership in a producers' organization/cooperative – Access to weather forecast services for production-related decisions – Use of weather forecast services for production-related decisions – Access to quality and regular agricultural and livestock extension services – Awareness of negative impact of climate change – Awareness on climate-smart production techniques	Mid-term and completion surveys
	– Time needed to reach agricultural land – Irrigation water availability *versus* production needs – Annual volume of production, per crop type – Annual income from sales of agricultural production, per crop type – Annual expenditures, sales and net profit, per crop type	Annual outcome surveys
	– Annual yields, per crop type – Annual volume of crops harvested, per crop type – Annual expenditures, sales and net profit per crop type	Farmers' records
Roads construction/rehabilitation	– Physical access to markets by road users – Post-harvest losses of road users – Time needed to reach road users' land	Annual outcome surveys
Component 2:		
Business skills training	– Number of trainees and trainees' profile (age, sex, occupation, provenance) – Training topic and duration	BSF training records
Provision of grants to rural micro-entrepreneurs	– Income – Expected purpose of grant	VCF grants' application forms
Component 3.1:		
Agro-climate information and extension services to farmers	– Access to weather forecast services – Use of weather forecast services for production-related decisions – Access to agro-climate information – Use of agro-climate information for production-related decisions – Access to quality and regular agricultural and livestock extension services – Awareness of negative impact of climate change – Awareness on climate-smart production techniques	Annual outcome surveys Mid-term and completion survey

402. **Reporting.** Based on the monthly activity reports and annual progress reports prepared by project implementers, on the one hand, and on the activity reports prepared by selected PMU staff, on the other, the M&E Officer will prepare the following reports:

- **Quarterly progress reports**: Two quarterly progress reports will be prepared each year to describe progress and achievements against the quarterly targets defined in the AWPB, and identify shortcomings. The report will be mainly for internal management purposes and will not need to be shared with IFAD (English translation will not be required).
- **6-monthly progress reports**: The report will be prepared using the template in appendix 11 to describe progress and achievements, or lack thereof, against 6-monthly targets. The detailed physical and financial achievements will be summarized in a table (See appendix 11 for template). Key implementation issues will be highlighted, together with recommended actions. The report is mandatory and will be sent to IFAD (in English) for information.

- **Annual progress reports:** The report will be prepared using the annotated template provided in appendix 11. In addition to the sections covered in the 6-monthly progress report, the annual report will provide a detailed overview of project and implementation partners' performance with regard to M&E, targeting, gender mainstreaming, outreach, sustainability, etc. The report is mandatory and will be sent to IFAD (in English) and the PSC for information.

403. IFAD has established a corporate results' monitoring system, the "Results and Impact Management System" (RIMS), which consists of the systematic tracking, for its entire portfolio of projects, of annual achievements against a set of standard output indicators (called "level 1" indicators), outcome indicators (called "level 2" indicators) and outreach indicators. Annual reporting is mandatory for all IFAD-funded projects. For each relevant RIMS indicator, annual reporting to IFAD will consist in the reporting of output-level achievements against planned, annual targets (as identified in the AWPB); and in the reporting of cumulative achievements to date compared with global targets (as identified in the project Log-frame). RIMS data will be reported by IFAD supervision missions, based on the information provided by the M&E Officer. In preparation of these missions, the M&E Officer will prepare a consolidated table showing annual progress and cumulative progress to date in relation with all Log-frame output targets.

404. Towards the end of the third year of implementation a MTR will be jointly organized by the government and IFAD to assess project management performance, implementation status, outreach and targeting, as well as progress towards the achievement of the project development objectives. The MTR will also focus on corrective actions in order to address performance gaps and other issues.

405. Towards the end of the project completion period, ideally before the project completion date but no later than 3 months after project closing, a project completion review (PCR) will also be jointly organized by the government and IFAD. The PCR will focus on assessing the relevance of project interventions, implementation effectiveness and efficiency, outreach and targeting, the likelihood of sustainability of project benefits and the potential for upscaling and replication. The PCR also aims at generating and documenting useful lessons from implementation that will help improve future programming or policies. Both the MTR and PCR processes shall be informed by the findings of the mid-term and completion surveys.

406. **Responsibilities.** Each implementing partner (NGOs, local MoA staff, municipality engineers) will be responsible for collecting the necessary activity, output and outreach data for the activities falling under their responsibilities. Detailed data requirements will be clearly stipulated in their contracts, MoU or ToR. Implementing partners will also be responsible to maintain an electronic database to record all primary data collected (especially data on beneficiaries' profiles). Original hard copies of completed data collection forms (e.g. signed lists of training participants) will be filed at the implementers' offices and kept available to PMU staff for verification purposes, while copies shall be attached to the activity reports that will need to be submitted each month to the PMU M&E Officer. These monthly activity reports and annual progress reports will use a standard template and will include standard consolidated data tables.

407. Selected PMU staff (land development engineer, agricultural road engineer, extension officer, irrigation engineer and a marketing officer) will also play a key role in data collection (using standard data collection forms and records) for all the activities that they will implement themselves (e.g. training, supervision visits). For the proper monitoring of works, the land development engineer, agricultural road engineer and irrigation engineers will also be responsible to maintain their own records, using the information contained in implementers' monthly activity reports and the monitoring templates provided in the M&E Manual. After each field visits, they shall also prepare a mission report, using a standard outline, to be copied to the M&E officer; and they shall prepare each month an activity report to describe progress in their respective domains (to be submitted to the M&E officer).

408. The M&E officer will be overall responsible, among others, for establishing a sound M&E system; preparing the M&E Manual and all necessary data collection and reporting templates; training implementers and PMU staff in the use of these form and templates; ensuring that all implementers submit monthly activity reports and other progress reports; developing and maintain an electronic database; verifying on a random basis the reliability of the information provided by implementers; organizing or supervising quantitative and qualitative surveys; preparing quarterly, six-monthly and annual progress reports; preparing and updating digital maps showing key project interventions and outreach.

Table 44: Results framework

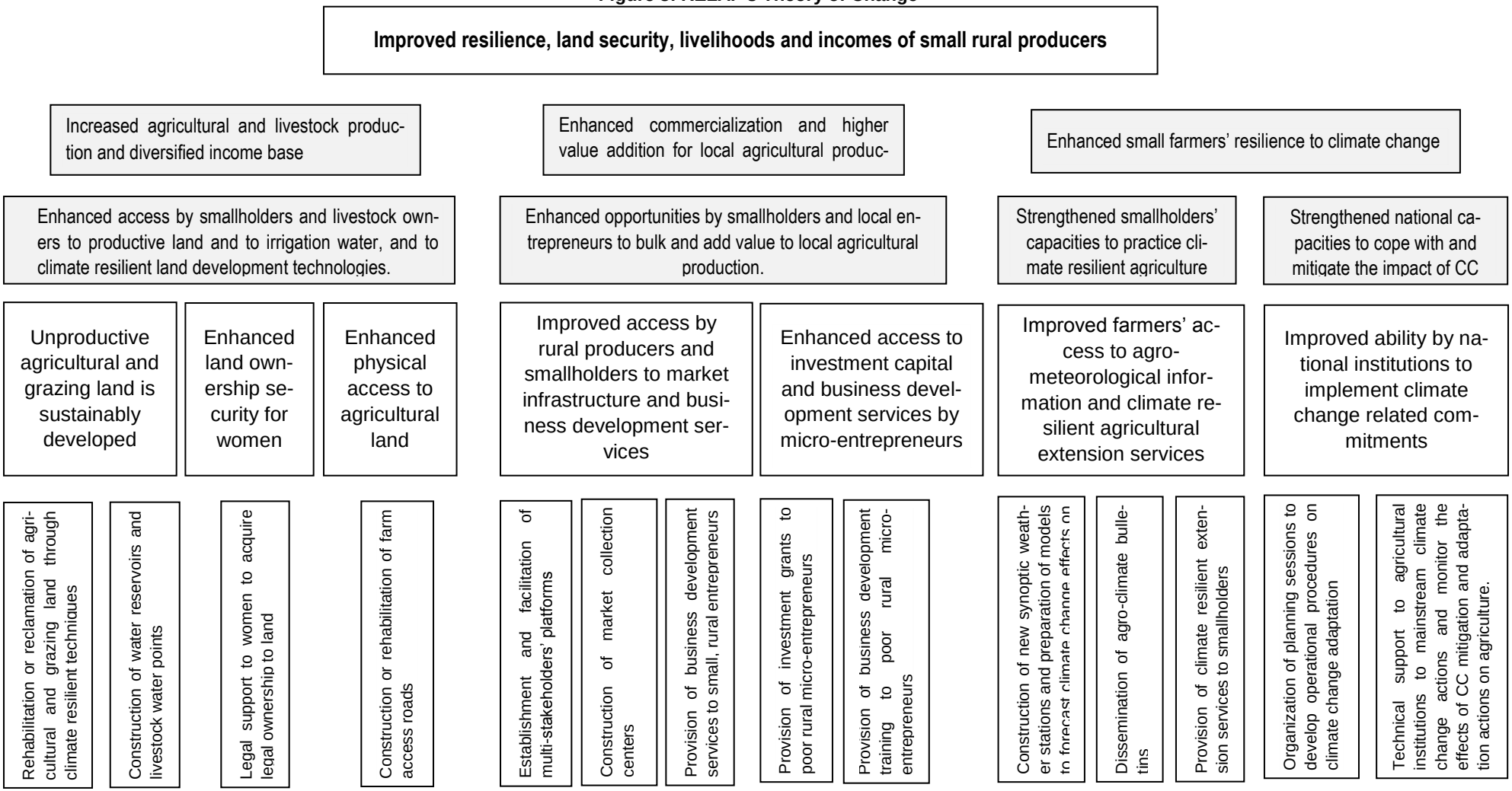
Objectives and expected results	Indicators		Targets			Means of Verification			Risks
		Baseline data	Y1	Mid-term	Y6	Source	Frequency	Responsib.	
Goal: To improve the resilience, land security and livelihoods of rural producers' households in selected villages of the West Bank.	At least 75% of the 4500 targeted beneficiary farmers (component 1) report a 20% increase in revenues	n/a	n/a	1,350	3,375	(i) Baseline and impact surveys; (ii) Sample of farmers' records	(i) Y1, Y3 and Y6; (ii) Annually	PMU	Sudden increase in prices may cause an increase in households' expenditures and override economic resilience benefits.
	At least 70% of the 900 targeted investment grant beneficiaries subcomponent 2,2) report a revenue of at least NIS 2,293/month	To be collected in Y1	n/a	180	630			PMU	
	Percentage of targeted households (all components) with enhanced resilience to climate change **(A)**	To be collected in Y1	n/a	9,000	24,000	Baseline and impact surveys	Y1, Y3 and Y6	PMU	
Development Objective: To increase climate resilience, land productivity, agricultural production and marketing opportunities for smallholders and landless rural poor	Number of households reached and supported	0	1,231	24,154	30,000	Annual outcome surveys (AOS)	Annually		Volatile economic and political situation disrupt implementation. Severe droughts may cause low agricultural productivity or production. Mobility restrictions may disrupt production and marketing.
	Number of supported households reporting an increase in production (RIMS)	n/a	0%	265	1,590		Annually, starting Y2	PMU	
	Number of hectares of land brought under climate-resilient management(RIMS)	0	0	955	1,800	Implementers' activity report,	Annually	PMU and implementers	
COMPONENT 1									
Outcome 1*:* Enhanced smallholders' and livestock keepers' access to productive agricultural land and water	Number of supported farmers reporting reduced water shortage vis-à-vis production needs (RIMS)	n/a	0	795	2,120	AOS	Annually	PMU	Delays in the selection or contracting of key implementing partners may cause implementation delays. Political interference in the local beneficiaries' selection process may cause mis-targeting
	Number of developed land reaching a productivity per dunum at least 20% higher than the average for similar crops and livestock systems in the West Bank five years after the start of land development activities	0	0	0	1,855	Midterm review report and impact survey	Y3 and Y6	PMU	
	Number of farmers and livestock keepers reporting adoption of climate resilient practices (RIMS)	0	0	1,325	2,120	AOS	Annually	PMU	
Output 1.1: *Unproductive land is developed using climate-resilient techniques*	Number of ha of reclaimed or rehabilitated land areas that became suitable for agricultural use (MOA)	0	0	780	1,450	Implementers' activity reports	Annually	PMU and implementers	
	Number of ha of rangeland rehabilitated	0	0	175	350				
	Number of livestock owners accessing rehabilitated rangeland	0	0	0	200				
Output 1.2: *Men and women smallholders are provided with legal support to obtain land property titles*	Number of persons provided with legal support to obtain formal land title **(B)**	0	0	20	40	Implementers' activity reports	Monthly	PMU and Implementers	Social pressure prevents women from seeking support Long court delays

Objectives and expected results	Indicators	Baseline data	Targets			Means of Verification			Risks
			Y1	Mid-term	Y6	Source	Frequency	Responsib.	
Outcome 2: Enhanced smallholders' physical access to markets	Number of farmers whose land holdings are connected to constructed or rehabilitated road **(B)**	0	0	2,550	4,500	AOS	Annually	PMU and implementers	Difficulties in identifying land development beneficiaries living close to one another may inflate costs or result in lack of road access for some Component 1.1 beneficiaries.
Output 2.1: *Market-access rural roads are constructed or rehabilitated.*	Number of km of roads constructed or upgraded (MOA, RIMS)	0	0	25	100	Implementers' activity reports	Monthly	PMU and Implementers	
COMPONENT 2									
Outcome 3: Increased marketing and business opportunities for farmers, rural producers and traders	Number of individuals or groups with signed contracts to market their products (MOA, RIMS)	0	0	500	1,500	AOS	Annually	PMU	Farmers' reluctance to use new marketing channels Traders' and brokers reluctance to join competitors in MRP may hinder results
	Number of traders, rural producers and brokers with improved marketing opportunities **(B)**	0	0	3,326	6,650				
Output 3.1*: Multi-stakeholders' rural platforms (MRP) are established and facilitated*	Number of MRP established	0	0	30	30	Implementers' activity reports	Monthly	PMU and Implementers	Lack of facilitation skills by implementers may jeopardize MRP's success.
	Number of micro-entrepreneurs receiving agricultural business development services (MOA, RIMS) **(B)**	0	0	1,675	1,675	Implementers' activity reports	Monthly	PMU and Implementers	
Output 3.2: *Village-level collection centres are rehabilitated/constructed, with functional management bodies.*	Number of collection centers constructed (RIMS)	0		11	11	Implementers' activity reports	Monthly	PMU and Implementers	Difficulties in identifying suitable municipal land Political influence may result in selection of unsuitable location.
Outcome 4: Enhanced income-generating capacities for poor, unemployed and landless rural youth and women.	Number of new jobs created (*including self-employed micro-entrepreneurs*) (RIMS) **(B)**	0	tbd	tbd	tbd	Annual outcome surveys	Annually	PMU	Social or family pressure prevents women from seeking project support. Husbands' capture of women's benefits.
	Number of supported (*existing*) micro-enterprises reporting an increase in profit (RIMS)	0	0	1,172	1,507	Annual outcome surveys	Annually	PMU	
Output 4.1*: Targeted, poor rural youth and women provided with investment grants*	Number of persons receiving investment grants and BDS**(B)**	0	0	675	900	Grants' management committee reports	Monthly	PMU	The lack of reliable data on applicants' income, may cause mistargeting
Output 4.2: *Business skills training and capacities development support provided to targeted poor rural youth and women*	Number of rural entrepreneurs accessing business development services or trained in income generating activities (RIMS) **	0	0	675	900	Implementers' activity reports	Monthly	PMU and Implementers	Husbands' reluctance to let their wives to attend capacity building events outside of the village may jeopardize results.
COMPONENT 3									
Outcome 5: Enhanced access by farmers and rural producers to practical agro-meteorological information	Number of supported farmers and livestock owners reporting accessing and using agro-climate information bulletins	n/a	0	15,000	27,000	Annual outcome surveys	Annually	PMU	Difficulties in tracking the total number of households accessing agro-meteorological information in the project target area,
Output 5.1. *Weather stations upgraded/installed and equipped,*	Number of agro-metrological stations upgrad-	0	0	12	12	Implementers' activity reports	Monthly	PMU and Implementers	

Objectives and expected results	Indicators		Targets			Means of Verification			Risks
		Baseline data	Y1	Mid-term	Y6	Source	Frequency	Responsib.	
with relevant staff trained in their proper operation	ed/installed and equipped								may be an obstacle to the proper measurement of results.
***Output 5.2.** Farmers have received technical advices in their adoption of climate resilient agriculture practices and are provided with regular agro-climate information*	Number of agro-climate bulletins issued annually	0	0	36	36	Implementers' activity reports	Monthly	PMU and Implementers	
	Number of farmers receiving technical advices, by topic [(B)]	0	1,231	17,847	30,000	Implementers' activity reports	Monthly	PMU and Implementers	
Outcome 6: Strengthened institutional and technical capacities for the implementation of the "*Action Plan for improving the Institutional Framework for Climate Change in Palestine"*	Percentage of Action Plan adaptation activities fully implemented	0%	0%	40%	70%	Implementers' activity reports	Quarterly	PMU and Implementers	Insufficient cooperation between MoA, EQA and FAO could jeopardize results.
***Output 6.1:** MOA and governorates have capacities to mainstream climate change adaptation measures in working/operational procedures*	*Number of governorates that have included climate change adaptation measures in annual planning, budgets, programs, and monitoring*	0	0	4	11	Implementers' activity reports	Monthly	PMU and Implementers	

[(A)] Indicator on climate resilience on beneficiary households will be monitored using a resilience score card as explained and presented in SECAP Appendix 13 and in M&E Appendix 6
[(B)] Data for these indicators will be disaggregated by sex (number of men and women to be reported separately) and age group (number of youth to be reported separately).

Figure 8: RELAP's Theory of Change



Annex 1, Appendix 6: Draft TOR for baseline survey

1) Background

A) Project objectives and expected results

B) Logframe indicators

C) Target groups and target area

2) Purpose

The proposed baseline survey aims at: (a) the collection of quantitative and qualitative information on the socio-economic conditions of potential project beneficiaries; and (b) the quantification of the initial baseline values for the project Logframe indicators (impact and outcome level).
Baseline data collected will be primarily used, at mid-term and project completion, as a reference for the measurement of project effectiveness and impacts. They may also be used to inform the planning of certain project interventions, or the process of beneficiaries' selection.
Among others and in relation with the specific project objectives and target groups, the baseline survey shall provide information on the following:

- General socio-economic situation in targeted municipalities (school enrolment, literacy rate, access to healthcare, poverty rate, etc.).
- Households' characteristics (number of members, age, sex).
- Ownership of, and access to productive/arable land, irrigated land, forests (ha owned, rented, actually utilized).
- Agricultural production: Key crops grown by households (number of ha grown, average yield/ha) and income derived; level of production of different crops.
- Livestock production: Types and number of animals owned by households; number of animals sold/year; Dairy production (type, quantities produced and sold);.
- Other sources of income; Total household annual income; Total farming income; Number of income contributors.
- Key assets owned.
- Access to quality inputs.
- Access to agricultural extension or livestock husbandry services.
- Access to domestic water, irrigation water and water for livestock.
- Access to financial capital and credit.
- Access to roads and status of roads.
- Access to markets, traders and buyers
- Access to market information.
- Effects of climate change on livelihoods and household-level adaptation strategy.
- Key drivers of rural poverty.

Under the various component, specific project activities will target specific groups of beneficiaries. Thus, component 1 will target small land owners (including 10% women) and livestock owners, component 2 will target small farmers and traders and female and young rural micro-entrepreneurs, while component 3 will target a much wider range of farmers. For each of these groups, the baseline survey will also seek to collect more specific information, such as the one presented in the following table.

Project activities	Data required
Testing and monitoring of climate adapted land development approaches	– Annual income, per source of income – Annual yields, per crop type – Expenditures, sales and net profit per crop type – Food security status
	– Land use practices/ production systems

	– Household food consumption patterns – Soil quality – Water harvesting capacity – Water use efficiency – Carbon sequestration benefits – Annual income, per source of income – Annual yields, per crop type – Expenditures, sales and net profit per crop type
	– Irrigation water availability *versus* production needs – Annual volume of production, per crop type – Annual income from sales of agricultural production, per crop type
Land rehabilitation/reclamation *(private land)*	– Primary and secondary sources of income – Amount of annual income – Food security status – Size of land owned, cultivable, irrigated and actually cultivated – Security of land ownership – Time needed to reach agricultural land – Irrigation water availability *versus* production needs – Size of rehabilitated/reclaimed area under cultivation – Annual volume of production, per crop type – Annual volume of production self-consumed, per crop – Annual volume of production sold, per crop – Annual income from sales of production – Type and number of animals owned – Amount of annual income from livestock production – Membership in a producers' organization/cooperative – Access to weather forecast services for production-related decisions – Use of weather forecast services for production-related decisions – Access to quality and regular agricultural and livestock extension services – Awareness of negative impact of climate change – Awareness on climate-smart production techniques
	– Time needed to reach agricultural land – Irrigation water availability *versus* production needs – Annual volume of production, per crop type – Annual income from sales of agricultural production, per crop type – Annual expenditures, sales and net profit, per crop type
Roads construction/rehabilitation	– Physical access to markets by road users – Post-harvest losses of road users – Time needed to reach road users' land
Business skills training	– Primary, secondary and tertiary household's income sources – Amount of annual income, per source of income – Food security status – Percentage of annual income from assistance – Membership in a producers' organization/cooperative – Expenditures, sales and net profit per income-generating activities – Access to BDS services – Access to microfinance services – Access to markets
Agro-climate information and extension services to farmers	– Access to weather forecast services – Use of weather forecast services for production-related decisions – Access to agro-climate information – Use of agro-climate information for production-related decisions – Access to quality and regular agricultural and livestock extension services – Awareness of negative impact of climate change – Awareness on climate-smart production techniques

3) Methods of data collection

After a review of the PDR, the PIM and other relevant documents, such as the MoA sector documents or municipal statistics, the Service Provider shall prepare a detailed methodological note highlighting the sampling strategy, process and tools for data collection, including survey questionnaires and interview guides. The following methods shall be used:

Households' survey: A quantitative survey will be carried out among a representative sample of rural households living in the targeted municipalities. The sample shall be representative of the key characteristics of future project primary beneficiaries in targeted municipalities. The purpose will be to collect quantitative data on rural households' livelihoods, income and socio-economic status, as well as on the extent of their access to essential production inputs, knowledge and markets.

One-on-one interviews with key informants: Semi-structured, open-ended interviews will be conducted with key informants (village or community leaders, municipal staff) in order to gain an in-depth understanding on specific aspects (e.g. drivers of poverty, production and marketing constraints, production levels, etc.).

Focus group discussions: In order to better comprehend the complex issue of resilience to climate change, semi-structured interviews will be organized with groups of producers sharing common characteristics (E.g. groups of livestock owners, women, youth, crop producers, fruit trees growers).

Use of secondary data: A thorough review of available secondary data for targeted municipalities will be carried out in order to provide background, macro-level information on targeted municipalities (access to education, food security, health, agricultural production and sales).

4) Sampling strategy and framework

Ideally, the survey should be conducted among a sample of actual beneficiaries, but the process for their selection may not be finalized at the time of the survey. Thus, at the time of baseline survey, the exact list of Component 1 beneficiaries or the location of Component 2 infrastructure will not be known. The Consultant will suggest an appropriate sampling strategy and sample size, keeping in mind the estimated size of potential beneficiary households and the various characteristics of the targeted municipalities (e.g. in terms of poverty rate, population size or agro-ecological potential). IFAD usually recommends that a sample of 900 households (30 households in 30 localities) be followed. Depending on the extent of homogeneity of target groups' socio-economic characteristics and agro-ecological potential across the targeted municipalities, the consultant will consider the need to apply a purposeful, stratified cluster sampling method, or if other sampling methods appear more appropriate.

5) Key tasks to be performed

Before field work:

- Preparation of a draft detailed methodological note: This document will describe, among others: (a) the proposed methodology, processes and tools; (b) the sampling framework (including specific on the design methodology and sample size calculation); (c) the field implementation plan with protocols for the enumerators and supervisors; (d) a calendar or activities; (e) Survey questionnaire and interview guide; and (f) survey report outline.
- Finalization of the methodological note based on feedback from the PMU and IFAD.
- Recruitment, training and coaching of enumerators and supervisors.
- Pre-testing and finalization of the questionnaire and interview guides.
- Database development.

In the field:

- Coordination with local partners and the PMU.
- Notification to partners and communities.
- Organization of survey logistics (material, transportation, lodging, etc.).
- Sample households' selection based on agreed sampling method and identification of key informants in sample villages/localities.
- Administration of the questionnaire and data collection through KII and FGD.
- On-site, quality control of data by supervisors before entry in database (if questionnaires are completed manually) or before uploading to database (if using electronic tablets).
- Tabulations and pre-analysis of FGD and KII responses

After field work:

- Data entry in database (if not using electronic tablets) and quality control.
- Data analysis and preparation of draft report
- Finalization of survey report based on PMU and IFAD comments
- Delivery final report and electronic files and raw data
- Presentation of final survey results to the PMU

6) Key deliverables

At the end of the assignment, the following products will have been delivered by the Consultant:

- Inception Report – To be submitted within one calendar week of the date of contract signing. This report will include a fully elaborated methodological note, including the approach and proposed survey instruments, sampling frame and sampling methodology, number of FGDs and the number of participants and locations, draft questionnaires and other survey tools, data processing and analysis methodology. It will also include an outline of the final survey report and the schedule of activities.
- Pilot Survey Report – To be submitted within one calendar week of the submission of the Inception Report. This report will provide the results of a small pilot survey (test), together with proposed changes to the survey instruments and/or questionnaire.
- Draft Survey Report – Survey findings will be compiled for both households' survey and FGDs in a draft Impact Survey Report, to be submitted within nine calendar weeks of the date of contract signing.
- Final Survey Report – To be submitted within one calendar week of the date of submission by the PMU of written comments on the draft Survey Report.

The final survey report shall present the results of the quantitative survey using charts, tables and narratives according to the agreed outline, while findings from FGD, KII and secondary data will provide contextual information and help deepen or complement survey findings. It shall also include a detailed description of the procedures and processes used during the field work, the description of problems faced during the exercise (if any) and the solutions adopted to overcome these issued. The raw data collected shall be annexed to the report and will also be submitted electronically.

7) Tentative deliverable dates:

Activity	Duration
Survey planning (desk review of documents, introductory meeting with PMU staff, sampling strategy, questionnaire development)	1 week
Training of enumerators, pilot testing and reporting outcome of testing	1 week
Modifying sampling strategy, questionnaire, etc. based on pilot testing outcomes	1 week
Field visits: data collection and FGDs	3 weeks
Data entry	1 week
Data Analysis and Draft Report Submission	3 weeks
Modifying report based on feedback and re-submitting report	1 week
Total duration	**11 weeks**

8) Service Provider qualifications

The Service Provider should have strong expertise and good track record of project M&E. It must be registered under appropriate law/regulation in Palestine and have **a minimum operational period of five years.** Experience in project M&E, in particular for designing and conducting an impact study or quantitative surveys, is a requirement. Knowledge about institutional set-up and operational modalities of the Government, especially the Ministry of Agriculture, and experience with externally funded projects in rural areas, will be an asset.

The Service Provider shall mobilize a team of experts dedicated to this exercise during the entire contract period. The core team should comprise: a Team leader (an M&E expert), a statistician, data

analysis expert and FGD facilitator(s), in addition to the required number of enumerators and supervisors, who shall be properly equipped to undertake field work.

At the minimum, the Team leader should have the following profile:

- A University Degree in a Social Science or a related field from an accredited university.
- At least seven (7) years of experience in the conduct of development research, socio-economic and impact surveys.
- At least seven (7) years of practical experience in conducting qualitative surveys, preferably with a background in rural development.
- Specific experience in data and information analysis and report writing.
- Prior experience in conducting baseline and impact surveys for UN agencies or the EU will be a plus.

Working knowledge of English and Arabic is required, especially for key team members.
The Consultancy firm will be responsible for the payment of all staff, per diem and logistical expenses and arrangements relating to the work as well as office expenses and equipment, report translation and publication and for obtaining all relevant permissions. The PMU might provide such assistance as is necessary and feasible.

Annex 2, Appendix 6: Resilience monitoring scorecard

Below is a draft resilience scorecard, to be finalized at start up (higher scores means more resilience)

Indicator	Yes	No
1) Can you explain how climate variability and change have affected your production activities the last 10 years and how they will be affected in the future?	1	0
2) Can you explain what options of adaptation practices and changes in your production system you can and/or may implement to address these risks?	1	0
3) Do you know how warnings on weather and climate risks are communicated by the government's early warning systems and which actions to take to avoid or reduce negative impacts on production?	1	0
4) In the last 3 years have you used weather forecast information to make decisions in the planning of your production activities?	1	0
5) Is the land the RELAP project has supported you in developing legally registered in the name of an adult currently living in the household?	1	0
6) Since you started to implement land development activities supported by the RELAP project, has there been any threats to losing your land under development?	0	1
7) Does the land developed have sufficient access to water resources (stored in soils and/or cisterns) to cover the needs of the production during the dry season?	1	0
Only for beneficiaries of the MET facility => 8) Is your micro business supported by the RELAP MET facility constrained by insufficient access to water?	0	1
9) Have you introduced practice to improve fertility and water storage capacity of your soils?	1	0
10) Have you observed any improvement in the yields of your crops by using these practices?	1	0
Only for rangeland rehabilitation beneficiaries => 11) Have you participated in any activities for rehabilitation of rangelands agreed with your community and do you trust it will bring positive benefits?	1	0
Only for rangeland rehabilitation beneficiaries => 12) Do you think your community will be able to manage rehabilitated rangeland? (why, why not?)	1	0
Only for beneficiaries of land development using irrigation with treated wastewater => 13) Do you have access to sufficient treated wastewater from irrigation system to cover your production needs?	1	0
Only for beneficiaries of land development using irrigation with treated wastewater => 14) Do you participate in the WAU and does the WAU effectively maintain and operate the irrigation system?	1	0
Only for beneficiaries of land development in wadis => 15) Do you have access to sufficient water for your land in the developed wadis to cover your production needs?	1	0
Only for beneficiaries of land development in wadis => 16) Is your land in the developed wadis under profitable production?	1	0
Total project attributable climate resilience score		

The M&E specialist in collaboration with other PMU staff will improve and adjust the scorecard and validate it with participation of beneficiary Villages. The proposed questions are formulated directed to households who are receiving project services, which is adequate for the rolling monitoring of the results of the project. But for the baseline study they should be revised to fit a baseline survey situation where both future potential beneficiary households and control group households are surveyed. In other words, it is important to consider what should be the resilience scorecard for the baseline, mid-term and final survey and what would be the resilience scorecard to monitor the progress in household resilience of beneficiary families as the project is rolled out.

The scores assigned to each questions in the draft scorecard proposed above are simply 1 and 0. It could be considered if all questions should have equal weight. Instead of only using binary 'yes' or 'no' answers scores it could also be considered to use:

a) Categorical scores to capture qualitative answers transformed into quantitative perception of resilience scored as for example 'would not be affected'=3, 'would be moderately affected'=2, and 'would be seriously affected'=0. Question example "How well would you and your family cope with a drought like the one that happened in 2015 if it happened within the current/next cropping season – how would you be affected?"
b) Continuous variables using a range to convert into a resilience score for for example household income, yield/ha, time for recovering after a shock. Answers to for example the last question on time to recover after a shock are divided into ranges assigned a score: 1 month=3; 2-3 months=2; 4-6 months=1; and >6 months=0.

Appendix 7: Financial management and disbursement arrangements

A. Inherent risks: country issues, entity risks and project design

409. The last public expenditure and financial accountability (PEFA) report for Palestine was published in 2013, followed by a World Bank public expenditure review (PER) of the Palestinian Authority in 2016. Both the PEFA and the PER report that the PA has made substantial progress in improving the efficiency, accountability, and transparency of its public financial management system (PFM), and in strengthening its public expenditure framework. Following the 2006 election, which led to the separation between the West Bank and Gaza, the Palestinian PFM system was successfully re-built, with: the relocation of the budget department in Ramallah; the establishment of the single treasury account and a debt management office; the implementation of BISAN as the new PA government integrated financial management information system (IFMIS); the reintroduction of monthly reporting and annual financial statements; and the development of internal and external audits. PEFA indicators related to comprehensiveness of budget information and transparency, control and audit, accounting and financial reporting are thus reported to have improved significantly. In the area of public expenditure, major efforts have been made to reduce the budget deficit (from 25%of GDP in 2007 down to 10% in 2014), to control the wage bill (through limitations in recruitment and salary increases) and to fund the capital investment program from domestic resources.

410. Yet, the PEFA report has highlighted persistent weaknesses in several areas. Further improvements are necessary in budget preparation and execution (hampered by the lack of cash planning and commitment control tools), public disclosures (of debt, budget and procurement information), fiscal relations between central and local governments, accounting policies/practices and internal controls. Furthermore, the report stresses the need to fully implement the currently ongoing public procurement reform. The PER report underlines the need for the PA to address the current fiscal situation (insufficient tax revenues coupled with high expenditures); the substantial dependence on foreign aid; the very low level of public investment; the heavy reliance on public sector employment to increase economic growth (as evidenced by the high public sector wage bill); and the average quality of public services.

411. Palestine is not included in the Transparency International scoring, and there is limited information available on corruption. Nevertheless, the literature available suggests that, despite improvement (notably the enactment of the State of Palestine anti-corruption law and the establishment of an anti-graft court and commission in 2010), corruption remains a major problem in the West Bank[120].

412. In light of the above, and given the highly volatile political and security situation in Palestine, coupled with the fact that the government operates with no electoral mandate and no functioning legislature, the country risk is rated as high.

B. Financial management risk assessment

413. Based on the financial management risk assessment, the overall fiduciary risk was rated as Medium, due to potential difficulties in the recruitment of competent staff, the inadequacy of the government IFMIS for project accounting and financial management, and the limited capacity of the internal audit unit at the executing agency level. It is considered, however, that RELAP financial management arrangements and internal control systems will satisfy IFAD's minimum requirements to provide accurate and timely information on the progress of project implementation and appropriate accountability for funds. The residual financial management risk may be reduced to Low, provided that the following appropriate risk mitigation measures are adopted:

- Competitive recruitment of the finance and procurement staff;
- Training of staff on IFAD guidelines and procedures at project start-up and continued support during the 1st year of project implementation;

[120] Transparency International 2010 Global Corruption Barometer, World Bank Institute 2011 Worldwide Governance Indicators, Global Integrity 2010 West Bank report and Freedom House, 2012 Freedom in the World-West Bank.

- Drafting of a financial and administrative procedures manual (including detailed procedures on the financial, accounting, procurement and administrative management of the project) to be submitted to IFAD's no objection as a condition of first disbursement;
- Purchase and installation of an accounting software that is designed for project accounting and meets all IFAD requirements as a condition of first disbursement.

414. The risk assessment summary table and proposed mitigation measures are shown as annex 1 to this appendix.

C. Proposed financial management and disbursement arrangements

415. **Financial management organization**. Although it is intended to be fully embedded and located within the MoA, the RELAP PMU will be vested with financial and administrative autonomy. The fiduciary team will be composed of a finance officer, a procurement officer and an accounts & administrative assistant, all recruited through a competitive process. These staff will be hired on one-year contracts renewable based on satisfactory performance. Detailed terms of reference for each of these positions are attached to appendix 5.

416. **Internal controls**. The RELAP internal controls system will rely heavily on the MoA system, as all transactions have to be approved by high-ranking ministry officials and validated by the MoFP financial controller. The project internal control mechanisms (and its linkages to the MoA internal controls system) will be detailed in the financial and administrative procedures manual, to be prepared before disbursements begin. IFAD will be requested to provide no-objection on this manual.

417. **Budgeting**. All project activities for each component and subcomponent will be included in an AWPB. The AWPB will detail the activities, quantities, unit costs, implementing entity, target dates, and will allocate the budget for each activity by funding source (IFAD grant, co-financiers, counterpart funds and beneficiaries contributions). The AWPB will also include (i) full documentation of all unit costs assumptions and hypotheses and (ii) summary tables showing forecasted disbursement rates against allocations (by category and by component).

418. The budgeting process will start in August each year so that the AWPB and procurement plan (PP) may be approved by the PSC and submitted to the government by the end of September each year. It will then be submitted to IFAD for no objection by the end of October each year. Through its computerized financial management system, the project will monitor the financial execution of the AWPB and produce budget vs. actual statements on a monthly basis. This will serve as a basis for discussion during the monthly budget review meeting to be organized by the Project Director for the review of physical and financial performance and the adoption of corrective actions.

419. **Accounting and financial reporting requirements**. The BISAN system currently in use by the MoA is not adapted to project accounting, and does not provide the required financial statements and reports. The PMU will therefore acquire and install an accounting software designed for project accounting, that will allow for (i) recording and reporting of transactions by component, category, source of fund, AWPB activity and geographical location, (ii) budget monitoring, (iii) automated bank reconciliations, (iv) contract management and monitoring of financial commitments, (v) production of the required financial reports and statements including those related to contributions in kind, and, (vi) possibly, the automated production of withdrawal applications.

420. The PMU will record eligible expenditures following international accounting standards (cash basis), and all accounting policies and procedures related to the project will be clearly documented in the financial and administrative procedures manual. The PMU will be required to produce monthly financial reports that will include analyses of disbursement rates by category, AWPB execution, cash position and cash forecast, implementing partners' financial situation, procurement plan execution and any salient administrative issues. In addition, interim unaudited financial reports (IFR) will be submitted to IFAD within 30 days of the end of each quarter using a format defined in the manual. The IFR will summarize the project's financial situation for each funding source and will include analytical comments on budget variances, as well as any constraints faced in the fiduciary area. Finally, the PMU will prepare annual financial statements (in accordance with the IPSAS cash basis of accounting) and submit them to IFAD and the external auditors at the latest 2 months after the end of each fiscal year.

421. **Flow of funds**. The Recipient will open USD denominated Designated Accounts (DAs) operated by the MoFP in a commercial bank, in order to receive IFAD grant and co-financiers' resources. The authorized allocations will be equal to 6 to 9 months of project expenditure so as to ensure a smooth flow of funds and avoid delays in project implementation. Project accounts (also in USD) will be opened for PMU payments, which will be processed through the government BISAN system. A chart of the flow of funds arrangements is shown as Attachment 2 to this appendix.

422. **Counterpart funding**. The government contribution to project costs will be in the form of tax exemptions, cash contributions to cover certain project activities, and in kind contributions (essentially office space and utilities, PMU operating costs and salaries). Payments from the counterpart cash contribution will be managed through a separate bank account, recorded separately in the RELAP accounting system, and reported separately both in the quarterly IFR and in the annual financial statements.

423. **Implementing partners**. As detailed in Appendices 4 and 5, a number of project activities will be implemented by NGOs (under components 1 and 2) and by FAO (component 3). These implementing partners will be required to (i) open dedicated bank accounts to manage RELAP funds; (ii) maintain separate accounting records to account forroject activities; and (iii) submit the RELAP funds to annual external audits (to be finalized in time to meet IFAD project audit requirements). The agreements signed between the IPs and RELAP/MoA will specify the schedule and amount of the funds to be made available by RELAP (based on the approved AWPBs), as well as the financial reporting requirements (in terms of content and frequency). For the NGOs, this will consist of monthly summary financial reports and quarterly full financial reports[121]. The reporting requirements for FAO will be based on IFAD's obligations vis-à-vis the GCF.

424. **External audit**. The Palestinian state audit institution, the State Audit and Administrative Control Bureau (SAACB), is a member of the INTOSAI[122] and is in charge of auditing the government accounts as well as all state institutions. Due to the magnitude of its mandate and in light of its limited human resources, the SAACB does not currently have the capacity to conduct external audits of donor-funded projects[123]. The Bureau will be encouraged to include RELAP in its annual audit program as soon as it becomes feasible, as its staffing expands and its capacity is strengthened. In the meantime, the Recipient, through the PMU, will appoint independent auditors acceptable to IFAD, under TOR cleared by IFAD, and in line with the IFAD Guidelines for Audits. The contract for the audit will be for a maximum of three years, subject to satisfactory performance and IFAD clearance. The auditors will give an opinion on the financial statements, designated accounts and SOEs, and will comment on the use of project resources (in particular by implementing partners) and the adherence to procurement rules. The auditors will also provide a management letter addressing the adequacy of the accounting and internal control systems. The audit report will be submitted to IFAD not later than six months after the end of each fiscal year

425. **Internal audit**. The MoA Internal Audit Unit, which was established in 2005 and became functional in 2010, is composed solely of a General Director (reporting to the Minister) and a Director of Administration. With no audit staff and no dedicated budget, this unit lacks both the human and financial capacity to fully carry out its mandate. Consequently, the IA unit is not able to perform routine audits of donor-funded projects executed by the MoA. An alternative could be to utilize the MoFP Internal Audit Unit, which intervenes both on MoFP related institutions and on other entities lacking the capacity, based on specific requests[124]. The MoA will therefore be encouraged to submit an official request to MoFP for the use of their Internal Audit Unit as internal auditors of RELAP.

426. **Anticorruption and good governance framework**. The primary responsibility of detecting fraud and corruption lies with the Recipient. However, the project should note that 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

[121] Including: funds reconciliation (funds received, disbursements and balance), bank reconciliation and bank statement, detailed expenditure statement (by budget line) with copies of supporting documents, budget to actual statement with variance analysis (also linking physical to financial progress)

[122] International Organization of State Audit Institutions

[123] With support from the World Bank, the SAACB is planning to start the audit of a WB-funded project in 2018.

[124] The MoFP Internal Audit Unit focuses on risk assessment, compliance with regulations, review of internal controls systems, verification of accounts, achievement of objectives and good governance.

scope of this policy and that appropriate sanctions will be applied where the allegations are substantiated. IFAD shall take all possible actions to protect from reprisals individuals who help reveal corrupt practices in its project or grant activities and individuals or entities subject to unfair or malicious allegations. Given IFAD's Zero Tolerance described above, it is important that the staff and all stakeholders of the project are familiar with IFAD's as well as national anticorruption policies and whistleblowing procedures. The IFAD anticorruption policy is available on the IFAD website at www.ifad.org/governance/anticorruption/index.htm. The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight (http://www.ifad.org/governance/anticorruption/how.htm).

427. The dissemination of both IFAD's and national anti-corruption policy amongst project staff and stakeholders, as well as the adoption of IFAD procurement guidelines for RELAP procurement, should reinforce the use of good practices. In addition, RELAP will promote good governance through the involvement of municipalities, villages and beneficiaries in (i) the preparation of the annual work plans and budgets, (ii) the implementation of activities, and (iii) the monitoring and evaluation of activities.

428. **Taxation.** IFAD grant proceeds cannot be utilized for the payment of taxes. Consequently, the payment of taxes and duties will be made from the government counterpart contribution. The PMU will be responsible for securing the necessary tax exemption documents so as to ensure that all RELAP transactions are exempt from VAT, duties and other taxes.

429. **Supervision and implementation support (fiduciary aspects)**. Based on the risk assessment, the supervision and implementation support plan for RELAP will include:

- Full training of finance and procurement staff as part of the project start-up workshop, and refresher training as part of the IFAD supervision/implementation support missions
- One full fiduciary review each year (as part of a supervision mission)
- Detailed review of the FM and procurement arrangements in the procedures manual, including relevant policies, guidelines and procedures with regard to all activities.
- Desk reviews of periodic progress and financial reports and annual financial statements
- Follow-up on work performed and reports issued by the external and internal auditors.

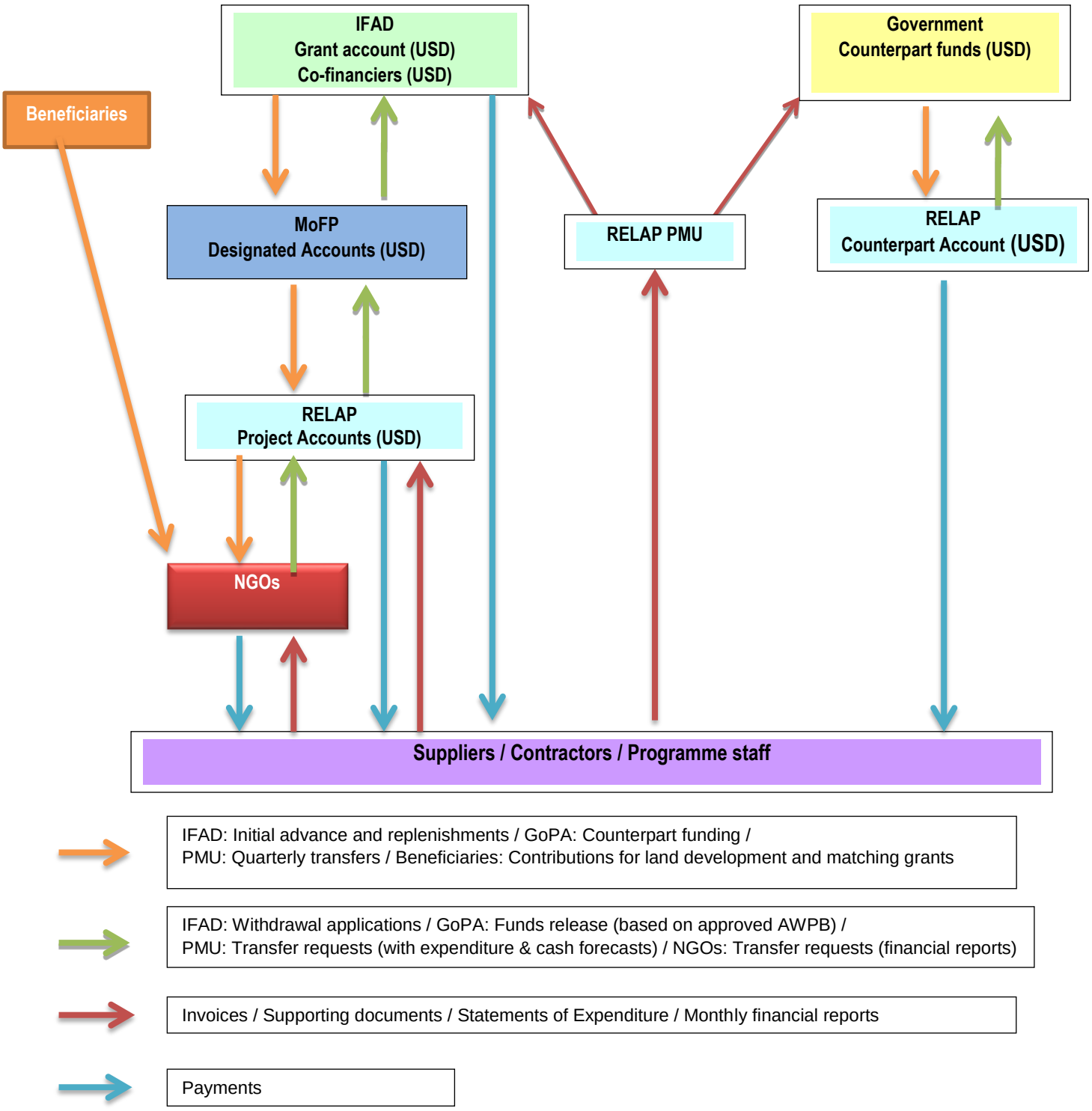
430. **Start-up costs.** In order to facilitate the timely launch of project activities, the Recipient will be allowed to incur certain expenditures prior to the satisfaction of all disbursement conditions. These will include costs related to: recruitment of the PMU contracted staff and salaries for first 3 months; start-up workshops; installation of the accounting software (including acquisition of license, customization and training); drafting of the PIM; procurement of the IT equipment and the project vehicle; selection of the implementing partners (NGOs); and baseline survey. The start-up costs will be limited to USD 200 000, and will be specified in the financing agreement.

Table 45: Financial management risk assessment summary

	Initial Risk rating	Proposed Mitigation	Residual Risk rating
Control Risks			
1. Organization and Staffing	Medium	Competitive recruitment of finance and procurement staff, full training on IFAD guidelines and procedures, and continued support during PY1 Drafting of finance & admin procedures manual as a disbursement condition	Low
2. Budgeting	Low	Accounting/FM software system to include budget monitoring feature AWPB to include full documentation of cost assumptions	Low
3. Funds flow and Disbursement Arrangements	Medium	Training in IFAD procedures at start up and during PY 1 Regular submission of WAs	Low
4. Internal Controls	Low	Drafting of finance & admin procedures manual as a disbursement condition Installation of an accounting software	Low
5. Accounting Systems	Medium	Set-up of an accounting software meeting IFAD requirements	Low

6. Reporting and Monitoring	Medium	Accounting/FM software to include strong financial reporting features. PMU will be required to prepare fully informative monthly financial reports and IFRs (including budget vs. actual variance analysis)	Low
7. Internal Audit	Medium	MoFP IA department will be requested to perform internal audits of RELAP until such time that MoA IA Unit is in a position to do so	Medium
8. External Audit	Low	Audit scope to include project resources managed by implementing partners	Low
Project Fiduciary Risk at Design	**Medium**		**Low**

Figure 9: Flow of funds



Appendix 8: Procurement

A. National procurement system

431. In an effort to improve the efficiency, economy, transparency and accountability of its public procurement system, the PA launched a modernization program as part of the "Palestinian National Development Plan – State Building to Sovereignty 2014-2016". The public procurement system reform was supported by the World Bank and led to the adoption of the new Public Procurement Law (PPL) in 2014[125]. The enactment of the PPL was followed by the adoption of the Public Procurement Regulations (PPR – revised in June 2016) aimed at supporting the implementation of the new PPL.

432. This newly adopted legal and regulatory framework, which applies to all procuring entities and all procurement activities financed from public funds, is generally in line with international standards and IFAD procurement guidelines. It sets open competitive bidding as the default procurement method, and clearly defines the applicable procurement methods based on specified thresholds for the various categories of procurement (goods, non-consulting services, works and consulting services). The law establishes a "High Council on Public Procurement Policy" responsible for policy-making, development of documentation/guidelines/manuals, oversight of public procurement activities, compilation of data and issuance of annual reports on procurement, training of procurement officers, and public awareness campaigns). It also provides for a public procurement portal to be used for the publication of bidding opportunities, annual procurement plans, bidding documents, contract awards and data on complaints resolution. Finally, under the law, an independent body is established for the review/settlement of procurement complaints.

433. However, many of the instruments and institutional arrangements described in the legal/regulatory texts have not yet been implemented or are still not operational:

- The High Council on Public Procurement Policy, although created, is not yet functional;
- The required procurement documentation, including procurement manuals and standard bidding documents, are still in draft form;
- The procuring entities do not all prepare annual procurement plans or submit periodic reports on procurement;
- The public procurement portal is not fully operational and the required publications are not carried out;
- The State Audit & Administrative Control Bureau is not equipped to conduct procurement audits, and there is generally no prior or post review of procurement;
- The complaints mechanism is not functional (for the moment, complaints may only be filed with the concerned procuring entity).

434. Furthermore, it is worth mentioning that the recent revision of the PPR (June 2016) has decreased some of the thresholds for decentralized procurement, leaving the bulk of the procurement of goods and consulting services under the purview of the General Supplies Department (MoFP).

B. MoA Procurement Department assessment

435. As part of the review of the national procurement system, and in order to determine whether RELAP procurement activities could be undertaken by the Ministry of Agriculture (MoA) as lead agency, an assessment of the procurement capacity of the MoA was also conducted. Unfortunately, this assessment could only be partial due to the fact that all procurement documents at the MoA are available only in Arabic.

436. The MoA Procurement Department is currently composed of 6 staff (including the Director) and is responsible for both the ministry's internal procurement and procurement for the donor-funded projects under the MoA. However, the procurement activity under this department is limited to procurement of goods, non-consulting services and consulting services below USD 50 000, and works below

[125] A Public Procurement Law was previously issued in December 2011, and derived Public Procurement Regulations were finalized in 2013.

USD 500 000. Procurement above these values is undertaken by the General Supplies Department (at MoFP) or by the Central Tenders Department (Ministry of Public Works). In addition, it was noted that (i) the department does not prepare annual procurement plans; (ii) there is no monitoring of the execution of procurement activities and contract monitoring is handled by the requesting department or project; and (iii) the staff currently in place in the MoA Procurement Department are not proficient enough to work using the English language.

C. Procurement arrangements for RELAP

437. IFAD's approach is to adopt, whenever possible, the national procurement systems in order to enhance ownership and effectiveness of development aid, in accordance with the principles adopted in the Paris Declaration. However, based on the assessment conducted, it appears that the PA procurement framework, in its current state, cannot be relied upon for the RELAP procurement activities. The government endeavours, with continued support from the World Bank and other development partners, to continue the implementation of all provisions of the PPL and PPR until full operationalization of the institutional environment is reached, and an effective and efficient public procurement system is in place. Until this is achieved, and the national procurement system is re-assessed, it is recommended that IFAD procurement guidelines be adopted for the implementation of the RELAP, as is the case with the projects funded by other development partners such as the World Bank and other multilateral donors.

438. The PMU will be required to prepare and submit to IFAD (together with the AWPB) for no objection, an annual procurement plan (PP) organized by type of procurement (goods, non-consulting services, works and services) and by project component. The PP will show for each procurement: the reference to the AWPB, the estimated cost, the procurement method, the detailed timeline (from preparation of TOR/specifications to signature of contract) and the need for IFAD prior review. Each item in the PP will show a "planned" line and an "actual" line to facilitate the monitoring of PP execution. Thresholds for the applicable procurement methods126 will be as follows:

Table 46: Thresholds for the applicable procurement methods

Method	International Competitive Bidding	National Competitive Bidding	Shopping
Goods	> USD 200,000	> USD 20,000 ≤ USD 200,000	≤ USD 20,000
Non-consulting services	> USD 200,000	> USD 20,000 ≤ USD 200,000	≤ USD 20,000
Works	> USD 1,000,000	> USD 50,000 ≤ USD 1,000,000	≤ USD 50,000
Consulting services	> USD 100,000 'International' shortlists	≤ USD 100,000 'national' shortlists	N/A

439. The acceptable selection methods for consulting services will include (i) Quality- and Cost-based Selection; (ii) Quality-based Selection; (iii) Selection under a Fixed Budget; (iv) Least Cost Selection; (v) Selection based on Consultants' Qualifications; (vi) Single-source Selection of consulting firms; (vii) Procedures for competitive selection of Individual Consultants; and (viii) Single-source procedures for the Selection of Individual Consultants.

440. IFAD's prior review procedures will be on terms of reference, bidding documents, evaluation reports and contracts, and will apply to the procurement of goods and non-consulting services valued at USD 50 000 or more, works valued at USD 100 000 or more and consultant services valued at USD 30 000 or more. Furthermore, IFAD's prior no objection will be required for all procurement under direct contracting, regardless of the contract value.

441. The applicable rules and procedures related to project procurement will be detailed in the RELAP financial and administrative manual. All bidding documents will mention the applicability of IFAD's anti-corruption policy. In addition, bidding documents will contain a provision allowing IFAD to inspect the contractors' accounts, records and other documents related to their bid submission and

[126] These thresholds are aligned with the PPR thresholds.

contract performance or to have them audited by an auditor appointed by IFAD, in accordance with IFAD's Project Procurement guidelines. With regard to the bid opening and bid evaluation committees, the procedures manual will detail the provisions related to conflicts of interest, in particular the obligation for committee members to declare any real or apparent conflict of interest, and to withdraw from the committee if deemed necessary.

442. The level and complexity of procurement envisaged for RELAP will require the recruitment of a Procurement Officer who will be responsible for (i) the preparation and updating on a real-time basis on the annual procurement plan; (ii) the conduct of the procurement process in accordance with applicable rules and procedures; (iii) the monitoring of the procurement plan execution, and the related reporting on a monthly basis; (iv) the management of contracts; and (v) strengthening the capacity of the MoA Procurement Department staff. IFAD will support the PMU in this aspect, as needed, through:

a) Implementation support throughout project life, and in particular at project start;
b) Technical assistance during the first year of the project;
c) Workshops or training sessions.

443. Contracts below the prior review thresholds will be subject to post review as part of the IFAD supervision missions. Additionally, the RELAP auditors will be requested to ensure that procurement for goods, non-consulting services, works and consulting services under IFAD financing was conducted in compliance with the provisions of the financing agreement, the letter to the borrower and the IFAD Project Procurement guidelines. Any exception noted will have to be mentioned in the audit report and/or the management letter issued by the auditors.

444. The implementing partners (selected NGOs and the FAO) will be responsible for conducting any procurement required for the execution of the project activities allocated to them, using their own procurement procedures. For procurement undertaken by the NGOs, the PMU will be involved through the review of the bidding documents, participation in the bid opening/evaluations, and verification of contract awards, so as to ensure competition, transparency and compliance with applicable rules. In addition, village council representatives will participate in bid opening meetings and bid evaluations whenever feasible.

Table 47 : Tentative 18-months Procurement Plan

Period covered by the procurement plan: 01/07/2018 - 31/12/2019

GOODS and NON-CONSULTING SERVICES

Costab ref.	Description	Quantity	Estimated cost USD	Procurement method	IFAD prior or post	Technical specifications	Preparation bid docs	IFAD NO on bid documents	Bid advertisement or	Bid opening	Evaluation report	IFAD NO on evaluation	Contract signature
Component 1: Climate Adaptive Land Development													
Sub-component 1.2: Adaptive and equitable land development													
DT1.2	Sowing machines	7	17 500	NS	Post	20/08/2018	22/08/2018	N/A	24/08/2018	03/09/2018	04/09/2018	N/A	06/09/2018
	Subtotal 1.2		***17 500***										
	Total component 1		**17 500**										
Component 2: Market Linkages for the Rural Poor													
Sub-component 2.1: Rural clustering of agricultural products													
DT2.1	Equipment	5 sets	195 000	NCB	Prior	05/08/2019	10/08/2019	18/08/2019	21/08/2019	20/09/2019	27/09/2019	05/10/2019	12/10/2019
	Subtotal 2.1		***195 000***										
	Total component 2		**195 000**										
Component 4: Project Management Unit													
DT4	Accounting software	1	5 000	NS	Post	09/07/2018	11/07/2018	N/A	13/07/2018	23/07/2018	24/07/2018	N/A	26/07/2018
DT4	Computers/peripherals and printers	26 sets	26 000	NCB	Post	04/06/2018	09/06/2018	N/A	11/06/2018	11/07/2018	18/07/2018	N/A	26/07/2018
DT4	MS Office licences	26	5 000	DC	Prior	16/07/2018	N/A	24/07/2018	N/A	N/A	N/A	N/A	27/07/2018
DT4	Office equipment (phones, cameras, printers, video projectors)	various	10 000	NS	Post	10/09/2018	12/09/2018	N/A	14/09/2018	24/09/2018	25/09/2018	N/A	27/09/2018
DT4	Office furniture	various	10 000	NS	Post	04/06/2018	06/06/2018	N/A	08/06/2018	18/06/2018	19/06/2018	N/A	21/06/2018
DT4	Vehicle 4x4	1	61 000	NCB	Prior	04/06/2018	09/06/2018	17/06/2018	20/06/2018	20/07/2018	27/07/2018	04/08/2018	11/08/2018
	Total component 4		**117 000**										
TOTAL GOODS and NON-CONSULTING SERVICES			**329 500**										

Legend	
ICB	International Competitive Bidding
NCB	National Competitive Bidding
NS	National Shopping

Period covered by the procurement plan: 01/07/2018 - 31/12/2019

WORKS

Costab ref.	Description	Quantity	Estimated cost USD	Procurement method	IFAD prior or post	Technical specifications	Preparation bid docs	IFAD NO on bid documents	Bid advertisement	Bid opening	Evaluation report	IFAD NO on evaluation	Contract signature
Component 1: Climate Adaptive Land Development													
Sub-component 1.3: Investment in agricultural roads													
DT1.3	Roads construction	25 km	655 000	NCB	Prior	21/01/2019	26/01/2019	03/02/2019	06/02/2019	08/03/2019	15/03/2019	23/03/2019	30/03/2019
	Subtotal 1.3		***655 000***										
	Total component 1		**655 000**										
Component 2: Market Linkages for the Rural Poor													
Sub-component 2.1: Rural clustering of agricultural products													
DT2.1	Collection markets construction	5	1 366 000	ICB	Prior	04/02/2019	12/02/2019	22/02/2019	25/02/2019	11/04/2019	26/04/2019	06/05/2019	21/05/2019
	Subtotal 2.1		***1 366 000***										
	Total component 2		**1 366 000**										
TOTAL WORKS			**2 021 000**										

Legend

ICB	International Competitive Bidding
NCB	National Competitive Bidding
NS	National Shopping

Period covered by the procurement plan: 01/07/2018 - 31/12/2019

CONSULTING SERVICES

Costab ref.	Description	Estimated cost USD	Selection method	IFAD prior or post review	IFAD NO on TOR	Preparation of shortlist	IFAD NO on shortlist	Preparation of RFP docs	IFAD NO on RFP docs	RFP invitation	RFP closing	Evaluation of technical proposals°	IFAD NO on technical evaluation	Financial evaluation opening	Final evaluation (Tech and Fin)	IFAD NO on final evaluation report	Contract signature
Component 1: Climate Adaptive Land Development																	
Sub-component 1.1: Testing, monitoring and upscaling of climate adapted land development ap																	
DT1.1	Stocktake study	8 000	ICS	Post	N/A	15/04/2019	N/A	N/A	N/A	N/A	N/A	20/04/2019	N/A	N/A	N/A	N/A	28/04/2019
DT1.1	CCA land development practices testing & monitoring system	51 000	QCBS	Prior	07/01/2019	10/01/2019	18/01/2019	21/01/2019	29/01/2019	01/02/2019	03/03/2019	10/03/2019	18/03/2019	20/03/2019	20/03/2019	28/03/2019	04/04/2019
DT1.1	National Agricultural Research Center soil samples analysis	44 000	SSS	Prior	18/03/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28/03/2019
DT1.1	Household resilience survey	18 000	QCBS	Post	N/A	21/01/2019	N/A	24/01/2019	N/A	27/01/2019	17/02/2019	24/02/2019	N/A	26/02/2019	26/02/2019	N/A	05/03/2019
DT1.1	Knowledge products	7 000	ICS	Post	N/A	16/09/2019	N/A	N/A	N/A	N/A	N/A	21/09/2019	N/A	N/A	N/A	N/A	29/09/2019
DT1.1	Technical assistance	51 000	QCBS	Prior	15/10/2018	18/10/2018	26/10/2018	29/10/2018	06/11/2018	09/11/2018	09/12/2018	16/12/2018	24/12/2018	26/12/2018	26/12/2018	03/01/2019	10/01/2019
	Subtotal 1.1	***179 000***															
Sub-component 1.2: Adaptive and equitable land development																	
DT1.2	NGO contracts - land reclamation and rehabilitation (1 contract in each governorate ≈ USD 570 000 each)	3 420 000	QCBS	Prior	08/10/2018	11/10/2018	19/10/2018	22/10/2018	30/10/2018	02/11/2018	02/12/2018	09/12/2018	17/12/2018	19/12/2018	19/12/2018	27/12/2018	03/01/2019
	Subtotal 1.2	***3 420 000***															
Sub-component 1.3: Investment in agricultural roads																	
DT1.3	Supervision of roads construction	15 000	QCBS	Post	N/A	18/02/2019	N/A	21/02/2019	N/A	24/02/2019	17/03/2019	24/03/2019	N/A	26/03/2019	26/03/2019	N/A	02/04/2019
	Subtotal 1.3	***15 000***															
	Total component 1	**3 614 000**															
Component 2: Market Linkages for the Rural Poor																	
Sub-component 2.1: Rural clustering of agricultural products																	
DT2.1	NGO contracts - support to MSPs - 2018	98 000	QCBS	Prior	04/06/2018	07/06/2018	15/06/2018	18/06/2018	26/06/2018	29/06/2018	29/07/2018	05/08/2018	13/08/2018	15/08/2018	15/08/2018	23/08/2018	30/08/2018
DT2.1	NGO contracts - support to MSPs - 2019	180 000	QCBS	Prior	01/11/2018	04/11/2018	12/11/2018	15/11/2018	23/11/2018	26/11/2018	26/12/2018	02/01/2019	10/01/2019	12/01/2019	12/01/2019	20/01/2019	27/01/2019
DT2.1	PALGAP scheme development	9 600	SSS	Prior	13/08/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23/08/2018
DT2.1	Architectural studies for collection markets - 2018	64 000	QCBS	Prior	06/08/2018	09/08/2018	17/08/2018	20/08/2018	28/08/2018	31/08/2018	30/09/2018	07/10/2018	15/10/2018	17/10/2018	17/10/2018	25/10/2018	01/11/2018
DT2.1	Architectural studies for collection markets - 2019	65 000	QCBS	Prior	05/08/2019	08/08/2019	16/08/2019	19/08/2019	27/08/2019	30/08/2019	29/09/2019	06/10/2019	14/10/2019	16/10/2019	16/10/2019	24/10/2019	31/10/2019
DT2.1	Supervision of collection markets construction	65 000	QCBS	Prior	04/03/2019	07/03/2019	15/03/2019	18/03/2019	26/03/2019	29/03/2019	28/04/2019	05/05/2019	13/05/2019	15/05/2019	15/05/2019	23/05/2019	30/05/2019
DT2.1	Technical assistance	10 000	ICS	Post	02/07/2018	05/07/2018	N/A	N/A	N/A	N/A	N/A	10/07/2018	N/A	N/A	N/A	N/A	18/07/2018
	Subtotal 2.1	***491 600***															
Sub-component 2.2: Inclusive entrepreneurship development support																	
DT2.2	Support to business plans (total of 225 projects to be supported by companies registered at the Chamber of	116 000	SSS	Prior	12/01/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Jan to Dec 2019
DT2.2	ToT regional staff - 2018	6 000	ICS	Post	N/A	06/08/2018	N/A	N/A	N/A	N/A	N/A	11/08/2018	N/A	N/A	N/A	N/A	19/08/2018
DT2.2	ToT regional staff - 2018	6 000	ICS	Post	N/A	04/02/2019	N/A	N/A	N/A	N/A	N/A	09/02/2019	N/A	N/A	N/A	N/A	17/02/2019
DT2.2	Technical assistance - 2018	20 000	ICS	Post	09/07/2018	12/07/2018	N/A	N/A	N/A	N/A	N/A	17/07/2018	N/A	N/A	N/A	N/A	25/07/2018
DT2.2	Technical assistance - 2019	21 000	ICS	Post	07/01/2019	10/01/2019	N/A	N/A	N/A	N/A	N/A	15/01/2019	N/A	N/A	N/A	N/A	23/01/2019
	Subtotal 2.2	***169 000***															
	Total component 2	**660 600**															
Component 4: Project Management Unit																	
DT4	Baseline survey	40 000	QCBS	Prior	18/06/2018	21/06/2018	29/06/2018	02/07/2018	10/07/2018	13/07/2018	12/08/2018	19/08/2018	27/08/2018	29/08/2018	29/08/2018	06/09/2018	13/09/2018
DT4	Annual outcome survey	2 000	ICS	Post	N/A	11/11/2019	N/A	N/A	N/A	N/A	N/A	16/11/2019	N/A	N/A	N/A	N/A	24/11/2019
DT4	PIM - Financial procedures manual	3 000	ICS	Post	N/A	11/06/2018	N/A	N/A	N/A	N/A	N/A	16/06/2018	N/A	N/A	N/A	N/A	24/06/2018
DT4	PIM - Operations manual	3 000	ICS	Post	N/A	18/06/2018	N/A	N/A	N/A	N/A	N/A	23/06/2018	N/A	N/A	N/A	N/A	01/07/2018
DT4	Translation - 2018	10 000	LCS	Post	N/A	02/07/2018	N/A	05/07/2018	N/A	08/07/2018	29/07/2018	05/08/2018	N/A	07/08/2018	07/08/2018	N/A	14/08/2018
DT4	Translation - 2019	10 000	LCS	Post	N/A	21/01/2019	N/A	24/01/2019	N/A	27/01/2019	17/02/2019	24/02/2019	N/A	26/02/2019	26/02/2019	N/A	05/03/2019
DT4	Capacity building - gender mainstreaming tools	10 000	QCBS	Post	N/A	13/08/2018	N/A	16/08/2018	N/A	19/08/2018	09/09/2018	16/09/2018	N/A	18/09/2018	18/09/2018	N/A	25/09/2018
DT4	Capacity building - gender mainstreaming tools	10 000	QCBS	Post	N/A	11/02/2019	N/A	14/02/2019	N/A	17/02/2019	10/03/2019	17/03/2019	N/A	19/03/2019	19/03/2019	N/A	26/03/2019
DT4	Annual audit	10 000	QCBS	Prior	05/08/2019	08/08/2019	16/08/2019	19/08/2019	27/08/2019	30/08/2019	29/09/2019	06/10/2019	14/10/2019	16/10/2019	16/10/2019	24/10/2019	31/10/2019
	Total component 4	**98 000**															
TOTAL CONSULTING SERVICES		**4 372 600**															

GRAND TOTAL PROCUREMENT PLAN	**6 723 100**

Legend

ICS	Individual Consultant Selection
LCS	Least Cost Selection
QCBS	Quality and Cost based Selection
SSS	Sole Source Selection
°	Evaluation of CVs for individual consultant selection

Appendix 9: Project cost and financing

A. Introduction

445. This appendix covers the project costs and financing plan, while it also describes the assumptions underlying them and sets out the basis and details of the estimated project costs.

B. Project costs and financing

446. **Main assumptions.** The project is financed over a six-year (6) period, and it is assumed to start in the second semester of 2018. Costs have been estimated on the basis of prices prevailing during project design in September 2017.

447. *Physical and price contingencies*. A physical contingency of 5% has been applied to civil works - land development - to take into account the uncertainty on the exact implementation quantities while price contingencies have been applied on all costs, with the exception of grants.

448. *Inflation*. According to the Economist Intelligence Unit, Palestine's price trends closely follow those in Israel — especially in the West Bank. Prices remained in deflationary territory in both Gaza and the West Bank in 2016, reflecting global commodity price trends and the relative strength of the currencies in use in Palestine, but inflation averaged 0.5% in the first half of 2017. Prices are expected to trend up only modestly, with inflation averaging 1% in 2017/18[127]. For the purpose of this analysis, annual local inflation rates have been set at 1.2% throughout the six project years. For foreign inflation, an average inflation of 1.8% has been retained.

449. *Exchange rate*. Palestine does not have its own currency and it mostly relies on the Shekel, given that the bulk of trade and tax revenue is mainly sourced through Israel. For the purpose of this analysis, local prices have been collected in Shekel. The exchange rate used is 1 USD: NIS 3.74, which is calculated as the average annual exchange rate between 2015 and 2018[128].

450. *Taxes and duties*. Part of the Government co-financing of the project will be in form of waiving of all taxes and duties on goods and services procured under the project. The rates and amounts of the taxes and duties in the project's costs presented below are defined only to determine the Government contribution and to value the total project cost.

451. The items to be imported for the project attract import and excise duties of varying proportions, and a value-added tax (VAT) of 16% is levied on all imported goods.

C. Project costs

452. The total project costs including physical and price contingencies are estimated at USD 41.37 million over six years implementation period. Project costs by components are summarized in table 1, while a complete set of project summary tables and detailed costs tables are presented in attachments 1 and 2 of this appendix.

453. **Project costs by components.** Project investments are organized into four major components: (i) Climate resilient land development (60 per cent of the total costs); (ii) Market linkages for the rural poor (23 per cent of the total costs); (iii) Improved public services for upscaling climate resilient agricultural land use and production systems (8 per cent of the costs); (iv) Project management[129] (9 per cent of the costs). A summary breakdown of the project costs by components is shown in table 37.

[127] Country Report Palestine, 3rd Quarter 2017. Economist Intelligence Unit.
[128] It includes forecast for 2018. Country Report Palestine, 3rd Quarter 2017. Economist Intelligence Unit.
[129] Included seconded staff from the government, which is accounted as GoP in kind-contribution.

Table 48: Project costs by component

Palestine
Resilient Land and Resource Management Project (RELAP)
Project Components by Year -- Totals Including Contingencies
(USD '000)

	Totals Including Contingencies						
	2018	2019	2020	2021	2022	2023	Total
A. Climate resilient land development							
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	-	200	123	126	128	150	726
2. Resilient land development	18	4,491	6,237	6,154	4,235	44	21,179
3. Investment in agricultural roads	-	671	688	701	706	-	2,766
Subtotal	18	5,361	7,048	6,981	5,069	194	24,671
B. Market linkages for the rural poor							
1. Rural bulking of agricultural products	182	1,871	1,862	214	134	-	4,263
2. Inclusive entrepreneurship development support	27	1,269	2,508	1,274	18	3	5,098
Subtotal	209	3,140	4,371	1,488	151	3	9,362
C. Improved public services for upscaling climate resilient agricultural land use and production systems	719	976	616	462	332	245	3,351
D. Project Management	752	591	624	598	609	815	3,989
Total PROJECT COSTS	1,698	10,069	12,659	9,529	6,161	1,257	41,373

D. Project financing

454. The total project costs of USD 41.37 million will be financed by i) an IFAD grant (from the trust fund for Gaza and the West Bank) of USD 4.56 million (confirmed), ii) a cash contribution from the government of USD 1.17 million, iii) an OFID grant of USD 0.95[130] million (confirmed), iv) an in-kind contribution from government currently estimated at USD 6.55 million[131], v) an in kind and cash contribution from beneficiaries, respectively of USD 3.61 million and USD 1.28 million (in the form of cash, casual labour, and some inputs and equipment), and vi) a contribution toward the road construction from the village councils (estimated at US$ 0.24 million). Funds of approximately US$ 23 million– including a grant from the Green Climate Fund (GCF) of USD 15 million and a grant of approximately USD 8 million from other partners/entities - are to be budgeted as a financing gap. IFAD, MOA and EQA will be in constant contact with the GCF, OFID and other potential co-financiers to mobilize this amount to fill the financing gap or otherwise seek alternative financing sources during the inception and implementation. The proposed financing plan is summarized in Components by Financier table 2 below.

Table 49: Project costs by financier

Palestine
Resilient Land and Resource Management Project (RELAP)
Components by Financiers
(USD '000)

	The Government in kind		The Government in cash		IFAD GRANT		OFID		GCF		Other entities		Beneficiaries in kind		Beneficiaries in cash		Village council		To
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
A. Climate resilient land development																			
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	110	15.2	-	-	223	30.7	60	8.2	60	8.2	273	37.6	-	-	-	-	-	-	726
2. Resilient land development	3,389	16.0	646	3.1	1,160	5.5	845	4.0	8,810	41.6	2,106	9.9	3,619	17.1	604	2.9	-	-	21,179
3. Investment in agricultural roads	443	16.0	-	-	66	2.4	-	-	-	-	2,017	72.9	-	-	-	-	240	8.7	2,766
Subtotal	3,941	16.0	646	2.6	1,449	5.9	905	3.7	8,869	36.0	4,396	17.8	3,619	14.7	604	2.4	240	1.0	24,671
B. Market linkages for the rural poor																			
1. Rural bulking of agricultural products	682	16.0	-	-	1,269	29.8	-	-	-	-	2,312	54.2	-	-	-	-	-	-	4,263
2. Inclusive entrepreneurship development support	95	1.9	-	-	103	2.0	-	-	3,032	59.5	1,193	23.4	-	-	676	13.3	-	-	5,098
Subtotal	777	8.3	-	-	1,373	14.7	-	-	3,032	32.4	3,504	37.4	-	-	676	7.2	-	-	9,362
C. Improved public services for upscaling climate resilient agricultural land use and productio	351	10.5	-	-	-	-	-	-	3,000	89.5	-	-	-	-	-	-	-	-	3,351
D. Project Management	1,483	37.2	520	13.0	1,744	43.7	44	1.1	99	2.5	99	2.5	-	-	-	-	-	-	3,989
Total PROJECT COSTS	6,552	15.8	1,166	2.8	4,566	11.0	950	2.3	15,000	36.3	8,000	19.3	3,619	8.7	1,280	3.1	240	0.6	41,373

455. The IFAD grant will finance: i) sub-component 1.1 "Testing, monitoring and upscaling of climate adapted land development approaches" (USD 0.22 million, ii) sub-component 1.2 “Resilient land development” (USD 1.16 million), iii) sub-component 1.3 “Investment in agricultural roads” (USD 0.07 million), iv) sub-component 2.1 " Rural bulking of agricultural products" (USD 1.27 million), v) sub-component 2.2 " Inclusive entrepreneurship development support" (USD 0.1 million); and vi) Project management (USD 1.74 million).

456. Government in-cash contribution will mostly finance: sub-component 1.2 “Resilient land development” (USD 0.65 million), and Project management (USD 0.52 million).

130 The OFID grant will be USD 1 million, out of which USD 50,000 (5%) will be IFAD management fee.

131 It will cover VAT, salaries of seconded staff, office space and utilities

457. OFID will mostly finance sub-component 1.1 "Testing, monitoring and upscaling of climate adapted land development approaches" (USD 0.06 million), and sub-component 1.2 “Resilient land development” (USD 0.85 million), and a small amount (USD 0.044 million) will contribute to the project management cost.

458. The GCF will mostly finance i) sub-component 1.1 "Testing, monitoring and upscaling of climate adapted land development approaches" (USD 0.06 million); ii) sub-component 1.2 “Resilient land development" and in particular climate adaptive land development works (USD 8.81 million); iii) sub-component 2.2 " Inclusive entrepreneurship development support" (USD 3 million); iv) component 3 “Improved public services for upscaling climate resilient agricultural land use and production systems” (USD 3 million), and v) Project management (USD 0.1 million)[132].

459. Other sources of financing will be identified and confirmed before the project start. The component by financier table shows that other entities are expected to finance sub-component 1.1 “Testing, monitoring and upscaling of climate adapted land development approaches" (USD 0.27 million), sub-component 1.2 “Resilient land development" (USD 2.1 million), 1.3 “Investment in agricultural roads” (USD 2 million circa), sub-component 2.1 “Rural bulking of agricultural products” (USD 2.3 million circa), 2.2 "Inclusive entrepreneurship development support" (USD 1.2 million circa), and project management (app. USD 1 million).

460. Government’s in-kind contribution will be the exemptions from taxes and duties on all project inputs that involve funding from the IFAD grant, CGF, OFID and other entities. The estimate of taxes and duties was based on the rates in effect prevailing at the time of the design. In conformity with the principle that no taxes or duties will be financed out of the proceeds of the IFAD loan/grant, any future changes in tax legislation will have to apply to the project. The in-kind contribution will also include: office space, utilities, government's seconded staff time, vehicles at district level, etc. (see appendix 5 for more details).

461. Beneficiaries will contribute both in-kind and in-cash to i) sub-component 1.2 “Resilient land development" (USD 3.62 million in-kind and USD 0.60 in-cash), where Beneficiaries' in cash contribution for orchards land development is estimated at 15% of machine works and beneficiaries' in kind contribution is estimated at 30% of labour intensive works; and (ii) 2.2 "Inclusive entrepreneurship development support" (USD 0.68 million in-cash), where beneficiaries would contribute to 15% of the Inclusive entrepreneurship development support cost.

462. Village Councils are expected to contribute to sub-component 1.3 “Investment in agricultural roads” (US$ 0.24 million, approximately 10% of the total road construction cost).

463. Expenditure and disbursement accounts. The project will be rolled out through the project management unit - which will manage and coordinate the flow of funds and the expenditures incurred on account of the project activities. Financial management and procurement procedures are described in appendices 7 and 8. A summary of the total costs by expenditure accounts per year is shown in Table 3 and a summary of the total costs by disbursement accounts and financier is presented in Table 37.

[132] In particular the salary of the Deputy project director technical assistant, specialist in land and water management will be financed by the GCF's funds.

Table 50: Project costs by expenditure account

Palestine
Resilient Land and Resource Management Project (RELAP)
Expenditure Accounts by Financiers
(USD '000)

	The Government in kind		The Government in cash		IFAD GRANT		OFID		GCF		Other entities		Beneficiaries in kind		Beneficiaries in cash		Village council		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs																				
A. Consultancies /a	820	13.2	723	11.7	1,134	18.3	91	1.5	3,235	52.2	193	3.1	-	-	-	-	-	-	6,195	15.0
B. Goods, Services, Equipment /b	344	14.7	8	0.4	443	18.9	-	-	1,404	60.0	-	-	139	5.9	-	-	-	-	2,338	5.7
C. Grant & Subsidies	0	-	-	-	-	-	-	-	2,703	60.0	1,126	25.0	-	-	676	15.0	-	-	4,505	10.9
D. Trainings and Workshops /c	291	16.0	-	-	694	38.1	13	0.7	675	37.1	147	8.1	-	-	-	-	-	-	1,819	4.4
E. Works	3,706	16.0	-	-	966	4.2	845	3.7	6,885	29.7	6,435	27.8	3,480	15.0	604	2.6	240	1.0	23,161	56.0
Total Investment Costs	5,161	13.6	731	1.9	3,236	8.5	950	2.5	14,901	39.2	7,901	20.8	3,619	9.5	1,280	3.4	240	0.6	38,018	91.9
II. Recurrent Costs																				
A. Salaries & Allowances	1,102	42.2	-	-	1,314	50.3	-	-	99	3.8	99	3.8	-	-	-	-	-	-	2,614	6.3
B. Operating Costs	290	39.1	435	58.8	16	2.2	-	-	-	-	-	-	-	-	-	-	-	-	741	1.8
Total Recurrent Costs	1,391	41.5	435	13.0	1,330	39.6	-	-	99	3.0	99	3.0	-	-	-	-	-	-	3,355	8.1
Total PROJECT COSTS	6,552	15.8	1,166	2.8	4,566	11.0	950	2.3	15,000	36.3	8,000	19.3	3,619	8.7	1,280	3.1	240	0.6	41,373	100.0

\a Including studies and technical assistance
\b This category includes goods, services, equipment & materials
\c It includes meetings

Table 51: Project costs by disbursement account

Palestine
Resilient Land and Resource Management Project (RELAP)
Disbursement Accounts by Financiers
(USD '000)

	The Government in kind		The Government in cash		IFAD GRANT		OFID		GCF		Other entities		Beneficiaries in kind		Beneficiaries in cash		Village council		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Consultancies_DA	820	13.2	723	11.7	1,134	18.3	91	1.5	3,235	52.2	193	3.1	-	-	-	-	-	-	6,195	15.0
2. Goods, Services, Equipment_DA /a	344	14.7	8	0.4	443	18.9	-	-	1,404	60.0	-	-	139	5.9	-	-	-	-	2,338	5.7
3. GRANT_DA	0	-	-	-	-	-	-	-	2,703	60.0	1,126	25.0	-	-	676	15.0	-	-	4,505	10.9
4. Workshops_DA	291	16.0	-	-	694	38.1	13	0.7	675	37.1	147	8.1	-	-	-	-	-	-	1,819	4.4
5. Works_DA	3,706	16.0	-	-	966	4.2	845	3.7	6,885	29.7	6,435	27.8	3,480	15.0	604	2.6	240	1.0	23,161	56.0
6. Salaries and Allowances_DA	1,102	42.2	-	-	1,314	50.3	-	-	99	3.8	99	3.8	-	-	-	-	-	-	2,614	6.3
7. Operating Costs_DA	290	39.1	435	58.8	16	2.2	-	-	-	-	-	-	-	-	-	-	-	-	741	1.8
Total PROJECT COSTS	6,552	15.8	1,166	2.8	4,566	11.0	950	2.3	15,000	36.3	8,000	19.3	3,619	8.7	1,280	3.1	240	0.6	41,373	100.0

\a This category includes goods, services, equipment & material

Attachment 9.1, Appendix 9: Summary cost and financing tables (US$)

Table	Description
1	Components by Financier
2	Expenditure Accounts by Financier
3	Expenditure Accounts by Components - Base Costs
4	Expenditure Accounts by Components - Totals Including Contingencies
5	Components Project Cost Summary
6	Expenditure Accounts Project Cost Summary
7	Project Components by Year -- Base Costs
8	Project Components by Year -- Totals Including Contingencies
9	Expenditure Accounts by Years -- Base Costs
10	Expenditure Accounts by Years -- Totals Including Contingencies
11	Disbursement Accounts by Financiers
12	Disbursements by Semesters and Government Cash Flow

Table 1 Components by Financier

Palestine
Resilient Land and Resource Management Project (RELAP)
Components by Financiers
(USD '000)

	The Government in kind		The Government in cash		IFAD GRANT		OFID		GCF		Other entities		Beneficiaries in kind		Beneficiaries in cash		Village council		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Climate resilient land development																				
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	110	15.2	-	-	223	30.7	60	8.2	60	8.2	273	37.6	-	-	-	-	-	-	726	1.8
2. Resilient land development	3,389	16.0	646	3.1	1,160	5.5	845	4.0	8,810	41.6	2,106	9.9	3,619	17.1	604	2.9	-	-	21,179	51.2
3. Investment in agricultural roads	443	16.0	-	-	66	2.4	-	-	-	-	2,017	72.9	-	-	-	-	240	8.7	2,766	6.7
Subtotal	3,941	16.0	646	2.6	1,449	5.9	905	3.7	8,869	36.0	4,396	17.8	3,619	14.7	604	2.4	240	1.0	24,671	59.6
B. Market linkages for the rural poor																				
1. Rural bulking of agricultural products	682	16.0	-	-	1,269	29.8	-	-	-	-	2,312	54.2	-	-	-	-	-	-	4,263	10.3
2. Inclusive entrepreneurship development support	95	1.9	-	-	103	2.0	-	-	3,032	59.5	1,193	23.4	-	-	676	13.3	-	-	5,098	12.3
Subtotal	777	8.3	-	-	1,373	14.7	-	-	3,032	32.4	3,504	37.4	-	-	676	7.2	-	-	9,362	22.6
C. Improved public services for upscaling climate resilient agricultural land use and productio	351	10.5	-	-	-	-	-	-	3,000	89.5	-	-	-	-	-	-	-	-	3,351	8.1
D. Project Management	1,483	37.2	520	13.0	1,744	43.7	44	1.1	99	2.5	99	2.5	-	-	-	-	-	-	3,989	9.6
Total PROJECT COSTS	6,552	15.8	1,166	2.8	4,566	11.0	950	2.3	15,000	36.3	8,000	19.3	3,619	8.7	1,280	3.1	240	0.6	41,373	100.0

Table 2 Expenditure Accounts by Financier

Palestine
Resilient Land and Resource Management Project (RELAP)
Expenditure Accounts by Financiers
(USD '000)

	The Government in kind		The Government in cash		IFAD GRANT		OFID		GCF		Other entities		Beneficiaries in kind		Beneficiaries in cash		Village council		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs																				
A. Consultancies /a	820	13.2	723	11.7	1,134	18.3	91	1.5	3,235	52.2	193	3.1	-	-	-	-	-	-	6,195	15.0
B. Goods, Services, Equipment /b	344	14.7	8	0.4	443	18.9	-	-	1,404	60.0	-	-	139	5.9	-	-	-	-	2,338	5.7
C. Grant & Subsidies	0	-	-	-	-	-	-	-	2,703	60.0	1,126	25.0	-	-	676	15.0	-	-	4,505	10.9
D. Trainings and Workshops /c	291	16.0	-	-	694	38.1	13	0.7	675	37.1	147	8.1	-	-	-	-	-	-	1,819	4.4
E. Works	3,706	16.0	-	-	966	4.2	845	3.7	6,885	29.7	6,435	27.8	3,480	15.0	604	2.6	240	1.0	23,161	56.0
Total Investment Costs	5,161	13.6	731	1.9	3,236	8.5	950	2.5	14,901	39.2	7,901	20.8	3,619	9.5	1,280	3.4	240	0.6	38,018	91.9
II. Recurrent Costs																				
A. Salaries & Allow ances	1,102	42.2	-	-	1,314	50.3	-	-	99	3.8	99	3.8	-	-	-	-	-	-	2,614	6.3
B. Operating Costs	290	39.1	435	58.8	16	2.2	-	-	-	-	-	-	-	-	-	-	-	-	741	1.8
Total Recurrent Costs	1,391	41.5	435	13.0	1,330	39.6	-	-	99	3.0	99	3.0	-	-	-	-	-	-	3,355	8.1
Total PROJECT COSTS	6,552	15.8	1,166	2.8	4,566	11.0	950	2.3	15,000	36.3	8,000	19.3	3,619	8.7	1,280	3.1	240	0.6	41,373	100.0

\a Including studies and technical assistance
\b This category includes goods, services, equipment & materials
\c It includes meetings

Table 3 Expenditure Accounts by Components - Base Costs

Palestine
Resilient Land and Resource Management Project (RELAP)
Expenditure Accounts by Components - Base Costs
(USD '000)

	Climate resilient land development			Market linkages for the rural poor		Improved public services for upscaling climate resilient agricultural land use and production systems	Project Management	Total	Physical Contingencies	
	Testing, monitoring and upscaling of climate adapted land devel-opment approaches	Resilient land development	Investment in agricultural roads	Rural bulking of agricultural products	Inclusive entrepreneurship development support				%	Amount
I. Investment Costs										
A. Consultancies /a	595	2,635	75	493	93	1,764	285	5,940	-	-
B. Goods, Services, Equipment /b	-	648	-	380	-	1,103	124	2,255	-	-
C. Grant & Subsidies	-	-	-	-	4,505	-	-	4,505	-	-
D. Trainings and Workshops /c	90	-	-	580	475	393	199	1,737	-	-
E. Works	-	16,033	2,500	2,532	-	-	-	21,064	4.6	978
Total Investment Costs	685	19,315	2,575	3,985	5,073	3,260	608	35,501	2.8	978
II. Recurrent Costs										
A. Salaries & Allow ances	-	-	-	-	-	-	2,488	2,488	-	-
B. Operating Costs	-	-	-	-	-	-	702	702	-	-
Total Recurrent Costs	-	-	-	-	-	-	3,190	3,190	-	-
Total BASELINE COSTS	685	19,315	2,575	3,985	5,073	3,260	3,797	38,691	2.5	978
Physical Contingencies	-	802	50	127	-	-	-	978	-	-
Price Contingencies										
Inflation										
Local	23	588	78	85	17	46	114	952	-	-
Foreign	7	222	28	29	1	25	24	336	-	-
Subtotal Inflation	31	810	107	114	17	71	137	1,287	-	-
Devaluation	11	252	34	37	7	20	54	416	-	-
Subtotal Price Contingencies	41	1,062	141	152	25	91	191	1,703	2.9	49
Total PROJECT COSTS	726	21,179	2,766	4,263	5,098	3,351	3,989	41,373	2.5	1,028
Taxes	110	3,389	443	682	95	351	210	5,279	3.1	164
Foreign Exchange	126	4,439	553	849	19	1,206	493	7,687	2.7	206

\a Including studies and technical assistance
\b This category includes goods, services, equipment & materials
\c It includes meetings

Table 4 Expenditure Accounts by Components - Totals Including Contingencies

Palestine
Resilient Land and Resource Management Project (RELAP)
Expenditure Accounts by Components - Totals Including Contingencies
(USD '000)

	Climate resilient land development			Market linkages for the rural poor		Improved public services for upscaling climate resilient agricultural land use and production systems	Project Management	Total
	Testing, monitoring and upscaling of climate adapted land devel-opment approaches	Resilient land development	Investment in agricultural roads	Rural bulking of agricultural products	Inclusive entrepreneurship development support			
I. Investment Costs								
A. Consultancies /a	631	2,778	79	511	97	1,799	301	6,195
B. Goods, Services, Equipment /b	-	679	-	393	-	1,139	126	2,338
C. Grant & Subsidies	-	-	-	-	4,505	-	-	4,505
D. Trainings and Workshops /c	96	-	-	607	496	413	207	1,819
E. Works	-	17,722	2,687	2,752	-	-	-	23,161
Total Investment Costs	726	21,179	2,766	4,263	5,098	3,351	634	38,018
II. Recurrent Costs								
A. Salaries & Allow ances	-	-	-	-	-	-	2,614	2,614
B. Operating Costs	-	-	-	-	-	-	741	741
Total Recurrent Costs	-	-	-	-	-	-	3,355	3,355
Total PROJECT COSTS	726	21,179	2,766	4,263	5,098	3,351	3,989	41,373
Taxes	110	3,389	443	682	95	351	210	5,279
Foreign Exchange	126	4,439	553	849	19	1,206	493	7,687

\a Including studies and technical assistance
\b This category includes goods, services, equipment & materials
\c It includes meetings

Table 5 Components Project Cost Summary

Palestine
Resilient Land and Resource Management Project (RELAP)
Components Project Cost Summary

	(Local '000)			(USD '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
A. Climate resilient land development								
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	2,117	445	2,562	566	119	685	17	2
2. Resilient land development	57,064	15,174	72,239	15,258	4,057	19,315	21	50
3. Investment in agricultural roads	7,704	1,926	9,631	2,060	515	2,575	20	7
Subtotal	66,886	17,545	84,431	17,884	4,691	22,575	21	58
B. Market linkages for the rural poor								
1. Rural bulking of agricultural products	11,931	2,973	14,905	3,190	795	3,985	20	10
2. Inclusive entrepreneurship development support	18,905	70	18,975	5,055	19	5,073	-	13
Subtotal	30,836	3,043	33,879	8,245	814	9,059	9	23
C. Improved public services for upscaling climate resilient agricultural land use and production systems	7,777	4,415	12,192	2,079	1,180	3,260	36	8
D. Project Management	12,445	1,758	14,202	3,327	470	3,797	12	10
Total BASELINE COSTS	117,944	26,760	144,704	31,536	7,155	38,691	18	100
Physical Contingencies	2,927	732	3,658	783	196	978	20	3
Price Contingencies	3,484	855	4,338	1,368	336	1,703	20	4
Total PROJECT COSTS	124,354	28,347	152,701	33,686	7,687	41,373	19	107

Table 6 Expenditure Accounts Project Cost Summary

Palestine
Resilient Land and Resource Management Project (RELAP)
Expenditure Accounts Project Cost Summary

	(Local '000)			(USD '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
I. Investment Costs								
A. Consultancies /a	16,740	5,476	22,216	4,476	1,464	5,940	25	15
B. Goods, Services, Equipment /b	4,216	4,216	8,433	1,127	1,127	2,255	50	6
C. Grant & Subsidies	16,850	-	16,850	4,505	-	4,505	-	12
D. Trainings and Workshops /c	6,496	-	6,496	1,737	-	1,737	-	4
E. Works	63,024	15,756	78,780	16,851	4,213	21,064	20	54
Total Investment Costs	107,326	25,448	132,775	28,697	6,804	35,501	19	92
II. Recurrent Costs								
A. Salaries & Allowances	9,305	-	9,305	2,488	-	2,488	-	6
B. Operating Costs	1,312	1,312	2,625	351	351	702	50	2
Total Recurrent Costs	10,617	1,312	11,930	2,839	351	3,190	11	8
Total BASELINE COSTS	117,944	26,760	144,704	31,536	7,155	38,691	18	100
Physical Contingencies	2,927	732	3,658	783	196	978	20	3
Price Contingencies	3,484	855	4,338	1,368	336	1,703	20	4
Total PROJECT COSTS	124,354	28,347	152,701	33,686	7,687	41,373	19	107

\a Including studies and technical assistance
\b This category includes goods, services, equipment & materials
\c It includes meetings

Table 7 Project Components by Year -- Base Costs

Palestine
Resilient Land and Resource Management Project (RELAP)
Project Components by Year -- Base Costs
(USD '000)

	Base Cost						
	2018	2019	2020	2021	2022	2023	Total
A. Climate resilient land development							
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	-	194	118	118	118	136	685
2. Resilient land development	18	4,196	5,740	5,565	3,757	40	19,315
3. Investment in agricultural roads	-	640	648	648	640	-	2,575
Subtotal	18	5,030	6,505	6,331	4,515	176	22,575
B. Market linkages for the rural poor							
1. Rural bulking of agricultural products	180	1,758	1,722	201	124	-	3,985
2. Inclusive entrepreneurship development support	26	1,265	2,498	1,265	16	3	5,073
Subtotal	207	3,023	4,220	1,467	140	3	9,059
C. Improved public services for upscaling climate resilient agricultural land use and production systems	716	954	597	444	318	230	3,260
D. Project Management	745	576	600	566	566	743	3,797
Total BASELINE COSTS	1,685	9,584	11,923	8,808	5,540	1,152	38,691
Physical Contingencies	-	250	315	243	169	-	978
Price Contingencies							
Inflation							
Local	6	124	242	271	250	60	952
Foreign	3	51	84	93	89	16	336
Subtotal Inflation	9	174	326	364	339	76	1,287
Devaluation	4	60	95	114	113	29	416
Subtotal Price Contingencies	13	235	421	478	452	105	1,703
Total PROJECT COSTS	1,698	10,069	12,659	9,529	6,161	1,257	41,373
Taxes	138	1,335	1,571	1,252	892	91	5,279
Foreign Exchange	646	1,925	2,073	1,639	1,209	194	7,687

Table 8 Project Components by Year -- Totals Including Contingencies

Palestine
Resilient Land and Resource Management Project (RELAP)
Project Components by Year -- Totals Including Contingencies
(USD '000)

	Totals Including Contingencies						
	2018	2019	2020	2021	2022	2023	Total
A. Climate resilient land development							
1. Testing, monitoring and upscaling of climate adapted land devel-opment approaches	-	200	123	126	128	150	726
2. Resilient land development	18	4,491	6,237	6,154	4,235	44	21,179
3. Investment in agricultural roads	-	671	688	701	706	-	2,766
Subtotal	18	5,361	7,048	6,981	5,069	194	24,671
B. Market linkages for the rural poor							
1. Rural bulking of agricultural products	182	1,871	1,862	214	134	-	4,263
2. Inclusive entrepreneurship development support	27	1,269	2,508	1,274	18	3	5,098
Subtotal	209	3,140	4,371	1,488	151	3	9,362
C. Improved public services for upscaling climate resilient agricultural land use and production systems	719	976	616	462	332	245	3,351
D. Project Management	752	591	624	598	609	815	3,989
Total PROJECT COSTS	1,698	10,069	12,659	9,529	6,161	1,257	41,373

Table 9 Expenditure Accounts by Years -- Base Costs

Palestine
Resilient Land and Resource Management Project (RELAP)
Expenditure Accounts by Years -- Base Costs
(USD '000)

	Base Cost							Foreign Exchange	
	2018	2019	2020	2021	2022	2023	Total	%	Amount
I. Investment Costs									
A. Consultancies /a	692	1,298	1,459	1,245	897	350	5,940	24.6	1,464
B. Goods, Services, Equipment /b	345	863	483	280	188	96	2,255	50.0	1,127
C. Grant & Subsidies	-	1,126	2,253	1,126	-	-	4,505	-	-
D. Trainings and Workshops /c	143	408	541	404	176	65	1,737	-	-
E. Works	-	5,380	6,680	5,239	3,765	-	21,064	20.0	4,213
Total Investment Costs	1,180	9,075	11,415	8,294	5,026	511	35,501	19.2	6,804
II. Recurrent Costs									
A. Salaries & Allow ances	393	393	393	393	393	521	2,488	-	-
B. Operating Costs	112	115	115	120	120	120	702	50.0	351
Total Recurrent Costs	505	508	508	513	513	641	3,190	11.0	351
Total BASELINE COSTS	1,685	9,584	11,923	8,808	5,540	1,152	38,691	18.5	7,155
Physical Contingencies	-	250	315	243	169	-	978	20.0	196
Price Contingencies									
Inflation									
Local	6	124	242	271	250	60	952	-	-
Foreign	3	51	84	93	89	16	336	100.0	336
Subtotal Inflation	9	174	326	364	339	76	1,287	26.1	336
Devaluation	4	60	95	114	113	29	416	-	-
Subtotal Price Contingencies	13	235	421	478	452	105	1,703	19.7	336
Total PROJECT COSTS	1,698	10,069	12,659	9,529	6,161	1,257	41,373	18.6	7,687
Taxes	138	1,335	1,571	1,252	892	91	5,279	-	-
Foreign Exchange	646	1,925	2,073	1,639	1,209	194	7,687	-	-

\a Including studies and technical assistance
\b This category includes goods, services, equipment & materials
\c It includes meetings

Table 10 Expenditure Accounts by Years -- Totals Including Contingencies

Palestine
Resilient Land and Resource Management Project (RELAP)
Expenditure Accounts by Years -- Totals Including Contingencies
(USD '000)

	Totals Including Contingencies						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
I. Investment Costs							
A. Consultancies /a	695	1,331	1,516	1,314	960	379	6,195
B. Goods, Services, Equipment /b	348	886	502	296	202	104	2,338
C. Grant & Subsidies	-	1,126	2,253	1,126	-	-	4,505
D. Trainings and Workshops /c	144	419	564	429	191	72	1,819
E. Works	-	5,786	7,296	5,822	4,257	-	23,161
Total Investment Costs	1,188	9,548	12,131	8,987	5,610	555	38,018
II. Recurrent Costs							
A. Salaries & Allowances	397	403	408	415	421	570	2,614
B. Operating Costs	113	118	120	127	130	132	741
Total Recurrent Costs	510	521	528	542	551	702	3,355
Total PROJECT COSTS	1,698	10,069	12,659	9,529	6,161	1,257	41,373

\a Including studies and technical assistance
\b This category includes goods, services, equipment & materials
\c It includes meetings

Table 11 Disbursement Accounts by Financiers

Palestine
Resilient Land and Resource Management Project (RELAP)
Disbursement Accounts by Financiers
(USD '000)

	The Government in kind		The Government in cash		IFAD GRANT		OFID		GCF		Other entities		Beneficiaries in kind		Beneficiaries in cash		Village council		Total	
	Amount	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
1. Consultancies_DA	820	13.2	723	11.7	1,134	18.3	91	1.5	3,235	52.2	193	3.1	-	-	-	-	-	-	6,195	15.0
2. Goods, Services, Equipment_DA /a	344	14.7	8	0.4	443	18.9	-	-	1,404	60.0	-	-	139	5.9	-	-	-	-	2,338	5.7
3. GRANT_DA	0	-	-	-	-	-	-	-	2,703	60.0	1,126	25.0	-	-	676	15.0	-	-	4,505	10.9
4. Workshops_DA	291	16.0	-	-	694	38.1	13	0.7	675	37.1	147	8.1	-	-	-	-	-	-	1,819	4.4
5. Works_DA	3,706	16.0	-	-	966	4.2	845	3.7	6,885	29.7	6,435	27.8	3,480	15.0	604	2.6	240	1.0	23,161	56.0
6. Salaries and Allowances_DA	1,102	42.2	-	-	1,314	50.3	-	-	99	3.8	99	3.8	-	-	-	-	-	-	2,614	6.3
7. Operating Costs_DA	290	39.1	435	58.8	16	2.2	-	-	-	-	-	-	-	-	-	-	-	-	741	1.8
Total PROJECT COSTS	6,552	15.8	1,166	2.8	4,566	11.0	950	2.3	15,000	36.3	8,000	19.3	3,619	8.7	1,280	3.1	240	0.6	41,373	100.0

\a This category includes goods, services, equipment & material

Table 12 Disbursements by Semesters and Government Cash Flow

Palestine
Resilient Land and Resource Management Project (RELAP)
Disbursements by Semesters and Government Cash Flow
(USD '000)

	Financing Available									Costs to be Financed	The Government in kind	
	The Government in cash	IFAD GRANT	OFID	GCF	Other entities	Beneficiaries in kind	Beneficiaries in cash	Village council		Project		Cumulative
	Amount	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**Total**	**Costs**	**Cash Flow**	**Cash Flow**
1	42	280	9	344	7	-	-	-	681	849	-168	-168
2	42	280	9	344	7	-	-	-	681	849	-168	-335
3	105	483	103	1,705	1,304	391	143	29	4,265	5,034	-769	-1,105
4	105	483	103	1,705	1,304	391	143	29	4,265	5,034	-769	-1,874
5	139	533	130	2,344	1,471	535	259	30	5,441	6,330	-889	-2,763
6	139	533	130	2,344	1,471	535	259	30	5,441	6,330	-889	-3,652
7	141	414	132	1,924	689	524	176	30	4,031	4,764	-733	-4,385
8	141	414	132	1,924	689	524	176	30	4,031	4,764	-733	-5,118
9	111	329	91	1,054	488	360	62	31	2,525	3,081	-555	-5,674
10	111	329	91	1,054	488	360	62	31	2,525	3,081	-555	-6,229
11	45	244	9	129	40	-	-	-	467	629	-161	-6,391
12	45	244	9	129	40	-	-	-	467	629	-161	-6,552
Total	1,166	4,566	950	15,000	8,000	3,619	1,280	240	34,821	41,373	-6,552	-6,552

Attachment 9.2, Appendix 9: Detailed Project Costs (US$)

Table	Description
1	Testing, monitoring and upscaling of climate adapted land development approaches
2	Resilient land development
3	Investment in agricultural roads
4	Rural bulking of agricultural products
5	Inclusive entrepreneurship development support
6	Improved public services for upscaling climate resilient agricultural land use and production systems
7	Project management

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 1.1. Testing, monitoring and upscaling of climate adapted land devel-opment approach

Detailed Costs	Unit	Quantities 2018	2019	2020	2021	2022	2023	Total	Unit Cost (USD)	Totals Including Contingencies (USD '000) 2018	2019	2020	2021	2022	2023	Total	Summary Divisions Component	Expenditure Account	Other A Fin. Rule
I. Investment Costs																			
A. Stocktake study /a	person.month	-	4	-	-	-	-	4	2,000	-	8	-	-	-	-	8	COMP_1.1	CONSULTANCIES	GCF (40%), OFID (60%)
B. CCA land development practices testing and monitoring system /b	lumpsum	-	1	-	-	-	-	1	50,000	-	51	-	-	-	-	51	COMP_1.1	CONSULTANCIES	GCF (50%), OFID (50%)
C. MOA local staff training of farmers and implementation of testing and monitoring /c	lumpsum	-	1	1	1	1	1	5	18,000	-	18	19	19	19	20	96	COMP_1.1	T&W	OTHER_ENTITIES (100%)
D. National Agricultural Research Center (NARC) soil samples analysis	sample	-	864	864	864	864	864	4,320	50	-	44	45	46	47	48	230	COMP_1.1	CONSULTANCIES	OTHER_ENTITIES (100%)
E. Household resilience survey	survey	-	1	-	-	-	1	2	18,000	-	18	-	-	-	20	38	COMP_1.1	CONSULTANCIES	GCF (60%), OFID (40%)
F. Know ledge products /d	lumpsum	-	1	1	1	1	1	5	7,000	-	7	7	7	8	8	37	COMP_1.1	CONSULTANCIES	GCF (40%), OFID (60%)
G. Technical Assistance	lumpsum									-	51	52	53	54	55	266	COMP_1.1	CONSULTANCIES	IFAD (100%)
Total										-	200	123	126	128	150	726			

\a Individual consultant
\b Design, IT platform and training - NGO contract
\c MOA local staff salaries and allow ances covered by the MOA
\d Policy briefs, adjustment of land development guidelines

Palestine
Resilient Land and Resource Management
Table 1.2. Resilient land development

Detailed Costs	Unit	Quantities 2018	2019	2020	2021	2022	2023	Total	Unit Cost (USD)	Totals Including Contingencies (USD '000) 2018	2019	2020	2021	2022	2023	Total	Summary Divisions Component	Expenditure Account	Disb. Acct.	Other A Fin. Rule
I. Investment Costs																				
A. Orchards using terrasses, conto																				
1. Civil w orks - land development /b	dunum	-	2,000	3,000	3,000	2,000	-	10,000	1,300	-	2,805	4,271	4,348	2,954	-	14,379	COMP_1.2	WORKS	WORKS_DA	IFAD (8%), GCF (57%), OFID (7%), BEN_IN_KIND (23%), BEN_CASH (5%)
B. Rangeland rehabilitation /c	dunum	-	875	875	875	875	-	3,500	617	-	583	591	602	613	-	2,389	COMP_1.2	WORKS	WORKS_DA	BEN_IN_KIND (25%), OTHER_ENTITIES (75%)
C. Wadis development w ith soil and w at	dunum	-	400	400	200	-	-	1,000	873	-	377	382	195	-	-	954	COMP_1.2	WORKS	WORKS_DA	BEN_IN_KIND (25%), OTHER_ENTITIES (75%)
D. Conservation agriculture in crop																				
Conservation agriculture w orks /e	dunum	-	1,000	1,000	1,000	500	-	3,500	180	-	185	188	191	97	-	661	COMP_1.2	GS&EM	GS&EM_DA	BEN_IN_KIND (25%), GCF (75%)
Modification of sow ing machines /f	machine	7	-	-	-	-	-	7	2,500	18	-	-	-	-	-	18	COMP_1.2	GS&EM	GS&EM_DA	IFAD (100%)
Subtotal										18	185	188	191	97	-	679				
E. Empow ering w omen through land rigl	lumpsum	-	1	1	1	1	1	5	40,000	-	41	42	42	43	44	213	COMP_1.2	CONSULTANCIES	CONSULTANCIES_DA	IFAD (100%)
F. NGOs cost for implementation /g	per year									-	500	762	776	527	-	2,565	COMP_1.2	CONSULTANCIES	CONSULTANCIES_DA	GCF (70%) , GOVT_CASH (30%)
Total										18	4,491	6,237	6,154	4,235	44	21,179				

\a 15% of applications w ill be for land reclamation on slopes betw een 10-30%, 40% for land rehabilitation on slopes betw een 10-30%, 35% of applications w ill be for lands w ith slope less than 10%, 10% for lands w ith slope betw een 30 to 40%
\b Beneficiaries' in cash contribution is estimated at 15% of machine w orks. Beneficiaries' in kind contribution is estimated at 30% of labour intensive w orks
\c It includes cost for: fencing, roads opening, cistern construction, planting, inputs, labur etc.
\d It includes cost for gabion structure, land leveling, stone preparation, w ater storage and distribution, inputs
\e It includes machinery, inputs and labour cost
\f One machinery every 500 dunums per season
\g 15% of investment; including selection, feasibility studies, baseline studies, design, bidding of w orks, supervision of w orks, irrigation and extension services.

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 1.3. Investment in agricultural roads

Detailed Costs	Unit	Quantities							Unit Cost	Totals Including Contingencies (USD '000)							Summary Divisions Expenditure Account	Other A Fin. Rule
		2018	2019	2020	2021	2022	2023	Total	(USD)	2018	2019	2020	2021	2022	2023	Total		
I. Investment Costs																		
A. Road	km	-	25	25	25	25	-	100	25,000	-	655	665	677	690	-	2,687	WORKS	OTHER_ENTITIES (90%), VILLAGE_COUNCIL (10%)
B. Supervision /a	km									-	16	25	25	17	-	83	WORKS	IFAD (100%)
Total										-	671	690	702	707	-	2,770		

\a Estimated at 3% of investment cost

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 2.1. Rural bulking of agricultural products

Detailed Costs	Unit	Quantities							Unit Cost	Totals Including Contingencies (USD '000)							Summary Divisions Expenditure Account	Other A Fin. Rule
		2018	2019	2020	2021	2022	2023	Total	(USD)	2018	2019	2020	2021	2022	2023	Total		
I. Investment Costs																		
A. Support to MSP																		
Implementing Partner staff /a	team.month	5	5	5	5	5	-	25	9,200	46	47	48	49	50	-	240	CONSULTANCIES	IFAD (100%)
Training /supporting in business skills /b	training	-	5	10	10	5	-	30	4,190	-	22	44	44	23	-	132	T&W	IFAD (100%)
Local expenses for MSP members /c	meeting	5	10	5	10	5	-	35	1,572	8	16	8	17	9	-	57	T&W	IFAD (100%)
Training /supporting infra management bodies /d	training	-	5	10	10	5	-	30	1,048	-	5	11	11	6	-	33	T&W	IFAD (100%)
PALGAP scheme development (PSI) /e	modules.year	3	-	3	-	-	-	6	3,165	10	-	10	-	-	-	19	T&W	IFAD (100%)
Fair/festival, farmers exchanges, national study tour	activity	5	10	10	10	5	-	40	8,730	44	90	91	93	47	-	365	T&W	IFAD (100%)
Subtotal										108	180	212	214	134	-	848		
B. Market and collection centres																		
Studies /f	center	5	5	-	-	-	-	10	12,660	64	65	-	-	-	-	129	CONSULTANCIES	IFAD (100%)
Collection markets physical w orks	market	-	5	5	-	-	-	10	253,165	-	1,366	1,386	-	-	-	2,752	WORKS	OTHER_ENTITIES (100%)
Supervision /g	market	-	5	5	-	-	-	10	12,660	-	65	66	-	-	-	131	CONSULTANCIES	IFAD (100%)
Equipment /h	market	-	5	5	-	-	-	10	38,000	-	195	198	-	-	-	393	GS&EM	IFAD (100%)
Technical Assistance	person.day	10	-	-	-	-	-	10	1,000	10	-	-	-	-	-	10	CONSULTANCIES	IFAD (100%)
Subtotal										74	1,691	1,651	-	-	-	3,416		
Total										182	1,871	1,862	214	134	-	4,263		

\a 1 supervisor and 4 sites officers
\b Persons per year per MSP, 4 day training (30 people per MSP)
\c Members meetings on bimonthly basis
\d Each infra w ith a management body 10 people
\e 3 modules, 20 inspectors, 5 gov, 4 auditors
\f Consultant and architect firm
\g Consultant firm
\h It includes scales, computers, w eighting bridge

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 2.2. Inclusive entrepreneurship development support

Detailed Costs		Quantities							Unit Cost	Totals Including Contingencies (USD '000)							Summary Divisions		Other A
	Unit	2018	2019	2020	2021	2022	2023	Total	(USD)	2018	2019	2020	2021	2022	2023	Total	Component	Expenditure Account	Fin. Rule
I. Investment Costs																			
A. Inclusive entrepreneurship development support (MGs)	per HH	-	225	450	225	-	-	900	5,006	-	1,126	2,253	1,126	-	-	4,505	COMP_2.2	GRANT	BEN_CASH (15%), GCF (60%), OTHER_ENTITIES (25%)
B. Support to business plans	per HH	-	225	450	225	-	-	900	500	-	116	235	119	-	-	470	COMP_2.2	T&W	GCF (83.2%), OTHER_ENTITIES (16.8%)
C. PMU Agribusiness Unit																			
ToT regional staff (facilitation multistakeholder platform) + support costs /a	per person	50	50	-	50	50	-	200	125	6	6	-	7	7	-	26	COMP_2.2	T&W	IFAD (100%)
Technical assistance /b	person.day	20	20	20	20	10	3	93	1,000	20	21	21	21	11	3	97	COMP_2.2	CONSULTANCIES	IFAD (100%)
Total										27	1,269	2,508	1,274	18	3	5,098			

\a 10 people per district
\b For expertise in market development/market infrastructure

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 3. Improved public services for upscaling climate resilient agricultural land use and production systems

Detailed Costs	Unit	Unit Cost (USD)	Totals Including Contingencies (USD '000) 2018	2019	2020	2021	2022	2023	Total	Summary Divisions Component	Expenditure Account	Other A Fin. Rule
I. Investment Costs												
A. 3.1 Improving agro-climate information and extension services to farmers												
1. Technical Expertise /a												
Agrometeorology network expertise	person.day	377	17	72	73	18	-	-	180	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Climate information analysis expertise	person.day	377	5	17	11	12	-	-	45	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Climate communication expertise	person.month	3,605	7	26	26	8	-	-	67	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Agrometeorology expertise	person.day	377	6	22	23	6	-	-	57	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Climate resilient agriculture expertise	person.day	377	-	2	6	6	2	-	15	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Climate resilience knowledge management and capacity development expertise	person.month	3,605	-	9	41	42	10	-	102	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Subtotal			35	148	180	91	11	-	466			
2. Inputs and services /b												
Strengthening agrometeorology monitoring capacities	lumpsum		41	292	-	-	-	-	333	COMP_3.1.2	GS&EM	GCF (100%)
Upgrade / maintenance of weather stations, equipment and improving management systems	lumpsum		-	71	72	73	74	76	365	COMP_3.1.2	GS&EM	GCF (100%)
Design and establishment of Climate Database Management System	lumpsum		59	-	-	-	-	-	59	COMP_3.1.2	GS&EM	GCF (100%)
Agroclimate modelling and information dissemination equipment	lumpsum		65	66	-	-	-	-	131	COMP_3.1.2	GS&EM	GCF (100%)
Server to run climate change impact models fr agriculture crops	lumpsum		32	33	-	-	-	-	64	COMP_3.1.2	GS&EM	GCF (100%)
Consolidation and analysis of climate data and linkage between PMD and MoA databases	lumpsum		20	39	30	10	-	-	100	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Subtotal			216	501	102	83	74	76	1,052			
3. Trainings and workshops /c												
On the job coaching and trainings on agrometeorological observation /d	lumpsum		6	26	16	16	-	-	65	COMP_3.1.2	T&W	GCF (100%)
On the job coaching, agro-climate information training package /e	lumpsum		6	26	16	16	-	-	65	COMP_3.1.2	T&W	GCF (100%)
On the job coaching and training on agro-meteorology and agricultural climate impact modelling /f	lumpsum		4	17	11	11	-	-	43	COMP_3.1.2	T&W	GCF (100%)
Training and coaching on climate resilient agriculture	lumpsum		-	13	43	13	18	-	87	COMP_3.1.2	T&W	GCF (100%)
Subtotal			17	81	86	57	18	-	259			
Subtotal			268	730	369	232	104	76	1,777			
B. 3.2 Strengthening institutional and technical capacities for the implementation of agriculture goals in th												
1. Technical Expertise /g												
Expertise in knowledge management and communication for climate change actions	person.month	3,605	-	3	3	3	3	3	15	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Programme analysis expertise for upscaling climate change adaptation practices	person.month	3,605	2	7	8	2	-	-	19	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Subtotal			2	10	11	5	3	3	34			
2. Inputs and services /h												
Compilation of validated adaptation practices and their benefits to inform public and private investment planning	lumpsum		-	18	18	18	19	19	93	COMP_3.1.2	CONSULTANCIES	GCF (100%)
3. Trainings and workshops /i												
Consultation workshops and awareness raising events on climate change actions	lumpsum		-	16	17	17	17	18	85	COMP_3.1.2	T&W	GCF (100%)
Dialogue and consultative workshops on upscaling climate change adaptation practices (programme design)	lumpsum		-	11	11	12	12	12	58	COMP_3.1.2	T&W	GCF (100%)
Partnership building workshops	lumpsum		-	2	2	2	2	2	10	COMP_3.1.2	T&W	GCF (100%)
Subtotal			-	30	30	31	31	32	154			

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 3. Improved public services for upscaling climate resilient agricultural land use and production systems

Detailed Costs	Unit	Unit Cost (USD)	Totals Including Contingencies (USD '000) 2018	2019	2020	2021	2022	2023	Total	Summary Divisions Component	Expenditure Account	Other A Fin. Rule
4. Travel												
International travel for partnership building	day.year	310	-	4	4	4	4	4	21	COMP_3.1.2	GS&EM	GCF (100%)
Tickets for international travel for partnership building	day	800	-	2	3	3	3	3	13	COMP_3.1.2	GS&EM	GCF (100%)
Subtotal			-	7	7	7	7	7	34			
Subtotal			2	65	66	61	60	61	314			
C. Cross cutting investment costs /j												
1. Travel												
Travel for expertise	day	282	13	17	17	13	13	13	85	COMP_3.1.2	GS&EM	GCF (100%)
Travel for beneficiaries	day	336	2	9	9	4	4	3	32	COMP_3.1.2	GS&EM	GCF (100%)
Tickets	ticket	800	3	10	10	6	5	3	36	COMP_3.1.2	GS&EM	GCF (100%)
Subtotal			18	36	36	23	21	19	153			
2. Other costs												
Technical support services	lumpsum		5	5	5	5	5	5	31	COMP_3.1.2	CONSULTANCIES	GCF (100%)
FAO project support cost /k	lumpsum		345	-	-	-	-	-	345	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Subtotal			350	5	5	5	5	5	376			
3. Climate change technical officer	person.month	9,900	59	119	119	119	119	59	594	COMP_3.1.2	CONSULTANCIES	GCF (100%)
4. General operating services /l	per month	1,800	22	22	23	23	23	24	137	COMP_3.1.2	CONSULTANCIES	GCF (100%)
Subtotal			450	182	182	170	169	108	1,260			
Total			719	976	616	462	332	245	3,351			

\a All unit costs for technical expertise include 16% tax (GoP in-kind contribution)
\b All unit costs/lumpsum include 16% tax as GoP in-kind contribution
\c All unit costs/lumpsum include 16% tax as GoP in-kind contribution
\d It includes the cost of procuring equipment for monitoring synoptic weather stations
\e Development and delivery
\f Development and delivery
\g All unit costs for technical expertise include 16% tax (GoP in-kind contribution)
\h All unit costs/lumpsum include 16% tax as GoP in-kind contribution
\i All unit costs/lumpsum include 16% tax as GoP in-kind contribution
\j Considered investment costs because they will be included in the consultancy contract with FAO.
\k 13% of 3 million
\l Part of FAO contract/project management cost

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 4. Project Management

Detailed Costs	Unit	Quantities							Unit Cost	Totals Including Contingencies (USD '000)							Summary Divisions		Other A
		2018	2019	2020	2021	2022	2023	Total	(USD)	2018	2019	2020	2021	2022	2023	Total	Component	Expenditure Account	Fin. Rule
I. Investment Costs																			
A. Workshops, trainings and meetings																			
1. Start-up w orkshop - 4 days in Ramallah	event	1	-	-	-	-	-	1	10,000	10	-	-	-	-	-	10	PM	T&W	IFAD (100%)
2. Start-up w orkshop for governorates /a	event	3	-	-	-	-	-	3	5,000	15	-	-	-	-	-	15	PM	T&W	OFID (100%)
3. KM & M&E w orkshops, stakeholder consultations, annual stakeholder w orkshops	event	2	2	1	1	1	1	8	5,000	10	10	5	5	5	6	42	PM	T&W	IFAD (100%)
4. Project Steering Committee and technical committee meetings /b	event	2	2	2	2	2	2	12	2,000	4	4	4	4	4	4	25	PM	T&W	IFAD (100%)
5. Trainings and capacity buiilding for PMU staff	lumpsum									20	21	21	21	22	10	115	PM	T&W	IFAD (100%)
Subtotal										60	35	30	31	31	20	207			
B. Survey, studies and manuals																			
1. Baseline	study	1	-	-	-	-	-	1	40,000	40	-	-	-	-	-	40	PM	CONSULTANCIES	IFAD (100%)
2. Mid-term review	study	-	-	1	-	-	-	1	39,000	-	-	41	-	-	-	41	PM	CONSULTANCIES	IFAD (100%)
3. Annual outcome surveys	study	-	1	1	1	1	1	5	2,000	-	2	2	2	2	2	11	PM	CONSULTANCIES	IFAD (100%)
4. Project completion report	study	-	-	-	-	-	1	1	10,000	-	-	-	-	-	11	11	PM	CONSULTANCIES	IFAD (100%)
5. Impact survey	survey	-	-	-	-	-	1	1	50,000	-	-	-	-	-	55	55	PM	CONSULTANCIES	IFAD (100%)
6. PIM financial procedures manual	manual	1	-	-	-	-	-	1	3,000	3	-	-	-	-	-	3	PM	CONSULTANCIES	IFAD (100%)
7. PIM operations manual	manual	1	-	-	-	-	-	1	3,000	3	-	-	-	-	-	3	PM	CONSULTANCIES	IFAD (100%)
8. Translation	lumpsum									10	10	10	11	11	11	63	PM	CONSULTANCIES	GOVT_CASH (50%), OFID (50%)
9. Capacity building on gender household methodology and other gender mainstreaming tools	lumpsum									10	10	-	-	-	-	20	PM	CONSULTANCIES	IFAD (100%)
Subtotal										67	23	53	13	13	79	248			
C. Audit																			
1. Financial audit	audit	-	1	1	1	1	1	5	10,000	-	10	10	11	11	11	53	PM	CONSULTANCIES	GOVT_CASH (100%)
D. Equipment and vehicles																			
1. Office furniture	lumpsum									10	-	-	-	-	-	10	PM	GS&EM	GOVT_CASH (100%)
2. Accounting softw are	lumpsum									3	2	2	2	2	2	14	PM	GS&EM	IFAD (100%)
3. Computers	set	26	-	-	-	-	-	26	1,000	26	-	-	-	-	-	26	PM	GS&EM	IFAD (100%)
4. Microsoft Office	set	26	-	-	-	-	-	26	200	5	-	-	-	-	-	5	PM	GS&EM	IFAD (100%)
5. Mobile phones, camera, printers, scanners, video projector	lumpsum									10	-	-	-	-	-	10	PM	GS&EM	IFAD (100%)
6. Vehicle 4x4	vehicle	1	-	-	-	-	-	1	60,000	61	-	-	-	-	-	61	PM	GS&EM	IFAD (100%)
Subtotal										115	2	2	2	2	2	126			
Total Investment Costs										242	70	96	56	57	113	634			

Palestine
Resilient Land and Resource Management Project (RELAP)
Table 4. Project Management

Detailed Costs	Unit	Quantities							Unit Cost (USD)	Totals Including Contingencies (USD '000)							Summary Divisions		Other A
		2018	2019	2020	2021	2022	2023	Total		2018	2019	2020	2021	2022	2023	Total	Component	Expenditure Account	Fin. Rule
II. Recurrent Costs																			
A. PMU Salaries																			
1. Seconded from GoP																			
Project director - 60%	person.month	12	12	12	12	12	18	78	1,440	17	18	18	18	19	29	119	PM	S&A	GOVT
Market specialist - 30%	person.month	12	12	12	12	12	12	72	630	8	8	8	8	8	8	48	PM	S&A	GOVT
Rangeland specialist - 30%	person.month	12	12	12	12	12	12	72	630	8	8	8	8	8	8	48	PM	S&A	GOVT
Soil conservation specialist - 40%	person.month	12	12	12	12	12	12	72	840	10	10	11	11	11	11	64	PM	S&A	GOVT
Natural resource research specialist - 20%	person.month	12	12	12	12	12	12	72	420	5	5	5	5	5	6	32	PM	S&A	GOVT
Road Infrastructure Engineer - 50%	person.month	12	12	12	12	12	12	72	1,050	13	13	13	13	14	14	80	PM	S&A	GOVT
Extension Officer - 20%	person.month	12	12	12	12	12	12	72	420	5	5	5	5	5	6	32	PM	S&A	GOVT
Field coordinators - 40%	person.month	72	72	72	72	72	72	432	840	61	62	63	64	65	67	383	PM	S&A	GOVT
Land Development Engineer - 30%	person.month	12	12	12	12	12	12	72	630	8	8	8	8	8	8	48	PM	S&A	GOVT
Climate change specialist - 30%	person.month	12	12	12	12	12	12	72	630	8	8	8	8	8	8	48	PM	S&A	GOVT
Driver at central level - 100% /c	person.month	12	12	12	12	12	12	72	900	11	11	11	11	12	12	68	PM	S&A	GOVT
Drivers at district level - 30% /d	person.month	78	78	78	78	78	78	468	270	21	22	22	22	23	23	133	PM	S&A	GOVT
Allowances for seconded staff /e	per year									51	51	51	51	51	44	301	PM	S&A	IFAD (100%)
Subtotal										226	229	231	235	238	244	1,403			
2. Contracted by RELAP																			
Deputy project director technical assistant, specialist in land and water management	person.month	12	12	12	12	12	18	78	2,400	29	30	30	31	31	48	198	PM	S&A	GCF (50%), OTHER_ENTITIES (50%)
Agribusiness specialist	person.month	12	12	12	12	12	12	72	2,300	28	28	29	29	30	30	175	PM	S&A	IFAD (100%)
M&E and KM specialist	person.month	12	12	12	12	12	18	78	2,300	28	28	29	29	30	46	190	PM	S&A	IFAD (100%)
Gender specialist /f	person.month	12	12	12	12	12	12	72	1,150	14	14	14	15	15	15	87	PM	S&A	IFAD (100%)
Procurement specialist	person.month	12	12	12	12	12	12	72	2,300	28	28	29	29	30	30	175	PM	S&A	IFAD (100%)
Financial management specialist	person.month	12	12	12	12	12	18	78	2,300	28	28	29	29	30	46	190	PM	S&A	IFAD (100%)
Accountant/administrative assistant	person.month	12	12	12	12	12	12	72	1,200	15	15	15	15	16	16	91	PM	S&A	IFAD (100%)
Termination benefits /g	lumpsum									-	-	-	-	-	92	92	PM	S&A	IFAD (100%)
Insurance /h	per year	7	7	7	7	7	7	42	300	2	2	2	2	2	2	13	PM	S&A	IFAD (100%)
Subtotal										171	174	177	180	183	325	1,211			
3. Operating costs for PMU																			
Travel PMU /i	lumpsum	2,635	2,635	2,635	2,635	2,635	2,635	15,810	25	67	68	69	70	71	73	417	PM	OC	GOVT_CASH (100%)
Office rent	per year	1	1	1	1	1	1	6	8,900	9	9	9	9	10	10	56	PM	OC	GOVT
Utilities	per year	1	1	1	1	1	1	6	3,100	3	3	3	3	3	3	20	PM	OC	GOVT
Communication costs (GOP seconded staff)	person.year	19	19	19	19	19	19	114	26	0	1	1	1	1	1	3	PM	OC	GOVT
Communication costs (staff hired by RELAP)	person.year	7	7	7	7	7	7	42	170	1	1	1	1	1	1	8	PM	OC	GOVT_CASH (100%)
Fuel for vehicle - central level	person.year	1	1	1	1	1	1	6	7,000	7	7	7	7	8	8	44	PM	OC	GOVT_CASH (100%)
Fuel for vehicles - district level	person.year	6	6	6	6	6	6	36	2,100	13	13	13	13	14	14	80	PM	OC	GOVT
Vehicle maintenance - central level	lumpsum									3	3	3	3	3	3	19	PM	OC	IFAD (100%)
Vehicle maintenance - district level	lumpsum									2	5	5	11	11	11	45	PM	OC	GOVT
Other vehicle costs (central level) /j	lumpsum									3	3	3	3	3	3	18	PM	OC	GOVT_CASH (100%)
Other operating costs (for stationery, bank charges, advertisment etc..)	lumpsum									5	5	5	5	5	6	32	PM	OC	GOVT_CASH (100%)
Subtotal										113	118	120	127	130	132	741			
Total Recurrent Costs										510	521	528	542	551	702	3,355			
Total										752	591	624	598	609	815	3,989			

\a 3 workshops to be held in the north, centre and south
\b Twice per year.
\c Driver seconded at central level (Ramallah). Full time.
\d 13 seconded drivers at district level (30% of their time)
\e Calculation based on 30% of the seconded staff salary's contribution from the GoP
\f Part time
\g Only for people hired by PMU. By law, when a contract ends the employer is obliged to pay one month salary for each year worked
\h For each staff directly employed by RELAP (7 people)
\i It includes partecipation to IFAD regional meetings/workshops. Estimated on average 2640 field trips per year (22 people x 10 days/month) @ USD 25 per trip (average)
\j It includes insurance

Appendix 10: Economic and Financial Analysis

464. A financial and economic analysis is undertaken to assess the financial and economic impacts of the project on farmers and on the society as a whole. Benefits are expected to derive from (i) enhanced access to productive agricultural land and water through a range of investments in land development, agricultural roads, soil improvements, and rain water harvesting facilities; ii) strengthened smallholders' resilience to current and anticipated impacts of climate variability and change through adapted agricultural land-uses and practices, and improved soil and water management; iii) improved market linkages at cluster levels; iv) entrepreneurship development support, which will focus on creating economic opportunities for women and youth. In order to represent the project financial benefits, 12 financial models have been prepared. The financial models have also been used as building blocks for the economic analysis.

465. **Number of beneficiaries.** RELAP is expected to benefit about 30,000 households, or 150,000 direct beneficiaries, considering an average household size of 5 in West Bank[133].Approximately 2 700 households will benefit from resilient and equitable land development activities; 4,500 households – including 1,850 not benefiting from land development - will benefit from agricultural roads construction; 900 households will benefit from inclusive entrepreneurship development support; and 6,650 households will benefit from cluster development support – out of which 4,000 households will exclusively benefit from cluster development support and 2,650 households will also benefit from access to grants and resilient land development activities . Finally, 30,000 households will directly benefit from component 3's activities, including climate resilient trainings and enhanced information/knowledge sharing. The below table summarizes the beneficiaries' phasing-in by activity.

Table 52: Direct household beneficiaries' phasing-in by main activity

Direct households beneficiaries'phasing-in by main activity								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Direct HHs beneficiaries	Direct Beneficiaries
Orchards using terrasses, contour bounds, v-shapes		300	450	450	300		**1 500**	**7 500**
Conservation agriculture in crop-livestock systems		87	87	87	29		**290**	**1 450**
Wadis land development		144	144	72			**360**	**1 800**
Rangeland land development		125	125	125	125		**500**	**2 500**
Investment in agricultural roads (benefiting from roads and land development)		1 125	1 125	1 125	1 125		4 500	22 500
Investment in agricultural roads (benefiting only from roads)		469	319	391	671		**1 850**	**9 250**
Cluster development support (benefiting from Component 1, MGs and cluster development support)		1 663	1 663	1 663	1 663		6 650	33 250
Cluster development support (benefiting only from cluster development support)		1 007	857	929	1 209		**4 000**	**20 000**
Inclusive entrepreneurship development support (MGs)		225	450	225			**900**	**4 500**
Farmers receiving trainings and agro-climate information (including beneficiaries from component 1 and 2)	1231	8154	8462	6308	3538	2308	**30 000**	**150 000**
Farmers receiving only trainings and agro-climate information (excluding beneficiaries from component 1 and 2)	1231	5797	6030	4029	1205	2308	20 600	**103 000**
Total direct households/beneficiaries	***1 231***	***8 154***	***8 462***	***6 308***	***3 538***	***2 308***	***30 000***	***150 000***

C. Financial analysis

466. The primary objective of the financial analysis is to determine the financial viability and incentives of the target group for engaging in project activities, by examining the impact of project interventions on family labour, cash flow and net incomes. Based on field visits, PNRMP's activities[134] national statistics, and on expected project activities, a number of indicative financial models were identified during the project design process. Twelve illustrative financial farm and activity models were prepared to demonstrate the financial viability of the investments: seven resilient land development financial models: i) orchard land reclamation with terrace on slope between 10-30%, ii) orchard land rehabilitation with terrace on slope between 10-30%, iii) orchard land rehabilitation with terrace on slope between 30-40%, iv) orchard land rehabilitation with terrace on slope<10%, v) wadis land development, vi) rangeland land development, vii) crop – livestock conservation agriculture (CA) system; three financial models representing potential activities that landless women or young people could undertake through inclusive entrepreneurship development support: viii) bee-keeping model, ix) mushroom model, x) sheep model; two infrastructure models: xi) road model, xii) market model. A cash-flow

[133] http://www.pcbs.gov.ps/site/512/default.aspx?lang=en&ItemID=1566
[134] Participatory Natural Resource Management Project. Previous IFAD project in West Bank, closed in 2016.

analysis is finally carried out to present the “with” and “without” project (WP/WOP) analysis. All financial models form the building blocks for the economic analysis.

467. **Key assumptions**. The following information gathered during the design mission has been used to set up the analyses: i) interviews with potential beneficiaries, ii) information collected from the Ministry of Agriculture in Ramallah, iii) mission experts’ estimates, iv) estimates from ICARD, v) national statistics, and vi) data from PNRMP. In particular, information on labour and input requirements for various operations, capital costs, prevailing wages, yields, farm gate and market prices of commodities, and transport costs were collected. Conservative assumptions were made both for inputs and outputs in order to take account of possible risks. Key assumptions are as follows:

a. **Exchange rate**. The exchange rate used in the analysis is fixed at 1 USD = 3.74 NIS.

b. **Numeraire and Prices.** The numeraire adopted in the analysis is the domestic price level expressed in domestic currency. The financial prices for project inputs and products are current prices for the second half of 2017 derived from market and government statistical sources, adjusted where necessary to represent farm gate prices. Economic prices for traded goods have been estimated based on World Bank commodity price of September 2017. The prices used in the analysis are shown in attachment 10.1 to this appendix.

c. **Labour**. Family labour has been valued both in financial and economic analysis. It has been assumed that both family labour and hired unskilled labour are priced at NIS 100 per day, which is the prevailing market rate in rural areas.

d. **Discount rate**. A discount rate of 10% has been used in this analysis to assess the viability and robustness of the proposed investments. The selected value is calculated by taking into account actual market and microfinance interest rates on loans as well as the average interest rate on deposits[135].

468. **Resilient land development models**. Activities of component 1 are designed to enhance farmer’s and livestock keeper’s access to productive agricultural land and water resources under increasing water scarcity through a range of investments in land development for different farming systems and livelihoods. Furthermore, activities of component 1 will be complemented with activities of component 3 to enhance households' capacities of absorbing climate risk by anticipating it and strengthening knowledge sharing.

469. When considering land development benefits versus costs, it is important to also highlight that by turning unproductive lands into productive ones, registered owners of unproductive lands would increase the rights that they have on the land and therefore decrease the possibility of land confiscation. Indeed, since 1967, according to the Ottoman law code "if a registered land is not cultivated for three successive years, it may become the property of the Ottoman State, i.e. “State Land”.

470. The table below shows the expected number of dunums to be reached by each land development intervention. Dunums are allocated, in consultation with MoA, based on the type of land development works needed in the project area as well as on the climatic vulnerability. For orchard land development, a weighted average unit cost is used in COSTAB to allow for more flexibility during project implementation.

Land development activity	Number of dunums
Land reclamation slope 10-30%	1500
Land rehabilitation slope 10-30%	4500
Land rehabilitation slope 30-40%	1000
Land rehabilitation slope <10%	3000
Wadis land development	1000
Rangeland land development	3500
CA and livestock integrated system	3500
Total	18000

[135] Country Report Palestine, 3rd Quarter 2017. Economist Intelligence Unit.. AICS. Economic Development, Policy Brief 1. Microfinance in Palestine: Are loans too expensive and should interest rates be capped? http://www.aics.gov.it/wp-content/uploads/2016/09/English_23-AGOSTO-2016_FINAL.pdf

471. **Orchard land development models.** Four orchard land reclamation and rehabilitation models are developed and individually described in the next paragraphs. All four models are developed on 7 dunums. The trees planted are olive, almond, fig and grapevine. Household's self-consumption of olive oil is included in all models (16 litres per year[136]).The models assume that 80% of the olive tree production is transformed in and sold as olive oil whilst 20% of the production is sold as fruit. Because olive trees take more than 10 years to reach full production, the WP scenarios of the land reclamation with terrace on slope 10-30%, rehabilitation with terrace on slope 30-40% and rehabilitation with terrace on slope less than 10% are developed over 20 years. Furthermore, the WOP scenarios of these models assume that the land is not cultivated and that trees have to be re-planted for all 7 dunums. In order not to overestimate results, foregone income related to labour requirements in the WP is considered in the WOP (at full orchards' development). At the end of all models, a financing analysis is developed to show the project support that farmers will receive for land development and consequently the change in their net income after financing.

(a) **Orchard land reclamation with terraces on slopes between 10% and 30%**.This model is developed on 7 dunums. The investment in land reclamation (including fencing, cisterns for water harvesting, retaining walls, land cleaning, land plowing, trees etc.) is NIS 9 200 per dunum, It is assumed that 3 dunums will be cultivated with olive trees, 1 dunum with fig trees, 1 dunum with almond trees and 2 dunums with grapevine[137]. Because the proposed trees start bearing fruits only from year 3 / 4, farmers intercrop trees with another crop, i.e. chick pea, which can provide them with an additional source of income while also improving the soil fertility. The profitability indicators of this model, summarized in the table below, are positive although borderline. Yet, when excluding family labour from the final calculation, results improve significantly (NPV: NIS 67 500 and IRR 20%). Most importantly, results obtained considering the flow of fund proceeding from donors and the farmer indicates that the activity is financially viable and further sustainable from farmers' viewpoint. Finally, the investment is further justified when considering that, according to the Ottoman Law referenced above, registered productive lands cannot be confiscated by the State.

(b) **Orchard land rehabilitation with terraces on slopes between 10% and 30%**. This model considers an investment of NIS 3 360 per dunum, including the cost for machine works, cistern, retaining walls and fencing. Rehabilitation can be much cheaper than reclamation because the type of works in rehabilitation may be less invasive and therefore less costly. Furthermore, in some rehabilitation cases, part of the land may be already productive and therefore does not need to be entirely re-planted with new trees. This is indeed the case represented in this model, in which the WOP scenario shows that 4 dunums of land are already cultivated and therefore foregone income is not considered. For the same reason, the WP is normally developed over 10 years[138] and it assumes that the land is cultivated with 3 dunums of olive trees, 1 dunum of fig trees, 1 dunum of almond trees and 2 dunums of grapevine. The profitability indicators of this model, summarized in the table below, are positive and show the sustainability of the investment. The net benefits before family labour are shown positive already from the second year.

(c) **Orchard land rehabilitation with terraces on slopes between 30% and 40%**. This model considers an investment of NIS 1 400 per dunum. It is assumed that 3 dunums will be cultivated with olive trees, 1 dunum with fig trees, 1 dunum with almond trees and 2 dunums with grapevine. As per the previous model, trees are intercropped with chick pea to provide an additional source of income while also improving the soil fertility. The profitability indicators of this model, summarized in the table below, are positive and show the sustainability of the investment. The net benefits before family labour are also in this case shown positive already from the second year

(d) **Orchard land rehabilitation with terraces on slopes less than 10%**. The investment cost considered in this model is approximately NIS 5,000 per dunum. The trees planted are also in this case olives, grapevine, almond and figs. Intercropping with chick pea is

[136] https://www.oliveoilmarket.eu/trends-in-world-olive-oil-consumption-ioc-report/
[137] Type and distribution of trees have been decided together with MoA and based on IFAD's previous project experience.
[138] Olive trees are assumed to be planted already in the WOP.

considered in this model too. The profitability indicators summarized in the table below are all shown to be positive.

Table 53: Profitability indicators: Orchard land development

	Net income WP (NIS)	NPV @ 10% (NIS)	B/C	IRR	Switching value benefits	Switching value costs	Return to family labour (NIS/day)
Land reclamation slope 10-30% (7 dunums)	33 214	9 985	1.06	11%	-5%	6%	405
Land rehabilitation slope 10-30% (7 dunums)	28 307	21 735	1.54	20%	-35%	54%	293
Land rehabilitation slope 30-40% (7 dunums)	25 620	25 977	1.20	18%	-17%	20%	283
Land rehabilitation slope <10% (7 dunums)	30 705	28 523	1.19	15%	-16%	19%	341

472. **Wadis land development.** The harvesting and storage of water and soil for viable agricultural production from wadis is an opportunity for the eastern slopes which is the area in the West Bank most affected by climate change in terms of a clear decrease in rainfall and increase in soil erosion and desertification. This model will therefore have clear adaptation benefits for the most climate vulnerable part of the population. The wadis land development investment cost is NIS 3 270 per dunum. The model assumes that 3 dunums of olives, 2 dunums of almonds and 2 dunums of grapevine will be planted. Also in this case, olive and almond trees are intercropped with another crop; chickpea. Household's self-consumption of olive oil is included in the model (16 litres per year[139]). Because the olive trees take more than 10 years to reach full production, the WP scenario of this model is developed over 20 years. The WOP scenario assumes that the land is not cultivated and, in order not to overestimate results, it takes into account the foregone income related to labour requirements in the WP scenario (at full orchards' development). The profitability indicators of this model, summarized in the table below, are positive and confirm the sustainability of this investment. Also in this case, a financing analysis is developed to show that, with project support, households' net income will be positive from year 1.

473. **Rangeland rehabilitation.** The rangeland rehabilitation will also be on the eastern slopes and will have adaptation benefits for the most climate vulnerable people in the West bank. The investment cost of this model is about NIS 2 500 per dunum. It will build soil water retention capacities by rehabilitating top soils and fodder rich vegetation cover in areas agreed with the Bedouin and other herders communities. Furthermore, RELAP will build beneficiaries' capacities for sustainable grazing governance and management. Both in the WOP and in the WP scenarios, the model assumes that the farmer owns between 40 and 45 small-ruminants/sheep. The model assumes that, from the third year after rangeland restoration, small-ruminants will be able to graze 15-20% more than in the WOP. This change is expected to have a twofold benefit: (i) decreasing the cost of animal feed, (ii) increasing some animal parameters, like fertility, twinning and milking rate. . Overall, the profitability indicators are positive confirming that the investment is worthwhile to undertake; this is significant especially when considering not only the economical but also the environmental benefits that the rangeland restoration will bring to a very climatic vulnerable area. Also in this case a financing analysis is developed to show the project support that farmers will receive for investing in this activity.

474. **Crop – livestock conservation agriculture system.** This model is developed on 7 dunums and it assumes that with project support the targeted farmers will start using conservation agriculture techniques. The WOP scenario assumes that (i) the land is already cultivated by applying conventional agriculture techniques, (ii) the crops considered are the same included in the WP scenario – wheat and barley, (iii) households own 40-45 small-ruminant heads. In the WP, the mulching process and constant soil coverage slowly builds up the water retention capacity of the soil and allow cultivation under low and variable rainfall and water stressed conditions. The main benefits expected are increased yields and incomes due to (i) improved soil and soil moisture, (ii) decreased quantity of fertilizers used, (iii) decreased cost of machine and especially fuel for the machine used for tillage. The project support to the farmer will be twofold: (i) support in switching from conventional to conservation

[139] https://www.oliveoilmarket.eu/trends-in-world-olive-oil-consumption-ioc-report/

agriculture, (ii) provision of technical assistance. Overall, the profitability indicators are shown to be all positive. The NPV is high compared to other interventions mainly due to the low investment costs and high benefits.

Table 54: Summary of wadis, rangeland and CA/Livestock models

	Net income WP (NIS)	NPV @ 10% (NIS)	B/C	IRR	Switching value benefits	Switching value costs	Return to family labour (NIS/day)
Wadis land development (7 dunums)	27 951	25 696	1.19	16%	-16%	19%	363
Rangeland land development (7 dunums)	17 444	15 444	1.31	23%	-24%	31%	317
CA & livestock integrated system (7 dunums)	23 087	40 870	1.28	85%	-22%	28%	308

475. **Inclusive entrepreneurship development support.** Component 2 will have a focus on rural women, unemployed youth, and the poor landless at the village level, who, belonging to the same villages, will also be encouraged to participate in the MRPs. RELAP will provide inclusive entrepreneurship development support/investment grants, together with tailored technical assistance provided by a business development services provider. Three indicative income generating activity models – small ruminant/sheep breeding, beekeeping, and mushroom cultivation - have been developed to show representative activities[140] that could be financed by a grant of NIS 18 700)[141] (or USD 5 000). The beekeeping and mushroom cultivation models are also used as representative examples of climate resilient activities supported by RELAP. In order not to overestimate benefits, the foregone income related to labour requirements of this model is used as counterfactual of the WOP scenarios. At the end of each model, a financing analysis is developed to show the project support that farmers will receive for land development and consequently the change in net income after financing.

a. **Sheep investment grant model.** This model assumes that the grant is used for purchasing 9 sheep, 8 females and 1 male. The main source of income would be selling meat and milk. The model also assumes that some of the milk will be used for HH's self-consumption. Overall, all profitability indicators are positive, as shown in the summary table below.

b. **Beekeeping investment grant model.** This model assumes that the grant will be used to purchase 30 beehives and the equipment needed for honey production. It is assumed that poliflora honey is produced[142], but other bees products and honey varieties could be considered by the farmers. This activity could be specifically suitable for landless people and it will contribute to pollination. Overall, all profitability indicators are positive, as shown in the summary table below.

c. **Mushroom cultivation grant model.** This model assumes that the grant will be used to start cultivating mushrooms (oyster variety). The main investment (NIS 5,500) includes: mycelium (40 kg), media, 40 boxes where mushrooms are grown, room humidificator and heater, and other small equipment to start the activity. With a minimum investment, mushroom production could represent a significant source of income – income could reach up to NIS 20,000 per year starting with 40 kg of mycelium - for young unemployed or landless people.

Table 55: Inclusive entrepreneurship development support activity models

	Net income WP (NIS)	NPV @ 10% (NIS)	B/C	IRR	Switching value benefits	Switching value costs	Return to family labour (NIS/day)
Sheep breeding _grant	12 263	6 148	1.07	16%	-7%	7%	415
Mushroom grant	21 772	13 076	1.17	50%	-14%	17%	211
Beekeeping grant	11 550	11 005	1.69	26%	-41%	69%	444

[140] The activities have been chosen based on: (i) interviews with potential beneficiaries, (ii) Advises from MoA.
[141] It includes 15% beneficiaries' contribution
[142] The variety produced will depend on the farmer's location.

476. **Road model.** The main benefits of this model are assumed to derive from: (i) savings on transportation costs for going to the market and (ii) reduced post-harvest losses. In order not to double count benefits, this model is mainly developed for 1,800 households who are expected to benefit only from agricultural roads (excluding land development). The model's main assumptions are: (i) farmers go to the market on average once per week; (ii) with good roads, the transportation cost per trip decreases of approximately 20%; (iii) on average 10% reduced post-harvest losses of agricultural outputs. Below, a summary of the profitability indicators of the road model is presented.

NIS '000	
Discount rate	10%
NPV @ 0.1	2 013
IRR	14%
NPVb	11 870
NPVc	8 377 435
B/C ratio	1.42
Switching values Benefits	-29%
Switching values Costs	42%

477. **Market model.** The project will support the construction of market and collection centres so to allow small producers to sell their products in a common place. It is expected that by iimproving facilities for bulking of agricultural products at village level, farmers and their organizations will be connected to more market actors (e.g. traders, retailers and input suppliers) and this will in turn generate increase local demand for agricultural products. The market model is based on the following assumptions: each market and collection centre can deal with an annual volume of transactions reaching 4 200 tons of fruit and vegetables and 720 tons of olives and almonds. It is estimated that each market can trade up to 7 five-tons vehicle par market day (3 per week), which is equivalent to 40 to 50 tons of agricultural products per market[143]. Investment cost of NIS 1.3 million per market as well as operating and maintenance costs are considered in the model. In order not to double count benefits, the model does not consider producer's benefits which are already considered in the land development models. The NPV for this model, discounted at 10%, is 107 million.

NIS '000	
Discount rate	10%
NPV @ 0.1	107 697
IRR	78%
NPVb	122 049
NPVc	13 431

478. In brief, the financial analysis of all proposed models shows acceptable results suggesting that all project activities are worthwhile to undertake. Equally important, unquantifiable benefits, such as increasing households' rights on their land, should also be taken into account when considering the profitability of land development activities.

D. Economic Analysis

479. The objectives of the economic analysis are: i) to examine the overall project viability; ii) to assess the project's impact and overall economic rate of return; and iii) to perform sensitivity analyses to assess the benefits from a broad welfare perspective.

[143] Figures are based on discussions with officials from the MA and discussions with stakeholders. These estimates will form the basis for discussions in each MRP and with concerned local authorities to adapt to local context, needs and specificities

480. **Key assumptions.** The physical inputs and productions established in the financial analysis provided the basis to determine the viability of the project investment in terms of opportunity costs and quantifiable benefits to the economy as a whole. The estimate of the likely economic returns from project interventions are based on the following assumptions:

d. Project life has been assumed at 20 years;

e. Project inputs and outputs traded are valued at their respective economic prices, and goods are expected to move freely within the project area in response to market demand;

f. Considering the very low interest rate on deposits in Palestine (average 1.2%), the **opportunity cost of capital** of 9% is calculated by considering the long-term deposit rate - to reflect a realistic alternative for public sector investments in the country – as well as the Wall Street prime rate (4.5%), actual market (6.4%) and microfinance (22.4%) interest rates on loans.

481. **Project economic costs and benefits.** The economic analysis includes the investment and incremental recurrent costs of the project components. The project financial costs have been converted to economic values by removal of price contingencies, tax and duties. In order to avoid double counting, the final aggregation considered only those costs that were not included in financial models.

482. **Benefits Estimation.** The incremental benefits stream comprises the economic net values of households and activity models[144]. These benefits are then aggregated by the number of households that are estimated to uptake each activity. The analysis conservatively considers an adoption rate of 80%. Roads and markets' incremental economic benefits are also considered in the final economic aggregation.

Table 56: Households phasing-in by activity for land development and inclusive entrepreneurship support economic aggregation

Households' phasing in by activity for Economic aggregation							
	PY1	PY2	PY3	PY4	PY5	PY6	Total HHs
Beneficiaries Adoption rate 80%	85%	85%	85%	85%	85%	85%	
Orchards using terrasses, contour bounds, v-shapes	0	255	383	383	255	0	
Land reclamation slope 10-30%	0	38	57	57	38	0	191
Land rehabilitation slope 10-30%	0	115	172	172	115	0	574
Land rehabilitation slope 30-40%	0	26	38	38	26	0	128
Land rehabilitation slope <10%	0	77	115	115	77	0	383
Wadis land development	0	122	122	61	0	0	306
Rangeland land development	0	106	106	106	106	0	425
CA and livestock integrated system	0	74	74	74	25	0	247
Sheep breeding _grant	0	38	77	38	0	0	153
Mushroom grant	0	77	153	77	0	0	306
Beekeeping_grant	0	77	153	77	0	0	306

483. **Economic Pricing.** Economic pricing has been based on the following assumptions:

a. The opportunity cost of labour is set at 73 NIS/day, or 73% of financial cost of labour, which is justified given rural unemployment rate at 26.7%[145]

b. The shadow exchange rate (SER) has been calculated at 1 USD = 4.22 NIS;

c. The Shadow Exchange Ratio Factor (SERF), used to obtain economic costs, has been calculated at 1.13.

[145] Country Report Palestine, 3rd Quarter 2017. Economist Intelligence Unit.

Derivation of SCF and SER (USD million)						
		2013	2014	2015	2016	Average
Total imports	M	5 271	5 816	6 213	6 057	5 839
Total exports	X	1 135	1 133	1 384	1 757	1 352
Import duties	Tm	843	931	994	969	934
Export duties	Tx	-	-	-	-	-
Total trade	M+X	6 406	6 949	7 597	7 814	7 192
	M+Tm	6 114	6 747	7 207	7 026	6 774
	X-Tx	1 135	1 133	1 384	1 757	1 352
SCF		**0.884**	**0.882**	**0.884**	**0.890**	**0.885**
OER		3.86	3.61	3.58	3.89	3.74
SER		4.37	4.09	4.05	4.37	4.22

484. **Economic rate of return.** The overall economic internal rate of return (EIRR) of the project is estimated at 27% for the base case. The net present value (NPV) of the net benefit stream, discounted at 9%, is USD 56.5 million.

Table 57: Summary of economic analysis

	Total Benefits USD '000	Total Costs USD '000	Cash flow USD '000
Y1	-56	1631	-1688
Y2	-6679	3167	-9846
Y3	-8243	3634	-11877
Y4	-4267	2597	-6864
Y5	2293	1540	753
Y6	10564	1093	9471
Y7	13510	500	13010
Y8	15090	500	14590
Y9	16087	500	15587
Y10	16647	500	16147
Y11	16888	500	16388
Y12	17005	500	16505
Y13	17209	500	16709
Y14	17412	500	16912
Y15	17586	500	17086
Y16	17663	500	17163
Y17	17673	500	17173
Y18	17672	500	17172
Y19	17673	500	17173
Y20	17674	500	17174
NPV@9%	**56 460**		
EIRR	**27%**		

485. **Sensitivity analysis.** In order to test the robustness of the above results, a sensitivity analysis has been carried out; the outcomes of which are presented in the below table. The sensitivity analysis investigates the effect of fluctuations in project costs, project benefits, and delays in implementation on the NPV and ERR. It shows the economic impacts that a decrease in project benefits – up to -50% – will have on the project viability. Similarly, it shows how the economic viability of the project will be affected by an increase of up to 50% in project costs; and by a one to three-year delay in project implementation. The analysis confirms that the economic viability of the project remains attractive as a positive NPV and ERR above 9% are preserved in each case analysed.

Table 58: Sensitivity analysis

	Assumptions	Related Risk	NPV USD	EIRR
Programme base case			56 460 129	27%
Decrease in programme benefits	-20%	Reduced no. of beneficiaries if not all co-financing expected materialize. Socio-political unexpected problems. Market/price fluctuations. Delays of trainings.	42 611 738	25%
	-30%		35 687 542	24%
	-50%		21 839 150	20%
Increase in programme Costs	20%	Market/price fluctuations (changes in market demands). Procurement risks. Socio-political unexpected problems.	53 903 763	25%
	30%		52 625 581	24%
	50%		50 069 215	23%
Delays in programme implementation	1 year	Delays in having the Project approved by all parties and financiers. Socio-political unexpected problems.Any other unforeseable event.	44 785 582	24%
	3 years		29 639 353	20%

Attachment 10.1, Appendix 10 - List of prices

NIS Financial and Economic Prices			
Output	**Unit**	**2017 FIN**	**2017 ECO**
Perennial crops	kg		
Olives	kg	6.5	7.3
Olive Oil	kg	22	24.9
Grape	kg	4.5	5.1
Almond	kg	22	24.9
Fig	kg	5	5.6
Field Crops			
Wheat	kg	2	2.3
Wheat subproduct	kg	1	1.1
Barley	kg	1.5	1.7
Barley subproduct	kg	1	1.1
Chickpeas	kg	5	5.6
Tomatoes	kg	2	2.3
Input			
Planting Material			0.0
Chickpea seed	kg	5	5.6
Wheat seed	kg	2	2.3
Barley seed	kg	2	2.3
Purchased inputs			0.0
Water	m3	12	12.0
Manure	kg	0.2	0.2
Fertilizer	kg	5	5.6
Herbicide	lt	5	5.6
Phosphate	kg	3	3.4
Chemicals/a	kg	50	56.5
Pesticides	lt	80	90.4
Hired Machinery			
Land preparation	hour	120	120
Sowing	hour	60	60
Fertilization	hour	60	60
Harvesting	hour	60	60
Land Development			
Reclamation slope 10/30%	dunum	9238	10438
Rehabilitation slope 10-30%	dunum	3366	3803
Rehabilitation slope 30-40%	dunum	1421	1606
Rehabilitation slope <10%	dunum	4956	5599
Wadi	dunum	3273	3698
Rangeland	dunum	2 338	2641
Labour			
Household Labour /c			
Family labour	per day	100	73
Hired labour	per day	100	73

Appendix 11: Draft project implementation manual

486. Due to the length of this appendix and the overall PDR, it has been decided to make the draft project implementation manual a separate stand-alone document.

Appendix 12: Compliance with IFAD policies

A. Alignment with IFAD's strategic framework 2016-2025

487. IFAD's fifth strategic framework (SF) covers the period 2016-2025 and serves as an overarching policy guideline to provide direction to IFAD's work and development effectiveness. RELAP is fully aligned with the SF, aiming at an enabling inclusive and sustainable rural transformation. Indeed, RELAP will aim at transforming Palestine's smallholders to become more secure in their land tenure, commercially more competitive and climatically more resilient. This will be accomplished by strengthening the resilience and improving economic opportunities for the rural poor based on competitive farms and agribusinesses that are connected to and integrated into more profitable value chains, making sustainable use of Palestine's land and water resources. In particular, RELAP will contribute i) to increase productive capacities (SF's first objective), through more secure access to and management of natural resources and enhancing agricultural productivity, especially supported by component 1; ii) to increase benefits from market participation (SF's second objective), through agricultural roads and facilitation of market linkages; and iii) to strengthen environmental sustainability and climate resilience of poor rural people's economic activities (SF's third objective), through more secure access to and sustainable management of NR, increased on-farm climate resilient production, and improved institutional capacities of public services for a better access of farmers to information on climate risks and impacts on different cropping and livestock systems.

B. Alignment with IFAD fragile situations strategy

488. RELAP has a clear focus on resilience and on root causes of fragility (access to natural resources most notably land). Through component 2, there is an integrated and mainstreamed targeting strategy to reach women and youth. Finally, unlike other donors in the region, IFAD is working directly through the MoA to support institution- and nation building, itself a prerequisite for reducing fragility.

C. Alignment with IFAD's engagement with MICs

489. The project will develop new models (R&D sub-component). This will ensure that IFAD supports the country through a mix of financial and knowledge products, as recommended by the MICs approach. The design process has already included key inputs from PTA/ ECD and FAO: based on their inputs, key knowledge products will be developed under component 3.1 to provide agro-climate information services to PA Ministries, village councils and farmers.

D. Alignment with IFAD's grant financing policy

490. IFAD's resources which will be invested in the RELAP come from the IFAD's trust fund for Gaza and the West Bank (FGWB) and the financing is aligned with the key principles of: 1) the project makes a contribution to a global, regional or national public good related to IFAD's mandate through its contribution to enhanced food security, productivity and resilience, in a region where food production and distribution systems are disrupted by restrictions; and 2) the project focuses on interventions where grant financing has added value and comparative advantage over loans (the PA not being eligible for financing through the PBAS).

E. Alignment with IFAD's private sector development and partnership strategy

491. The RELAP design is aligned with this strategy, which places strong emphasis on further developing and strengthening the linkages of smallholder farmers with the private sector. The linkages with local markets, for farmers and their organizations where they exist, local women and youth associations, but also other local stakeholders will be facilitated under the RELAP second component. Also, climate information received by farmers, thanks to the RELAP third component, will help them to make better market decision, thus ensuring more viable market prospects for agricultural products. Finally, the RELAP will follow an approach that works backwards from the market to ensure that there

is a demand for the products of the smallholder and that market links are established with local traders/buyers (thanks to the MRPs) prior to initiation of any activities.

F. Alignment with IFAD's policies on inclusive targeting, youth and gender mainstreaming

492. IFAD's poverty targeting and gender sensitive design and implementation guidelines, updated in January 2013, have informed the design of RELAP. Women and youth are given a clear focus in the project, with specific targets and separate budget line items allocated for them.

493. RELAP's approaches and implementation modalities across the components are in line with the guiding principles of the targeting policy including: focus on the 'active poor' (through both the land development activities and the investment grants requiring beneficiary contributions, thus soliciting commitment as 'active poor'), expanding outreach to proactively include those who have fewer assets or opportunities (by reducing the beneficiary contributions compared to PNRMP and developing the new inclusive activities including the investment grant and support to women's inheritance claims/ rights), addressing gender differences (again through the work on land inheritance and grants to women's groups).

494. The gender mainstreaming strategy shall also define the specific tools and mechanisms through which the empowerment of women and the youth will be measured. For example, the gender specialist, with support from the M&E specialist, shall undertake specific qualitative surveys among women and young beneficiaries in order to understand project impact on their level of economic and social empowerment, or to document any positive intra-household changes in power relations or gender roles. To do so, a baseline study (qualitative) will be conducted upon women beneficiaries' selection. Also, the gender mainstreaming strategy will devise specific mechanisms to help ensure that project support to women is not being "captured" by their husbands, in particular under the grants scheme, for example by making sure, through regular field visits conducted jointly with the M&E officer, that the grant amount was used for the intended purpose by the intended beneficiary; or by requesting women beneficiaries to open a bank account at their exclusive name in order to deposit profit from sales.

G. Alignment with IFAD's climate change strategy policies on inclusive targeting, youth and gender mainstreaming

495. IFAD's climate change strategy[146] recognizes that the speed and intensity of climate change are outpacing the ability of poor rural people and societies to cope. RELAP takes cognisance of the fact that poor rural people are in the front line of climate change impacts; the ecosystems and biodiversity on which they rely are increasingly degraded. The project incorporates IFAD's assessment that climate-related risks, and potential opportunities, can be addressed more systematically within its projects activities (climate change adaptation is mainstreamed in all RELAP components) and policy advice (particularly under RELAP third component). The project will make use of the IFAD and GCF resources to integrate climate change and environmental concerns within the project design. Weather stations are being planned for the project area to assist vulnerable farmers with timely information on changes in weather, rainfall, temperatures and their use in shaping decisions regarding watering, use of adapted crop varieties, animal breeds and other adaptation measures. The investments to be undertaken within RELAP will promote resilience and take into consideration the vulnerability of the target areas in terms of water shortage, salinity and post-harvest losses. The project will also promote policy engagement relevant to adaptation of the agriculture sector to climate change.

496. RELAP will contribute directly to the three purposes of the climate change strategy: a. to help smallholder farmers build their resilience to climate change: this is the key objective of component 3, to be achieved through the agro-climate information bulletins, promotion of climate resilient agricultural practices and varieties, and the use of climate information in the preparation of strategies and plans at the community levels; b. to help smallholder farmers take advantage of mitigation incentives and funding: this is the basis of the engagement with the GCF, ensuring that these funds can ultimately be channelled to enhance smallholder resilience; further, there will be inbuilt incentives

[146] Climate Change Strategy. IFAD, May 2010.

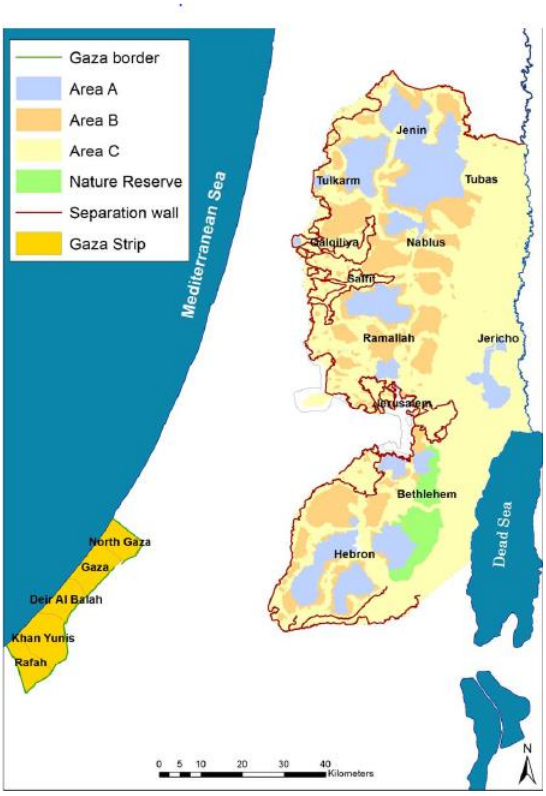
in the investment grants (with climate smart technology/ process development being a key criterion for the grants); and c. to inform a more coherent dialogue on climate change: sub-component 3.2 is focused on strengthening institutional capacities and partnerships, contributing directly and significantly to the national dialogue on climate change; the activities will directly support the Action Plan for improving the Institutional Framework for Climate Change in Palestine and the implementation of the National Adaptation Plan.

Appendix 13: Social, environmental and climate assessment procedures (SECAP)

A. Major landscape characteristics and issues (social, natural resources, and climate)

A.1. Socio-cultural context

497. The political situation in Palestine is universally recognized as one of the most fragile, complex and volatile political and institutional contexts globally. Areas restricted from Palestinian use are steadily increasing in the West Bank which is affecting livelihoods. The expansion and construction of new Israeli settlements in the West Bank is creating an ever more segmented geography where Palestinians are impeded from moving freely across their own land and applying a coherent management of their natural resources in the wider landscapes sustaining in particular rural livelihoods. Trade is also constrained affecting both agricultural input prices and availability as well as the export of produce which are all subject to Israeli restrictions. On internal markets, local products have to compete with third choice cheap produce that can easily be imported from Israel without any trade barriers (ARI-J, MOE, MOA, 2015)[147].



498. Under the framework of the Oslo Accord (1993/1996) the Palestinian Authority (PA) was designated exclusive control over both internal security-related and civilian issues in Palestinian urban areas ("Area A") and civilian control over Palestinian rural areas ("Area B"). The remainder of the territories (“Area C” including Israeli settlements and their access roads, buffer zones adjacent to the settlements, roads and strategic and border areas, most of the Jordan Valley and the Eastern slope region) covering 60% of the territory were subject to transfer to the PA within 18 months of the implementation of the Oslo Accord. However, that has not been implemented as foreseen. The area within area C restricted from Palestinian use has instead been steadily expanding including an important part of agricultural land, restricting the ability of Palestinians to effectively access land and also water resources and seriously restricting economic investment and growth (WB, 2008) [148]

A.2. Rural poverty

499. Detailed information is contained appendix 2.

A.3. Gender and youth.

500. Detailed information is contained appendix 2.

A.4. Land and water tenure

[147] “Palestinian Agricultural Production and Marketing between Reality and Challenges” Applied Research Institute - Jerusalem, Ministry of National Economy and Ministry of Agriculture, 2015

[148] “The Economic Effects of Restricted Access to Land in the West bank”, World Bank, 2008. **Source of the map**: Status of land Tenure, Planning and Management in the West Bank and the Gaza Strip, FAO 2015

501. Due to shifting governance systems over time and the Israeli occupation the land and water tenure situation for small farmers in the West Bank is complex and insecure.

502. **Land tenure.** After the establishment of the P.A it recovered three sets of land records for Palestine, namely Ottoman, British and Jordanian, all incomplete, imprecise and primarily based on individual land ownership. However, until the British and later Israeli confiscation of Palestinian land, most land in the rural areas were collectively owned by villages or the Bedouin tribes and there was little individual land ownership. This traditional system of collective ownership that existed for generations was generally not recognized in any of the three land records or by the Israeli state. The British Authority in Palestine introduced in 1920 the Woods and Forest Ordinance which became important in preparing the country for the creation of a future Jewish national homeland. This ordinance was used to confiscate lands that were largely utilized as grazing grounds by the Bedouin community and the rural population. These lands were then classified as state owned forest. With the establishment of the state of Israel in 1948, these lands became Israeli state lands. In the 1950's, the Government of Israel introduced the Vacant Lands Laws. These laws granted the Israeli Ministry of Agriculture the ability to acquire any unutilized lands that are "neglected" or "abandoned" by its owners to ensure proper and efficient use. These laws were used in conjunction with security laws to confiscate lands. The Army would declare an area as a closed military zone, barring farmers from reaching their fields. At a later point the Ministry of Agriculture issued confiscation orders regarding these fields due to 'neglect' by their owners. The army officers would then issue permits for the Jewish settlers to whom the lands were assigned by the Department of Agriculture. In 1953, Law 5713 was introduced which granted the Minister of Finance the ability to transfer ownership of properties confiscated by the previous laws over the last 5 years to the Israeli Department of Construction and Development and subsequently to the settlers. This process is still being followed today for the expansion of Israeli settlements in the area C of the West Bank. For Palestinian farmers to secure their land it is therefore crucial that they can show their active investment in and usage of their land and in parallel process the individual titles in case they do not have it (A. Imseis et. al., 2012) [149].

503. In 2002, the PA created the **Palestinian Land Authority (PLA)**. The PLA is in charge of surveying and registration of individual, non-governmental institutions, and state-owned land. The PLA has been supported by several projects to strengthen its capacities. A World Bank supported project, ending in 2007, worked with the PLA to address the issues of improving land security, developing efficient land and property markets, managing land in an equitable manner, and promoting a transparent management of public land. This project ended with the reformed **Land Policy Framework** endorsed by the cabinet in 2008. From 2007 the project Land Administration Project (LAP) phase I and currently the LAP phase II (financed by the World Bank and the Finish cooperation) have supported the PLA in piloting and upscaling land settlement and registration processes in Ramallah, Bethlehem and Salfit governorates.

504. Despite these efforts the PLA still encounters challenges. Since 2014 the PLA has been subordinated the Council of Ministers. It has 10 offices in the West Bank most of which are too poorly equipped to effectively fulfil their mandate. In 2014 the registration system covered less than 40% of the West Bank (formal Tabu registration) and many registrations do not reflect the current ownership status. The registered owner is in some cases deceased and the family failed to register subsequent transactions, particularly in the form of inheritances, or the land has been transacted without proper registration. In area C 26% of the land has been registered which underlines the important potential for progressing in areas A and B where only 9% and 5% respectively, had been registered in 2014 (FAO, 2015) [150].

505. Another important player in land recording is the Property Tax Department of the Ministry of Finance. Their database of property tax payers (currently 445,000 registered) is used by landowners to obtain a verification from the Tax Authority which is required for the land registration process managed by the PLA. The Tax Authority also keeps a parallel registry fed by their issuing of certificates for transactions of land amounting to 11,000 transactions per year. Going through this process managed by the Tax Authority is a cheaper and faster way for landowners to transact land and the issued certificates indicates the new buyer as owner (Ikhraj Qeid ownership) even though it is not a legally binding

[149] A Guide to Housing, Land and Property Law in Area C of the West Bank" A.Imseis et. al., 2012
[150] The Status of land Tenure, Planning and Management in the West Bank and the Gaza Strip", FAO 2015

registry per sé. These certificates can subsequently be used for the PLA managed land registration process[139].

506. The **main difficulties in land registration**, as per the PA itself, are the following:

- High transactions costs, resulting in most transactions still informal
- Costly and cumbersome enforcement of property rights (as judiciary is frequently involved)
- Lack of homogenous and coherent land and property management policies and vision
- Unpredictability of rules and requirements for registration
- Limited trust in the public service provisions
- The existence of easier, cheaper and faster services for conducting transactions such as the certificate issued by the Tax Authority or an Irrevocable Powers of Attorney issued by notaries in Palestinian embassies abroad or in the West Bank. Even though these are not legally binding per sé, they are widely used and leaves the PLA managed land registry incomplete and also leaves room for land disputes.

507. In addition to the individual land ownership, different types of public and common land ownership include: state and municipal land; Waqf (religious endowment) lands which is for the benefit of the entire religious communities; and communal land of Bedouin tribes which are under high risk of loss due to the occupation.

508. Women's right to land ownership is in most part of the West Bank governed by Islamic inheritance laws. These gives a daughter right to at least half of the land that a son receives after the dead of their parents and after the death of a husband they are also included among the inheritors, but the outcome depends on who the other eventual inheritors are. In practices, however, due to culture and the insecure land tenure situation under the occupation, women will often give up their land to a brother without or with minimal financial compensation.

509. **Water tenure**. Access to water and water tenure is also highly impacted by the occupation, affecting production and human consumption of both the Palestinian rural and urban population. In 1967 Israel issued a series of military orders taking full control of almost all shared water resources including the aquifers in the occupied territory. Palestinian construction of water infrastructure were made subject to obtaining a military issued permit. The around 30 million m^3 that the Palestinians used to extract from the Jordan river for irrigation was reduced to 0 while Israeli are extracting 650 million m^3 per year[151].Currently Palestinians do not manage to extract more than around 20% of the estimated annual potential of the aquifers while the Israeli consumption is estimated to overdraw the potential annual recharge of the aquifers by 90%[152].

510. The following table shows the average recharge capacity and the water allocations in accordance with the interim Oslo Accord in million m3 per year (MCM/a).

[151] "Thinking strategically about Water: Future scenarios for the Palestine water sector" a. Kouttab. Article presented in "Water in Palestine" Birzeit University, 2013

[152] World Bank, West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development, April 2009

	Western Aquifer	North eastern Aquifer	Eastern Aquifer	Total
Natural Characteristics				
Area (km²)	1,767	981	2,896	5,644
Average Recharge (MCM/a)	318-430	135-187	125-197	578-814
Allocation according to Oslo Agreement				
Israeli Allocation (MCM/a)	340	103	40	483
Palestinian Allocation (MCM/a)	22	42	54	118
Additional quantity for development			78	78
Total Quantity (MCM/a)	362	145	172	679

Source: "The Status of land Tenure, Planning and Management in the West Bank and the Gaza Strip", FAO 2015

511. The Oslo Accord article 40 established the Joint Water Committee (JWC) for the management of water and wastewater issues in the West bank with equal representation of Israeli and Palestinians. The article also establish that no water infrastructure or systems may be constructed without a permission from the JWC. However, the JWC is not functioning and almost no permissions are given to Palestinians in particular in area C where demolishment of new water infrastructures is also seen. Under these conditions it is complex for the Palestinian Water Authority to provide water tenure security for farmers in particular in area C and in relation to construction of wells. This has made Palestinian farmers very depended on rain water harvesting and water use efficiency in irrigation systems.

B. Natural resources and their management

B.1. Water resources

512. Water is the main issue in the Palestinian natural resources management agenda and water access is one main point of negotiation with Israel. West Bank has two main sources of freshwater including: the Jordan River and the West Bank's Aquifer. Water resources in the West Bank are limited and a key factor in the vulnerability of the population including vulnerability to food insecurity. Shared with Israel, the groundwater aquifer is the major source of freshwater supply and it provides more than 90-95% of all water supplies distributed as described under the section on water tenure above. The main aquifer systems comprised of several deep-seated rock formations from the Lower Cretaceous to the recent age. Recharge rates are low due to the limited annual average rainfall (100mm-700mm per year dependent on location) and runoffs. The quantity, quality, and extraction cost of groundwater, which differ greatly within West Bank despite its small area, vary with spatial and vertical hydrogeological variety of the mountain aquifers. West Bank groundwater resources are limited and insufficient to meet the water demand and need to be combined with rainwater runoff harvesting.

513. Deterioration of water resources is considered to be one of the limiting factors for production, particularly in arid or semiarid areas. Over-pumping, exhaustion and mismanagement of water aquifers is one of the main factors that can affect agricultural production and can result in land degradation. The increasing temperatures increases water demand and reduced rainfall will at the same time result in lower recharge of the groundwater. Furthermore, over-pumping, and decreased recharge of the aquifers causes water and land salinization in the Jordan Valley where fresh and saline water coexist in a natural balance in many aquifer systems, with saline water occurring in the lower part of these aquifers. Discordance of hydrostatic balance prevailing between fresh and saline water by pumping creates a flow of saline water within freshwater and increasing its salinity[153].

514. In West Bank the surface water resources are the Jordan River (which has not been accessible to the Palestinians since the beginning of the occupation in 1967) and ephemeral wadis flowing on the Eastern slopes towards the Jordan Valley and the Dead Sea. The Jordan River, the main and only permanent river in Palestine and one of the main rivers in the region, has seen a decrease of its dis-

[153] Nofal I., Barakat T. (2001) Desertification in the West Bank and Gaza Strip. In: Pasternak D., Schlissel A. (eds) Combating Desertification with Plants. Springer, Boston, MA.

charge and a modification of the quality of water over time due to different sources (among others: over-pumping, groundwater salinity and high temperatures). Furthermore, dams built upstream during the 1960s decreased the flow volumes dramatically, causing changes in the river's physical and ecological characteristics and increasing both the salinity and the organic pollution[154].

B.2. Land degradation

515. There is a limited availability of high valuable agricultural land in the West Bank. Mainly due to high salinity in some areas, low annual rainfall, increasing temperatures, and land conversion into urban and rural settlements. Between 1967 and 2015, the number of Israeli settlements has increased from 1 to 150 and the number of settlers has increased from 220 in 1990 to more than 600 thousand[155] in 2015. The lack of space to extend agriculture and the lack of knowledge on conservation agriculture draw the farmers to exploit the land damaging the top soil and soil erosion affects more than 50% of the land of the West Bank. The loss of grazing land and lack of management structures to cope with the ever more limited areas for grazing has led to overgrazed rangelands affecting the scattered vegetation and increasing erosion.

B.3. Salinization

516. Soil salinization is a problem in particularly in the Jordan Valley of the West Bank. Here, the salinity is increasing with time due to several reasons: the nature of soil parent material and its underlying substratum composed of lacustrine deposits; the climate which motivates large amount of evaporation leaving larger concentrations of salts in the soil. The increased salinity of irrigation water is also contributing to this problem, creating more saline soils and in certain cases leading to the transformation of some soils to holomorphic type, starting to appear in the Jordan Valley[156].

B.4. Reduction of vegetation cover

517. Although forest area represents less than 1% of the West Bank (about 4900 ha), it is estimated that 23% of this area has been destroyed from 1971 to 1999. The majority of this destruction has been caused by the construction of Israeli colonies and military camps. Rangeland and natural grassland are also negatively affected in the last three decades due to the political situation. Overgrazing is also resulting in reduction of the vegetation cover. The limitation of grassland access to Palestinian herders have resulted in intensive grazing to the remaining small area that is estimated to be about 15% of the whole rangeland area. In addition to the lack of management, the shift in rainfall within the seasons also contributes to the loss of the natural vegetation recovery.

B.5. Soil Erosion

518. Reduction of vegetation cover is one of the main reason for soil erosion in Palestine. Grazing and overgrazing leads to the exposure of soils to wind and water erosion. There are many steep mountain slopes in the West Bank, on these slopes the soils are washed away and the rainfall causes deep rills and gullies. In the Eastern part of West Bank, the major soil constraint is soil erosion. High temperatures and low precipitation accelerate the desertification process, increasing the risk of erosion. In the Central Highlands, the main soil constraint is erosion in uncultivated hills. Terracing the moderately steep hills with considerable amount of soil is often used as practice to reduce erosion risks.

B.6. Pollution

519. Prevailing pollutants in the West Bank are mainly the result of untreated wastewater from villages and settlements lacking wastewater management. This poses risks not just to the immediate environment, contaminating streams, springs and other water sources, but also to the public health, natural resources and groundwater contamination. Five central wastewater treatment plants are in

[154] Noa Hillel, Stefan Geyer, Tobias Licha, Saed Khayat, Jonathan B. Laronne, Christian Siebert, Water quality and discharge of the Lower Jordan River, In Journal of Hydrology, Volume 527, 2015.

[155] Palestinian Central Bureau of Statistics, Israeli Settlements in Palestine Annual Statistical Report, 2015.

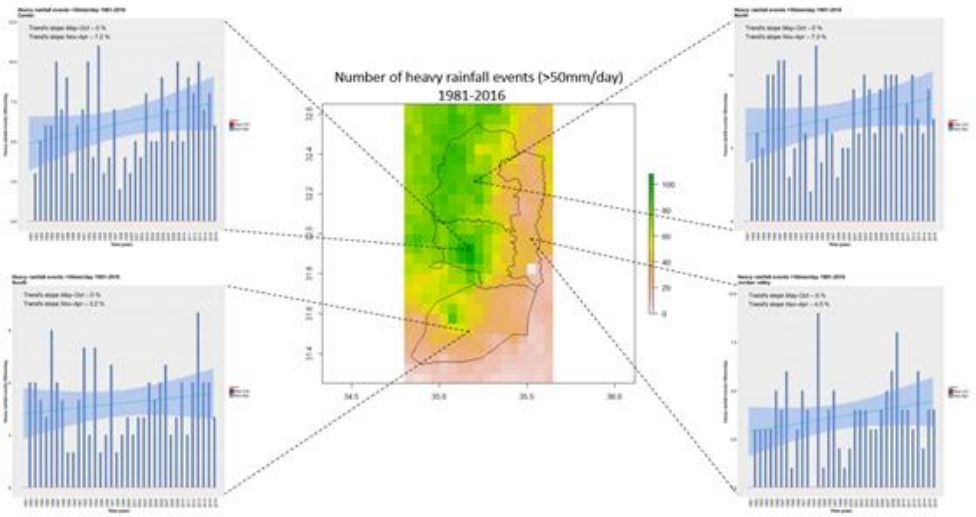
[156] Dudeen B. The soils of Palestine (The West Bank and Gaza Strip) current status and future perspectives. In : Zdruli P. (ed.), Steduto P. (ed.), Lacirignola C. (ed.), Montanarella L. (ed.). Soil resources of Southern and Eastern Mediterranean countries. Bari : CIHEAM, 2001. p. 203-225 (Options Méditerranéennes : Série B. Etudes et Recherches; n. 34).

operation in the West Bank. Two additional centrals are under planning and construction, one in Hebron (supported by World Bank project) and another one in Jericho but the amount of water treated is still insufficient in rural areas. According to the PCBS, only 38.4% of the households are connected to sewage collection network in the West Bank. Another source of pollution of soil and water resources is the excessive use of pesticides in particular in irrigated agricultural areas.

C. Climate change impacts and vulnerabilities

520. Situated in the Middle East, the West Bank climate is mainly Mediterranean with hot and dry during 4 months in summer, and with short winter with rainfall from November to March. Divided into four agro-ecological zones, each of which have a different climate. The Jordan Valley is warm and very dry in the south; Northern West Bank can be characterized as hot and dry during the summer and cool and wet in winter; the Central Highlands have occasional frost, snow and hail. Annual rainfalls range from 100 to 700 mm depending on locations[157]. The mean summer temperatures range from 30ºC in Jericho to 22ºC in Hebron, which is 850 metres above sea level. The mean temperatures range in winter from 13ºC in Jericho to 7ºC in Hebron.

Figure 10: Number of heavy rainfall events (>50mm/day) in West Bank for the period 1981-2016



C.1. Climate change impacts

521. Following the IPCC, at regional level in West Asia, upward temperature trends are notable and robust in recent decades. Also, a weak but non-significant downward trend in mean precipitation was observed in recent decades, although with an increase in intense weather events.

522. The National Adaptation Plan (NAP) to climate change based on the historical data from Palestine reached the conclusion that the average temperatures have risen over the past 100 years with very high confidence. There is a very high confidence that maximum and minimum temperatures have also increased and high confidence that the number of warm days and nights has increased since 1950 and high confidence that extreme temperature events (warm days) have increased in frequency.

523. Annual rainfall trend doesn't show major change and there is very low confidence that annual and seasonal rainfall totals have changed in either direction over the past 50 years or so but also very low confidence that there has been no change in annual and seasonal rainfall totals. Information regarding rainfall trends is then to take with certain precaution.

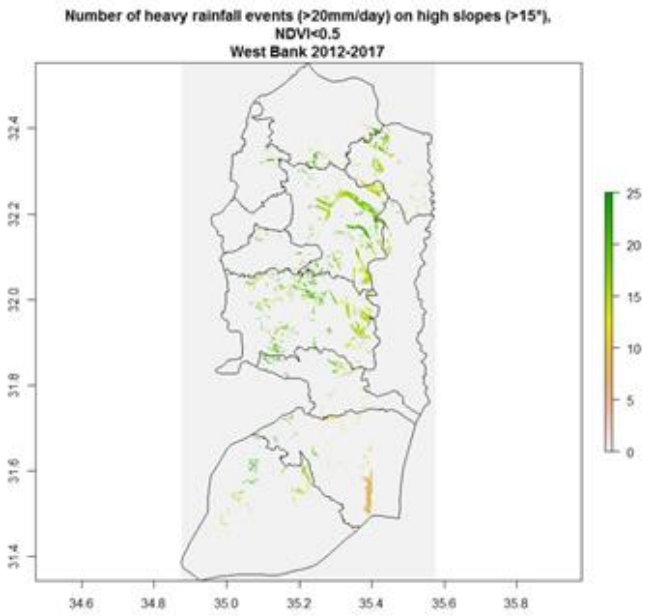
[157] Dudeen B. The soils of Palestine (The West Bank and Gaza Strip) current status and future perspectives. In : Zdruli P. (ed.), Steduto P. (ed.), Lacirignola C. (ed.), Montanarella L. (ed.). Soil resources of Southern and Eastern Mediterranean countries. Bari : CIHEAM, 2001. p. 203-225 (Options Méditerranéennes : Série B. Etudes et Recherches; n. 34).

524. The analysis of the last decades climatic patterns (1960-2016) done by IFAD in 2017[158] (see annex 1), in support of the design missions, confirms that the climate in the West Bank has already changed and that the main trends foreseen by the IPCC and the NAP are becoming evident. In particular, the study shows an increase in maximum and minimum temperatures all over the country (with a trend increase in average annual temperature of 0.27°C/decade for the period 1960-2015), more pronounced in summer, but also present the rest of the year.

525. The rainfall trend is not going down nor up significantly for the majority of the West Bank, except the Jordan Valley area where the rainfall is significantly decreasing. The analysis shows that a cycle of total annual rainfall is present and characterized by two drier years in a row every 6 to 8 years. This important inter-annual variability in annual precipitation is explained in a few articles[159]. Following those studies, the proximity of the Middle East to Europe indicates that the variability that affects rainfall in Europe also affects the Middle East. The studies also demonstrate links between Middle East rainfall and circulation over Europe and the Atlantic. Further, a shift in intra annual monthly rainfall is observed with an increase and concentration of monthly rainfall in January and a decrease in February-March (with a negative trend of around 1mm/year for March) and November-December. This shift in monthly rainfall is observed for the whole West Bank for the period 1981-2016. The number of extreme rainfall events (heavy rainfall >50mm/day) is increasing everywhere in the West Bank (3.2 to 7.3% increase) for the winter period November-April even though the trend is not significant.

526. An erosion study was also conducted to locate the possible main areas subject to water erosion from heavy rainfall compiling the daily moderate heavy rainfall events (>20mm/day) with low vegetation index (NDVI<0.5) at the time of rainy event and with high slope topography (>15 °). This study was then compared with a study led by the Land Research Centre (LRC). Both studies locate the sensitive areas mainly in the central band of West Bank from North to South.

Figure 11: Water erosion risk map in West Bank by number of heavy rainfall events on high slopes with low vegetation cover (20mm/day; slope>15°;NDVI<0.5)



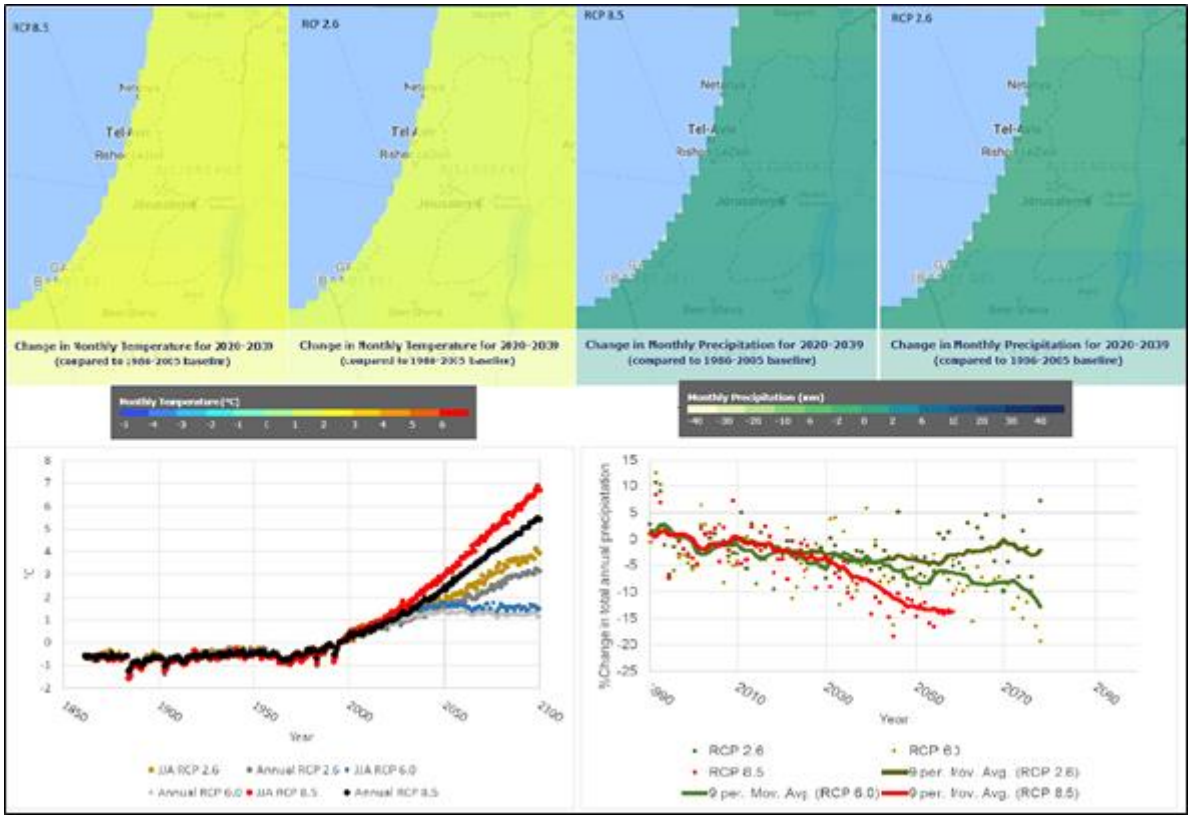
158 West Bank Georeferenced Climate Trends Assessment 1981-2016. IFAD 2017.

159 Krichak S. O., Kishcha P., Alpert P. (2002) Decadal trends of main Eurasian oscillations and the Eastern Mediterranean precipitation. Theor. Appl. Climatol. 72:209–220
Eshel G., Farrell B. F. (2000) Mechanisms of eastern Mediterranean rainfall variability. J. Atmos. Sci. 57:3219–3232.
Krichak S. O., Alpert P. (2005) Decadal trends in the east Atlantic–west Russia pattern and Mediterranean precipitation. Int. J. Climatol. 25:183–192.

527. From the above data the following conclusions can be drawn: i) although there is uncertainty of increase or decrease in annual rainfall, rains are more concentrated and heavier in early winter, increasing the torrential regime and thus the risk of flooding, soil erosion, and reduced infiltration of water in the soils (lower availability of water in spring-summer when water demand for crop production and other human uses is higher); and ii) the precipitation increase during early winter cannot compensate the decrease in early spring and autumn and for increased evaporation caused by higher temperatures. More climatic and environmental analysis by region is shown in annex 1.

528. Climate change forecasts for the West Bank is derived from 35 available global circulation models (GCMs) used by the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report[160]. The Climate Change Knowledge Portal (CCKP, World Bank)[161] and the Applied Research Institute of Jerusalem (ARIJ)[162] present the IPCC data CMIP5 multi-model in the figure below.

Figure 12: Change in monthly temperature (upper left) and precipitation (upper right) for 2020-2039 compared to 1996-2005 baseline (IPCC-CCKP); CMIP5 multi-model mean time series of temperature (lower left) and precipitation (lower right) change relative to 1986



529. ARIJ[163] summaries the future climatic situation for the Mediterranean region (30°N to 45°N, 10°W to 40°E) and more specifically for Palestine based on the 5th report of IPCC (AR5). Following the summary, there is high confidence in model projections of mean temperature increases in the Mediterranean region. The AR5 results suggest that it is very likely that temperatures will continue to increase throughout the 21st century over the Eastern Mediterranean and that it is likely that summer warming will be more intense than winter warming. The CMIP5 model projections for this century with medium confidence is a further reduction in annual mean precipitation in the Eastern Mediterranean and an increase in extreme rainfall in winter leading to longer drought periods in summer time. Inter-annual variation in rainfall is also expected to increase, with very wet years alternating with longer multi-

160 https://www.ipcc.ch/report/ar5/
161 http://sdwebx.worldbank.org/climateportal/
162 Status of the Environment in the State of Palestine, ARIJ, 2015.
163 Status of the Environment in the State of Palestine, ARIJ, 2015.

annual droughts. It should be noted that the various interacting dynamical influences on precipitation of the region results in uncertainty in the magnitude of future precipitation change.

530. According to the Initial National Communication Report to the United Nations Framework Convention on Climate Change (UNFCCC) published in 2016, important climate change impacts affecting rural livelihoods in the West Bank are presented in the table below:

Table 59: Climate change impacts in West Bank

Resource	Impact
Water Resources	Water resources are limited and water demand exceeds the available water supply. Irrigation water is sensitive to rainfall amount and distribution, and shifts in the rainy season. Drought decreases the quantity of water that can be allocated to agriculture yet at the same time increases crops' water requirement, increasing costs of production (inclusive of electricity for pumping). The capacity of storm water drainage systems to drain excess water during flood events is limited. Storm-water systems in the West Bank are under-designed and poorly managed.
Agriculture And Livestock	Agricultural production is sensitive to climate and local weather forecasts do not accurately predict heat waves, frosts or flash flood. Olive production is sensitive to heat wave, frost and drought. Grape production is even more climate sensitive (frost, shift in rainfall pattern) and important weather related losses were reported in 2010 and 2015 for both crops. Production of olives, grapes, stone fruits, rain-fed vegetables and field crops requires long-term water harvesting systems (and land management, including soil conservation practices, e.g. stone wall terracing etc.). Heat and cold waves reduce productivity in cattle and poultry, cold waves reduce the amount of milk production. Sheep are sensitive to cold (new-borns and small lambs). Adult sheep are sensitive to heat waves (during the fertilization period). The cost of agricultural production increases in climatic extremes. The grazing area on the eastern slopes is the most sensitive to climatic conditions. Overgrazing, low rainfall and drought combine to reduce vegetation cover, species-richness and productivity, and increase wind erosion. Loss of vegetation makes soils sensitive to gully erosion resulting from intense rainfall events and flash floods, which can remove a substantial amount of fertile topsoil.
Biodiversity	Palestine's strategic position at the meeting point between Eurasia and Africa enriches the country's biodiversity. Species will need to shift their ranges in response to changes in climate. However, the extreme climatic conditions and human activities limit species' abilities to move between terrestrial ecosystems.

C.2. Impact of climate change on different farming systems and adaptation capacities

531. Integrated crop (barley and wheat) and livestock systems under rain-fed conditions in the northern and southern parts of the West Bank are to some extend drought resistant. However, they are increasingly affected by lack of soil water storage capacities and overgrazing and are struggling to cope with the increasingly water scare conditions driven by raising temperatures. Orchard (olive, fig, almond, grape, peaches) production systems, mostly on terraces and sometimes intercropped with annual crops, are found throughout the West Bank where rainfall is higher than 300 mm/year. Olive production alone, comprises 15-19% of the total agricultural production. These orchard systems are experiencing an increasing need for complementary irrigation in the dry and hotter summers exacerbated by low soil water storage capacities. According to the NAP in 2010 heat waves during the flowering season reduced the olive production by 20%. Some of the areas used for orchards today could in the future fall below 300 mm annual rainfall making them more suitable for grazing and fodder shrub production. The eastern slopes, with annual rainfalls below 200mm, and home to Bedouin herder communities and are the most affected by increasing temperatures, decreasing rainfalls, and loss of herders' access to their grasslands. All this leads to the lowering of grassland biomass productivity and further pressure on the already overgrazed rangelands. Vegetable production in greenhouses is found throughout the West Bank in particular in the plains and lower grounds. This production is more resilient to higher temperatures but water scarcity is often the limiting factor and strong winds can be damaging to the infrastructure.

532. **Adaptation capacities**. Palestinian farmers have limited access to reliable agro-climatic information and early warnings that enable them to anticipate long-term and sudden onset climate risks

and mitigate potential impacts before they become a disaster. Reliable agro-climatic information is needed to: identify what and when to plant, control animal movement, or adjust agriculture practices throughout the season. The PA, in particular the Palestinian Meteorological Department and the MoA, lack technical capacities and equipment to adequately measure agro-meteorological data and translate these into timely reliable early warnings and early action recommendations for farmers. Several national strategies and plans promote adaption to climate change and identify priority areas. However, for structural changes in managing climate risks, more information on the long-term implications of climate change on agriculture is needed as well as evidence on the returns of investment in adaption at the local level. Palestine thus needs additional downscaled projections of climate change risks and potential impacts on agriculture as well as evidence on the performance of local adaptation and risk reduction practices. If made available this could inform long-term planning and investments. Over the past years, substantial progress has been made in mainstreaming climate change adaptation and mitigation across sectors. However, this has not translated in accelerated actions at local level. Goals and actions identified in national strategies are not yet reflected in clear roles and responsibility and resources in the MoA, which results in weak awareness and capacities at decentralized levels to take concrete actions. For improved support to assist farmers to adapt, the Palestinian extension services requires know-how on farm-level technologies and practices that are effective in increasing resilience to the hotter and dryer future with more erratic rainfalls.

C.3. Knowledge gap

533. The Extension Services Department (ESD) of the MoA for each Directorate has in general good capacity and knowledge to support farmers in their production activities on the developed land under the RELAP project. This support will be supplemented by technical assistance to farmers provided by the NGOs contracted as service providers for both land development and marketing activities. The ESD is subdivided in Divisions specialized in different specific subject areas. Some divisions pertinent for the project implementation are: Olive Trees Division, Vegetables Division, Live-stock Division, Rain-fed crop Division, and Rural Development Division among others.

534. However, there is a knowledge gap for data gathering and quality control, which makes it challenging to improve the resilience effectiveness analysis of different adaptation practices. Palestine's situation makes this particularly difficult. Where resources are limited, there is a need to support data collection and enable systematic quality control of the data used in the analysis. Technical training to share experience and best practice in the deployment of adaptation practices in similar regions (e.g. other parts of the Middle East) and training on systematic monitoring of adaptation benefits is also needed to support learning and scaling up.

D. Potential project's social, environmental, and climate change impacts and risks

535. The West Bank's climate change adaptation strategy is structured around the NAP developed by the Environmental Quality Authority (EQA) and based on the requirements of the UNFCCC's Guidelines for the preparation of national communications from Parties. New strategies to ensure environment management and climate change mitigation and adaptation have been developed. Nonetheless, the country is still facing a major deficit in terms of climate change adaptation.

536. The climate change scenario (described in the first chapter of this note) will impact natural resources (rangelands, water bodies, biomass and others) affecting in particular the agricultural production as well as rural infrastructures such as roads and water points and therefore livelihoods of smallholders and rural people. Neglecting smallholders' adaptation in West Bank will contribute to socio-economic issues such as rural depopulation (urban population reached 75.3% of the total population in 2015 – CIA World Factbook) and unemployment (18% total population with youth unemployment even higher at 25%, PCBS 2016) with possible consequences on the country's stability. The project has integrated a clear adaptation strategy at the core of the project deign that includes both investments in climate resilient land development and training/capacity building to support the adoption of adaptation practices. The project will ensure adaptation by targeting directly smallholders as well as supporting institutions (central and local) taking into account the main climatic challenges of the target areas.

537. The described activities in appendix 4 will support climate change adaptation of over 20 000 households to increase their resilience to climate change, improve soil and water management securing higher and more stable crop yields and land and water productivity, and mitigate the impact of the higher frequency and intensity of increased extreme weather events, such as drought, torrential rainfall/floods and storms.

D.1. Climate resilient land development (component 1)

538. The project will ensure environmental friendly and climate resilient land development for rural people by:

- Supporting smallholders to register their land and implement activities depending on land suitability under current and future climate trends and variability.
- Providing smallholders with rainwater harvesting structure, cisterns and possibly small scale irrigation systems and capacity building in water-use efficiency.
- Testing, monitoring and upscaling of climate adapted land development approaches to implement more resilient type of production. Those approaches would include enhanced water use-efficiency and improvements to the terracing practice with complementary irrigation from rainwater harvesting systems. Also alternative practices will be supported with particular focus at increasing the soil water storage capacity by being less invasive and preserve and regenerate more efficiently the top soil and use the landscapes natural contours to capture more rainwater.
- Supporting capacity development and technical support to farmers in understanding climate risks and adaptation options, soil and water management practices as well as rangeland improvement and management.
- Improvement and management of soil to increase its nutrients and the soil water storage capacity.
- When possible support development of land to be irrigated with treated wastewater
- Capacity building in integrated pest management, use of organic pest management practices and safe application and handling of pesticides and its empty containers protecting human and environmental health.

D.2. Inclusive entrepreneurship development support (subcomponent 2.2)

539. The project will support climate smart income generating activities by:

- Creating entrepreneurial opportunities and addressing constraints faced by the marginalized, including women, youth and landless poor. RELAP will support installation of, among others:
    - Hydroponics systems;
    - Mushroom production;
    - Compost production;
    - Beehives.
    - Processing of dry and canned fruits and vegetables
- Ensuring tailored technical assistance provided by business development services provider registered under Chamber of Commerce.
- Supporting the establishment of local multi stakeholder rural platforms (MRPs), and Rehabilitation/construction of climate proofed village collection centres.

D.3. Components 1 and 3

540. The project will also support the improvement of public services facilitating farmers' access to information on climate risks and impacts on different cropping and livestock systems. Farmers will be sensitised to a diversity of climate resilient land uses, production systems and practices and will receive and use agro-climate information services for on-farm decision making. National initiatives in the agricultural sector mainstreaming climate smart approaches will be enhanced.

541. For further details see appendix 4 of this PDR

E. Environmental and social category (A, B, C)

542. Potential adverse environmental impacts (e.g. unintentional removal of topsoil in land development, or excessive use of agrochemicals in e.g. greenhouses and other irrigated production) will be mitigated by: i) the development, testing and scaling-up of less invasive land development practices; ii) the careful consideration of land-use suitability (based on soil types, rainfall and water availability and land capabilities), which, combined with market opportunities, will be the basis for deciding on land development approaches, production activities and cropping and livestock management plans to avoid unsustainable land uses; and iii) provide capacity building in integrated pest management and safe (both for farmers and consumers) and environmentally responsible use of pesticides and handling of empty containers. Works in terracing and the rehabilitation or construction of rural roads, will be subject to an assessment of eventual environmental risks to be mitigated as part of the engineering design. RELAP will develop mechanisms to target the poor and vulnerable households, and will, as such, have positive social impacts. Considering that environmental improvements and social inclusion are at the heart of RELAP and potential negative impacts are mitigatable, the project is categorized as B.

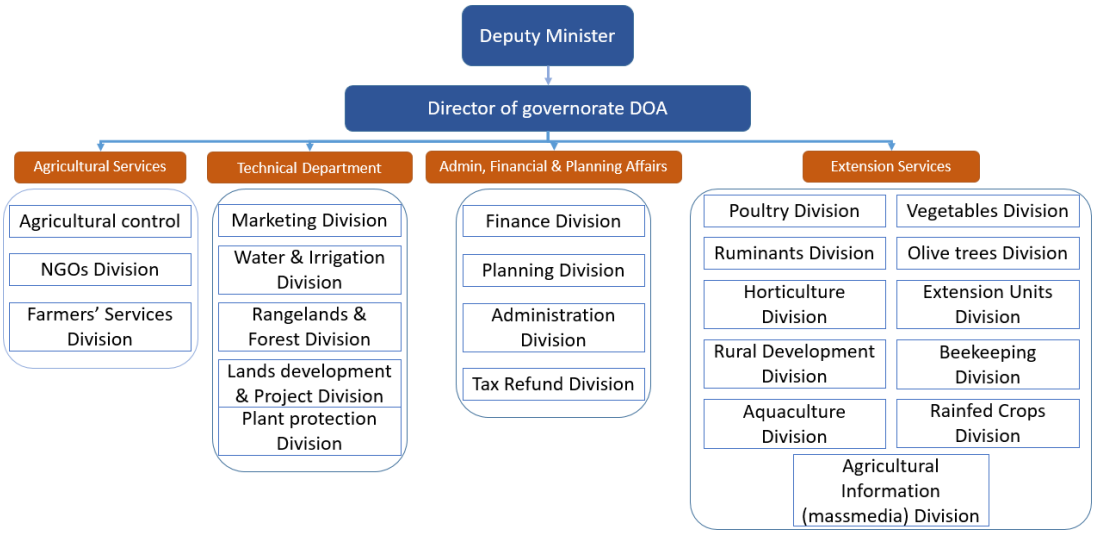
F. Climate risk category (High, Moderate, Low)

543. The RELAP is addressing in particular the issue of water stress in land development approaches as the most important impact of climate change on farmers and rural villages as described above. The main component 1 will focus at increasing climate resilience of a diversity of farming systems and rural livelihoods by promoting practices for soil moisture conservation, local rainwater harvesting and water-use efficiency in complementary irrigation. The resilience of landless rural women and unemployed youth will also be supported through applying a climate resilience criterion for the selection of micro-businesses to be supported by small investment grants targeting in particular these groups. Green Climate Fund financing, is in the process of being mobilized and will be invested to ensure climate adaptation and resilience of both infrastructures and livelihood strategies of rural poor. With this mainstreamed focus on resilience, the climate risk to the project is assessed to be moderate.

G. Institutional analysis

I.1. Institutions

544. The MoA performs major duties in the regulation and management of the agricultural sector in addition to the oversight, supervision and delivery of certain basic services. The Ministry carries out its assigned functions from its headquarters, agricultural and veterinary directorates and offices in the governorates and main gatherings. The Directorate of Agriculture of each governorate depends on the Deputy Minister of Agriculture and is divided in specialized divisions for implementation of projects as represented in the figure below:



545. Beside MoA, there are several ministries and public institutions that play major role in the development, regulation and delivery of services to the agricultural sector.

546. The Ministry for Environmental Affairs was created in 1998. It 2002, it became the Environmental Quality Authority (EQA). MENA initiated the 1999 Palestinian Environmental Law, which provides the basis for environmental decisions and secondary legislation. The EQA became the Ministry of the Environment for the period 2012-2013, and then became EQA again. Since, it has been reporting to the Prime Minister. Its mandate is to ensure the protection of the environment, biodiversity and natural vegetation; to conduct environmental assessments, licensing in cooperation, and coordination with the competent authorities; to conduct awareness and environmental education activities. EQA has developed among others – and with active participation of national stakeholders – the National Adaptation Plan to Climate Change and also the Initial Communication Report to the United Nations Framework Convention on Climate Change (submitted to UNFCCC secretariat on 11 November 2016). EQA thus participates in the development of specifications and standards related to the environment and proposes and develops instructions and technical requirements for environment protection. EQA is the National Designated Authority (NDA) to Green Climate Fund and is also working to attract funding for environmental projects from International Financing Institutions. EQA submitted the Nationally Determined Contributions report and its annexes to UNFCCC on 21 August 2017.

547. Additional institutions provide some services for agriculture and environment protection. Palestinian Water Authority (PWA) regulates the management of water sector and sanitation in Palestine and achieves an equitable distribution among different sectors. It optimizes the use of water resources to ensure water and food security and economic development of Palestine and manages wastewater treatment. Ministry of National Economy (MoNE) regulates the trade of agricultural inputs and products, and promotes local products. It also supervises and holds commercial conventions and protocols, registers companies and related activities, promotes exports and prepares specifications and standards. Ministry of Local Government (MoLG) plans regional, municipal and rural schemes and oversees the wholesale markets and slaughterhouses. Ministry of Labor (MoL) registers agricultural cooperatives and develops strategies and laws for cooperative work.

548. Several government ministries are involved in the fight against climate change and desertification, including the EQA (leading it), the Palestinian Energy and Natural Resources Authority, the PWA, and the Ministry of Finance and Planning. The Ministry of Local Government, , the MoA and the Ministry of Health are working to advance environmental causes. The distribution of roles and responsibilities between different stakeholders in the environmental field is still unclear (Ministry of Health, MLOG, PWA, MoA).

549. The Palestinian Environmental Protection Agency was created in 1994 and was given the mandate to prepare for the multilateral negotiations. Later the Ministry of Planning and International Cooperation created the Environmental Planning Directorate within its structure. In alignment with na-

tional priorities, the Palestinian authorities agreed on ratifying 16 multilateral environmental conventions upon which the PA has signed three conventions and one protocol; (i) Basal Convention on the Control of Trans boundary Movements of Hazardous Wastes and Their Disposal, (ii) Convention of Biological Diversity (CBD) and the Cartagena Protocol on Biosafety to the Convention of Biological Diversity, and (iii) UN framework Convention on Climate Change (UNFCCC). In addition, several national strategies and action plans were set. The EQA is working to develop the bylaws needed to be in alignment with the conventions they ratified.

550. Local authorities are not in charge of developing environmental policy but are entrusted with implementing it as part of their legal responsibilities.

551. There are several Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) involved in agriculture and environmental protection such as the Palestinian Agricultural Relief Committees (PARC), and the Palestinian Environmental NGOs Network (PENGON). NGOs and CSOs have played an essential role in agricultural development before and after the establishment of PA. Their activities, fields of work and geographical coverage vary, noting that large portion of the donors' funds is channelled directly through them. Various expert organisations and environmental NGOs also operate in the field of water management.

I.2. Capacity development

552. Following the Initial Communication Report to the United Nations Framework Convention on Climate Change (EQA, 2016), Relevant government institutions, such as the Environment Quality Authority (EQA), Ministry of Agriculture (MOA), Palestinian Water Authority (PWA), Ministry of Transportation (MOT), Ministry of Finance and Planning4 (MOFP), Ministry of National Economy (MONE), Palestinian Energy and Natural Resources Authority (PENRA), and the Ministry of Health (MOH) have limited systems, capacity and expertise to address challenges related to climate change efficiently.

553. The project considers capacity development and institutional strengthening two pillars of its theory of change. Both component will ensure capacitation of both institutions and beneficiaries. The objective of the process is to reduce the climate change adaptation deficit in rural areas. The project will ensure capacitation in the following domains:

554. Capacity building of technical offices of rural municipalities and villages to ensure climate resilience of infrastructures and services.

555. Capacity development of smallholders, associations and institutions in the field of natural resource management, sustainable livestock, beekeeping, and others key topics

H. Recommended features of project design and implementation

G.1. Mitigation of vulnerabilities

556. The project is applying a resilience model to identify adaptation actions to be supported and develop a scorecard to monitor changes in resilience for project beneficiary households. The population's future well-being in the West Bank depends on the resilience of communities, cities and ecosystems, and resilience provides a critical point of integration for adaptation strategies. Building resilience is about the suitable actions taken at present time so that the impact of inevitable shocks and stresses are minimized and the rebound accelerated.

557. Resilience is the ability to cope with adverse shocks and stresses, and to adapt and learn to live with changes and uncertainty. The 'ability to resist, recover from, or adapt to the effects of a shock or a change'[164]. 'Resilience is a long-term approach, not only focussed on the ability to bounce back but also integrating adaptation and transformation while undergoing change'[165].

558. Indeed, building resilience delivers near-term economic benefits and jobs, while making everyone better prepared when a shock hits. There may be upfront costs to get this done, but money will be saved later: It costs sometimes more to rebuild in the wake of a disaster than to build in a way that can withstand the shock. Resilience can be approached at different levels, such as at the level of agroeco-

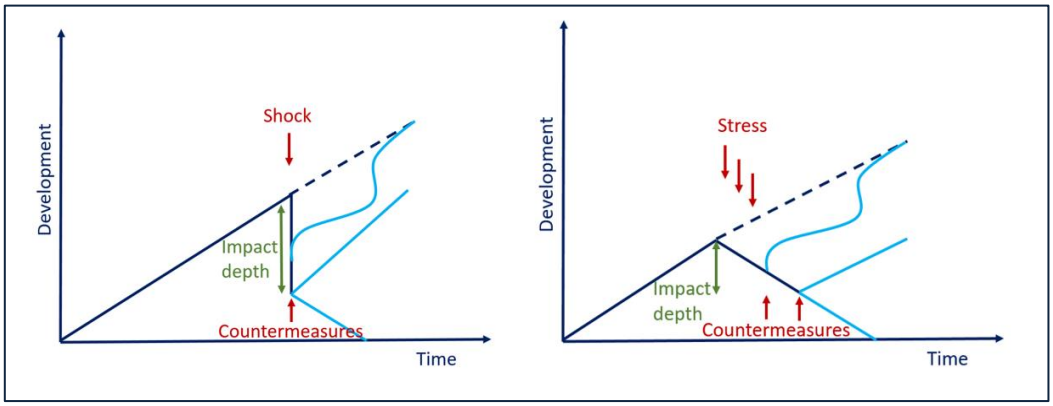
[164] IDS, 2012 - Resilience: New Utopia or New Tyranny?
[165] BC3, 2011 – Multidisciplinary perspectives on urban resilience

systems or productive territories, countries, communities or families, and facing different crises and shocks.

559. To a great extent, increasing resilience can be achieved by reducing vulnerabilities and increasing adaptive capacity. This can be achieved by reducing exposure, reducing sensitivity and increasing adaptive capacity, for every type of risk. The project uses a resilience model focused on poor rural families. This model helps to define the strategies of project interventions to support the rural poor in improving the management of natural resources and adaptive capacities to climate change.

560. The model followed in the project is based on an identification and grouping of factors that contribute to the households' capacities to face climate related stresses and shocks, reducing their effects and to recover quickly avoiding persistent adverse effects. The model is explained in more detail in the following figure.

Figure 13: Impacts of shocks and stresses (green lines) on development pathways (black and blue lines) depending on different levels of resilience



561. The figure above illustrates how the factors and countermeasures associated contribute to the resilience of households according to their influence on:

- the depth of the impact (in green) that shocks (left graph) and stresses (right graph) have on households;
- the ability of households to recover (in blue) after a shock (left graph) or adjust to stresses (right graph).

562. The depth of the impact depends on factors such as; i) management of natural resources; ii) diversification of crops, income, and livelihoods; iii) quality of the diet (health); iv) road access and transportation and other services; v) quality and location of assets (infrastructure, fields an equipment); vi) existence of an early warning system and prevention strategies; vii) membership in social networks and/or producer organizations; viii) knowledge and skills to understand climate trends, risks and potential impacts on livelihoods and effectiveness of available adaptation options.

563. On the other hand, the capacity and speed of recovery and adjustments depends on factors such as: i) savings; ii) access to credit; iii) insurance (where life, health, home insurance, etc. are generally more or just as important as agricultural insurances); iv) the effectiveness of public (and private) auxiliary response programs; v) road access; vi) capacity to access new technologies and adopt them in livelihood activities; and again vi) membership in social networks and/or producer organizations.

564. In figure 13 above the light blue lines illustrate different scenarios of impact and recovery according to the presence or not of the resilience factors and countermeasures. When a stress or shock occurs, the depth of the impact may vary and the recovery may bring the households to a different level of welfare compared to the initial state depending on the factors of resilience. Finally, a systematic learning process after a crisis or shock or as part of evaluating the effectiveness of implemented approaches to cope with increased stresses, is an additional factor in strengthening the resilience to reconstruct and adopt each time something better based on the lessons learned.

G.2. Social and environmental management plan

Geographic targeting

565. The RELAP target area comprises Areas B and C in 6 governorates of the West Bank166. In each governorates, the project will seek to select the areas with the highest incidence of poverty. Other criteria for final village selection include beneficiary interest, the existence of potential land to be developed with opportunities for linking produce to markets, and high potentials for reducing climate change vulnerabilities and generating adaptation benefits. Also, in the selection of land development beneficiaries and their lands the project will seek to identify poorer households and plots which are contiguous, in order to allow for a more landscape-based approach.

Selection of land development activities

566. Appendix 4 of this PDR describes in details the village engagement and planning process in selected villages to identify resilient land development approaches and practices and how this process will take into account the inclusion of more vulnerable and poor households, land-use suitability and adaptation measures to address current and future climate change and variability risks. The different land-uses and farming systems and related adaptation measures to be included in land development activities are presented in table 18 in appendix 4. This initial selection of farming systems was done during the two design missions jointly with the MOA after meeting with other agencies, NGOs and producers associations. The selection covers a broad set of systems present in the West Bank as well as new systems and approaches proven to have high adaptation benefits and which needs to be further up-scaled.

567. The participatory exercise with village stakeholders will include farmer's and livestock keepers informed and guided analysis of climate change and variability historical and future trends, the impacts on the different cropping and livestock systems and identification of different adaptation options for increased resilience. Planning of land development activities, based on a landscape management approach, identification of investments in agricultural roads and development of the medium-term cropping, livestock rearing and business plans with farmers and livestock keepers. In addition to works, equipment and inputs the planning should include farmers' and livestock keepers' own investments and needs for capacity building and technical assistance.

Systematic monitoring of adaptation benefits and resilience

568. The planning will also identify the interest of the farmers in participating in the systematic testing and monitoring of the production, economic and resilience benefits of the land development approaches implemented. Results of the testing and monitoring will be available on an IT data platform (relevant for learning, upscaling and policy reforms) and could be later integrated in the WOCAT platform. The system aim to give more land development options to farmers and in doing so increase their resilience to climate variability. [167]

569. The matrix below identifies the risks and vulnerabilities of rural families, activities that may be included in land and small entrepreneurship development to address these, and the questions proposed for the scorecard to monitor the increase in household resilience (see section J below in this appendix and the Monitoring and Evaluation appendix 6 section B in this PDR).

Risks and vulnerabilities	Project supported activities	Tentative questions for the resilience scorecard
Lack of knowledge on risks and impact of climate variability and change (CVC) and options for adaptation.	Sensitization and participatory analysis of the effects of CVC on productive activities and other livelihoods of households and identification of adaptation practices to be adopted in land and entrepreneurship development. Systematic monitoring and documentation with farmers of socioeconomic and adaptation benefits of the various land development activities to	1. Can you explain how CVC have affected your production activities the last 10 years and how they will be affected in the future? 2. Can you explain what

166 Jenin, Tubas, Tulkarm, Nablus, Bethlehem, Hebron.
167 For more details, kindly refer to the Appendix 4, component 1.1.

	strengthen the evidence base and learning for further scaling up. Downscaling and modelling of future CVC impacts on different farming systems and development and dissemination of adaptation options to farmers and extension services	options of adaptation practices and changes in your production system you can and/or may implement to address these risks?
Decisions about land-use, crops, varieties, sowing and harvesting does not consider the risk of CVC	Upgrading of the meteorological network to an agromet system and development of early warning and information products tailored to small farmers for their decision making on actions to mitigate risks. train MOA national and local extension staff and farmers in adaptation actions to take in relation to the different alerted climate events.	3. Do you know how warnings on weather and climate risks are communicated by the government's early warning systems and which actions you can take to avoid or reduce negative impacts on your production? 4. In the last 3 years have you used weather forecast information to make decisions in the planning of your production activities?
Insecure land tenure and access for productive activities.	Provide legal assistance to women and men land owners in the land registration process Support farmers in resilient land development activities to demonstrate use and steadfastness and invest in rural roads for improved access to agricultural land. Support activities for landless households through micro entrepreneurship development facilities (MEFs): beehives, mushroom production, hydroponics units, processing of dry fruits and canned stone fruits, etc.	5. Is the land the RELAP project has supported you in developing legally registered in the name of an adult currently living in the household? 6. Since you started to implement land development activities supported by the RELAP project, has there been any threats to losing your land under development?
Risk of droughts and water scarcity during summer months as dry season is getting longer, and temperature is getting warmer.	Technical assistance and investments in use of landscape and field level water harvesting techniques (contour bunds, half-moon, maintain natural infiltration around rocks, terraces) to detain runoff and increase water storage in soils Investments in water harvesting and cisterns storage infrastructures and water-use efficient drip irrigation systems and capacity building for the optimal maintenance and management of these infrastructures and systems. Support micro entrepreneurships in businesses increasing food security and requiring minimal land and water resources (such as mushroom production, hydroponics, processing of dry and canned fruits and vegetables and beekeeping).	7. Does the land developed have sufficient access to water resources (stored in soils and/or cisterns) to cover the needs of the production during the dry season? 8. Is your micro business supported by the RELAP MET facility constrained by insufficient access to water?
Loss of top soils, soil fertility and water storage capaci-	Technical assistance and investments for: integration of biomass and organic fertilizer in soils;	9. Have you introduced any practice to improve the

ties	agroforestry with constant soil coverage; protection against erosion for crops on slopes (contour, V- and U-shape stone walls, light terracing); . Introduction of conservation agriculture in crop (wheat and barley) livestock (sheep and goat) systems balancing the use of biomass for fodder and mulching and introducing fodder crops in crop rotation.	fertility and water storage capacity of your soils? *If yes* 10. Have you observed any improvement in the yields of your crops by using these practices?
Reduced rainfall, salinization of soils and loss of vegetation cover in eastern slopes.	Rangeland rehabilitation, protecting areas by fencing, constructing cisterns, planting, enhancing vegetation cover and biodiversity. Strengthening capacities of Bedouin and other herders' communities in rangeland management	11. Have you participated in any activities for rehabilitation of rangelands agreed with your community and do you trust it will bring positive benefits? 12. Do you think your community will be able to manage the rehabilitated rangeland? (why, why not?)
Water scarcity, inefficiency in water use and waste water management causing soil and water pollution.	Establish coordination with other donors and further the collaboration between PWA, MOA and municipalities with wastewater treatment plans and support farmers with technical assistance and investments in land development activities using treated waste water for irrigation of tree and fodder crops. Strengthen water user associations (WAU) capacities to govern water allocations, maintain and operate the irrigation systems and recover costs through fees.	13. Do you have access to sufficient treated wastewater from the irrigation system to cover your production needs? 14. Do you participate in the WAU and does the WAU effectively maintain and operate the irrigation system?
Degraded wadis/watersheds increasing loss of soils and water runoff.	Development of wadis for cultivation of perennial tree crops and annual crops with gabion walls retaining water and sediments and water storage and distribution facilities.	15. Do you have access to sufficient water for your land in the developed wadis to cover your production needs? 16. Is your land under the developed wadis under profitable production?

I. Analysis of alternatives

570. During project design alternatives for land development has been analysed with the MOA staff to come up with a broader selection of land development than orchards on terraces covering a diversity of farming systems and livelihoods which will provide for more resilience. Also for the practices used for terraced orchards has been discussed in order to come up with approaches which are more cost effective and less environmental invasive in removing topsoil during the construction process. To further push for more alternatives for land development and identify the ones with more adaptation benefits, the project include a subcomponent (1.1) on testing and monitoring with farmers and livestock keepers the different land development approaches and practices for different agro-ecological zones and livelihoods.

Additional funding

571. The project is funded by several entities including IFAD (grant) to support climate change adaptation and to ensure a rational and sustainable use of available natural resources. IFAD is an accredited agency for the Green Climate Fund and the project is currently in project approval process.

J. Monitoring and Evaluation (M&E)

572. The M&E arrangements are described in details in the appendix 6 of the PDR including the application of the resilience monitoring scorecard tool.

573. A special attention to the geo-referencing methodology for monitoring is advised. The PMU staff (M&E Officer) and implementer partners should be trained before and at the beginning of project implementation to collect GPS information for all activities within the components of the project. The M&E Officer (and other PMU staff if needed) should also be trained to use the GPS data collected with GIS software, to create maps and to analyse changes in time. The monitoring will be focused on vegetation index for activities related to land development and on the construction of infrastructure (roads, water harvesting techniques …) through satellite imagery (i.e. Landsat, Sentinel) and pictures taken on the field before and after the activities. The geo-referenced information should be gathered in a KMZ file (Google Earth) by component and subcomponent. As reported in the PDR the whole project will be georeferenced as was its design. A simple resilience index will be developed during the final design mission to monitor the changes in beneficiaries resilience.

K. Further information required

574. No further information is needed to complete the SECAP note. The ESMP will be further detailed as part of finalizing the project PIM. In addition to this SECAP note, the following tools have been designed as part of the project design and will be share with the PMU during project start up:

K.1. Google Earth Package Including the following maps, data and analysis;

- Remote Sensing Analysis of (I) Vegetation, (II) Climate trends.
- Administrative Boundaries
- Soil Map (2013)
- Global agro-ecological zones (GAEZ)
- Potential Water Erosion map (2017)
- Map of Roads (2010)
- West Bank Digital Terrain Model (DTM – 2017))
- West Bank Slope (%) Map (2017)
- Map of visited Sites and Communities (2017)
- Watersheds' map (2017)

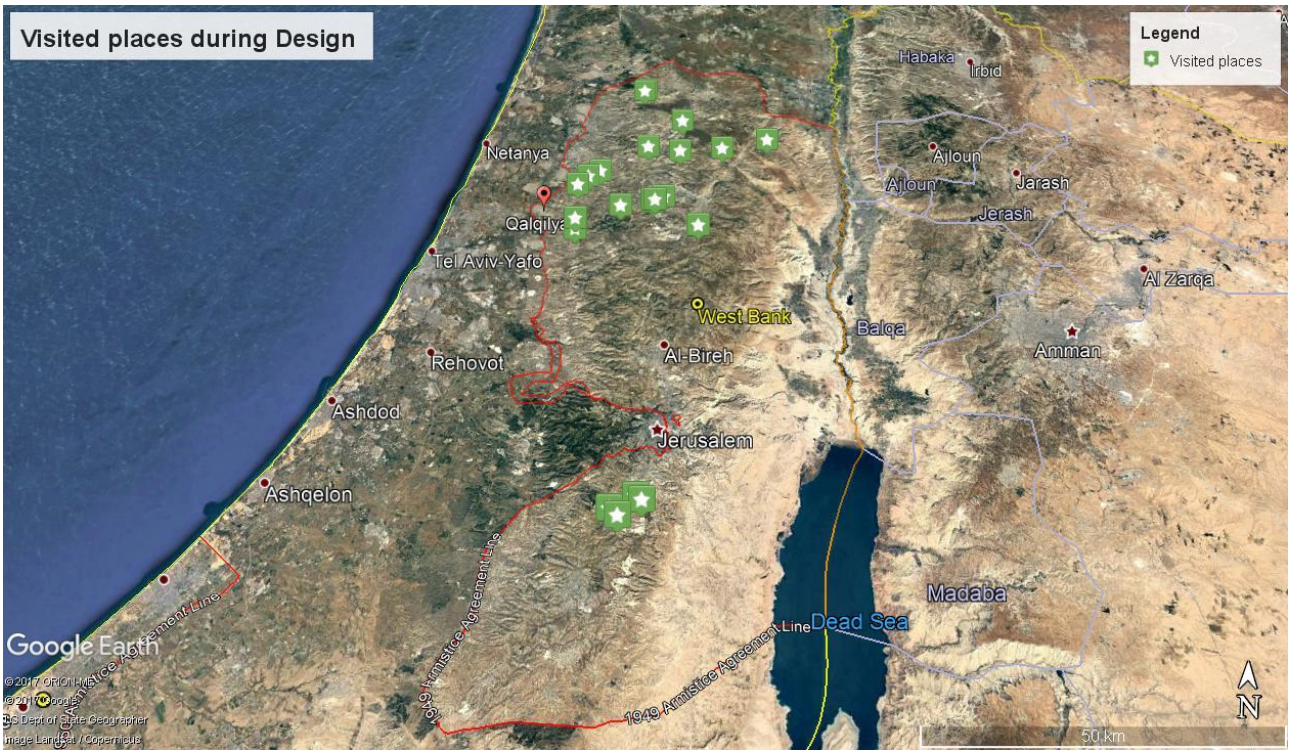
K.2. Remote Sensing Climate Trends (1981-2016) Analysis

L. Budgetary resources and schedule

575. No further budget is required to develop the SECAP. A concept note for the Green Climate Fund has been prepared in house in collaboration between PTA, NEN and ECD and has been presented to the GCF on 26 October 2017. The concept note received positive feedback and guidance for the development of the full project package to be presented to the GCF in February 2018. NEN and ECD are currently working on finding resources to cover the consultancies for supporting the development of all GCF required documents.

M. Record of consultations with beneficiaries, civil society, general public, etc.

576. The design team met with farmer associations, women cooperatives and centres, youth clubs potential beneficiaries of RELAP and beneficiaries of PNRMP on their land. The visited sites are presented in the figure below:



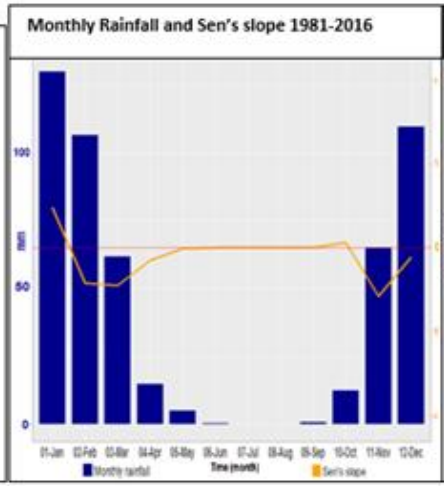
Annex 1, Appendix 13: Analysis of Climate Trends in West Bank

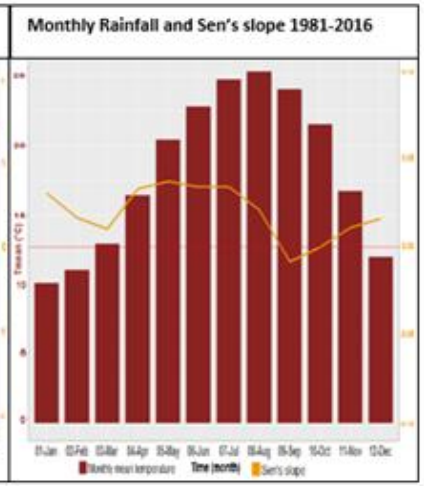
Figure 14: Governorates' grouped in 4 areas in West Bank for climate analysis for the RELAP project [168]

[168] The governorates were grouped in 4 areas following the 4 agro-ecological zones in West Bank.

North Area

Area: 1,804 km2
Population: 1,079,454
Pop. Density: 598 /km2
Total water pumped (2014) - excluding Salfit: 44.9 M m3 (domestic: 23.5; agricultural: 21.4)
Cultivated Land Area (2011): 506.2 km2
Percentage land cultivated: 28%
Livestock (2013): 300,457 (14,972 cows, 238,260 sheep, 47,225 goats) 166.5 head/km2 of total area
Source: Palestinian Central Bureau of Statistics 2016
Average Altitude MASL: 357m
Slope: 16.8% (>10°)



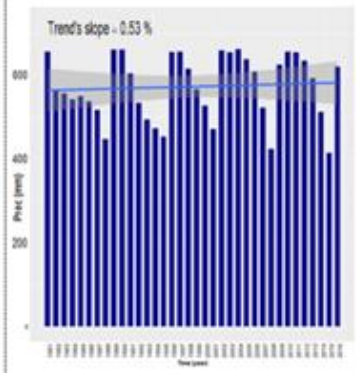


Past climatic data

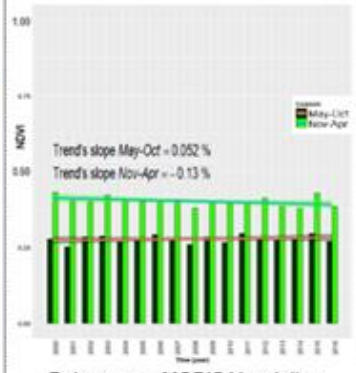
Rainfall
The trend of annual rainfall is around 580mm/y and doesn't show any significant change in time from 1981 although we can note a cycle every 6 to 8 years. Monthly rainfall seems to decrease over time in Feb, Mar and Nov and increase in Jan.

Temperature
The trends of max and min temperature seem to increase for both seasons and is significant for May-Oct season. Indeed, we can see that the monthly mean temperature is increasing over time for the majority of the months (except Sep and Oct) and especially from Apr to Jul.

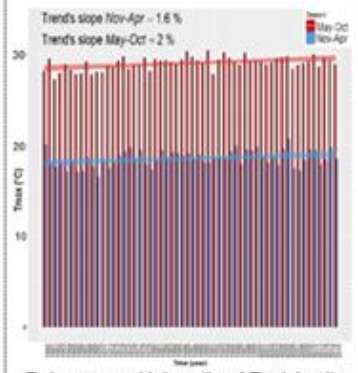
NDVI[2]
The trend of the vegetation index for both seasons is quite stable, even though the May-Oct season seems to decrease.



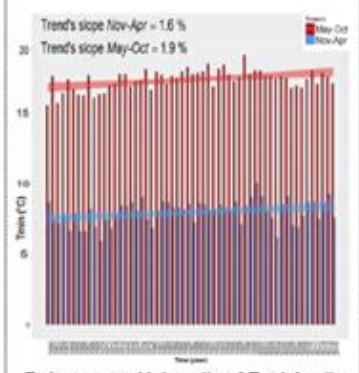
Data source: CHIRPS/Climate Hazards Group-USGS. 1981-2016



Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA. 2000-2016



Data source: University of East Anglia Climatic Research Unit (CRU). 1960-2015



Data source: University of East Anglia Climatic Research Unit (CRU) 1960-2015

Possible Impacts

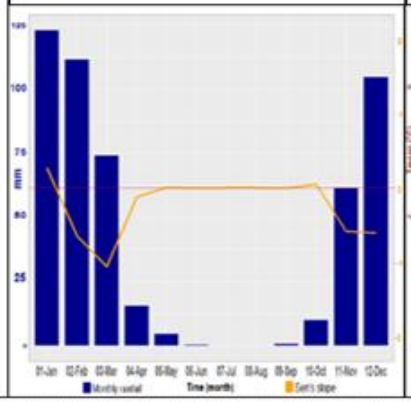
If we look at the cycle shape from the annual rainfall we could foresee a decrease in annual rainfall in the next 5 to 7 years. The decrease in rainfall seems to take place during the early stage of the Summer and Winter crops (Feb-Mar and Nov). The increase of temperature during those months and the summer season could cause issues of water scarcity for the 28% of total area considered as cultivated land. Livestock production (high density of head of livestock in the North) could also suffer from water scarcity and could then impact the rangelands already overgrazed if no adequate management is implemented.

[1]Season 1: May to October – Season 2: November to April.
[2]The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from –1 to +1.

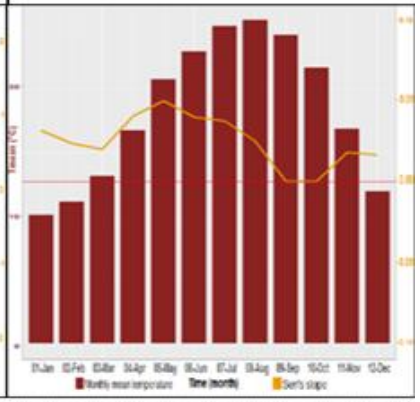
Centre Area

Area: 1,200 km2
Population: 784,498
Pop. Density: 653.74 /km2
Total water pumped (2014): 2.5 M m3 domestic; agricultural: no data
Cultivated Land Area (2011): 93 km2
Percentage land cultivated: 7.75%
Livestock (2013): 113,282 (755 cows, 68,938 sheep, 43,589 goats) 94.4 head/km2 of total area
Source: Palestinian Central Bureau of Statistics 2016
Average Altitude MASL: 481 m
Slope: 22.3% (>10°)

Monthly Rainfall and Sen's slope 1981-2016



Monthly Rainfall and Sen's slope 1981-2016



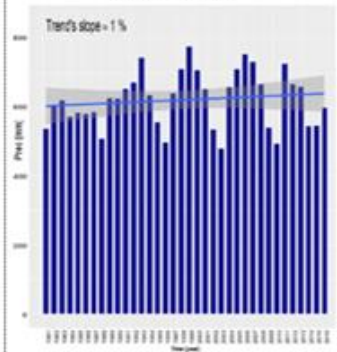
Past climatic data

Rainfall
The trend of annual rainfall is around 630mm/y and since 1987 it shows a cycle every 6 to 7 years. Monthly rainfall seems to decrease over time in Feb, Mar and Nov and increase in Jan.

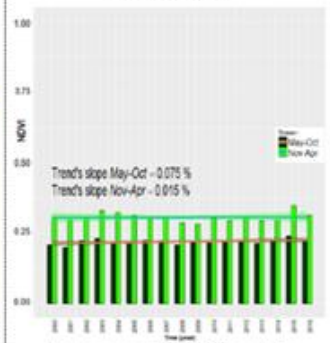
Temperature
The trends of max and min temperature seem to increase for both seasons and is significant for May-Oct season. Indeed, we can see that the monthly mean temperature is increasing over time for the majority of the months (except Sep and Oct) and especially from Apr to Jul.

NDVI[2]
The trend of the vegetation index for both seasons is quite stable.

Annual rainfall

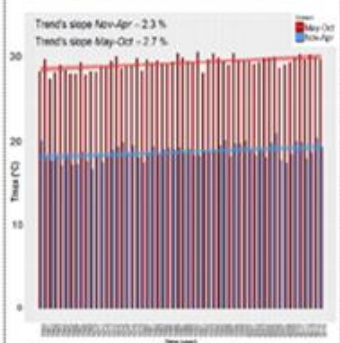


Data source: CHIRPS/Climate Hazards Group-USGS. 1981-2016



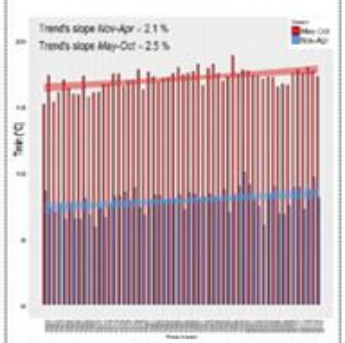
Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA. 2000-2016

Seasonal[1] Max temperature



Data source: University of East Anglia Climatic Research Unit (CRU). 1960-2015

Seasonal[1] Min temperature



Data source: University of East Anglia Climatic Research Unit (CRU) 1960-2015

Possible Impacts

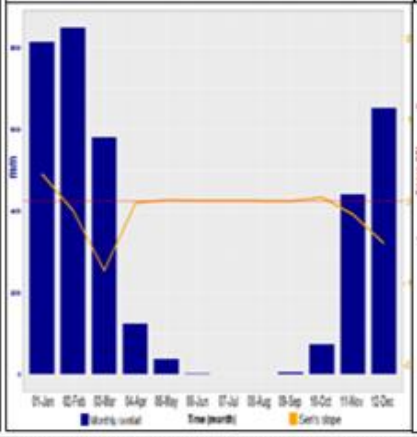
If we look at the cycle shape from the annual rainfall we could foresee a decrease in annual rainfall in the next years. The decrease in rainfall seems to take place especially during the early stage of the Summer and Winter crops (Feb-Mar and Nov-Dec) and this combined with the increase in temperature during those months and the summer season could have a negative impact on the agricultural sector already suffering from water scarcity. Even though the percentage of land cultivated is small in this area of West Bank, the livestock density is quite high, rangelands management and rehabilitation and water harvesting techniques should be promoted in order to face potential overgrazing.

[1]Season 1: May to October – Season 2: November to April.
[2]The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from –1 to +1.

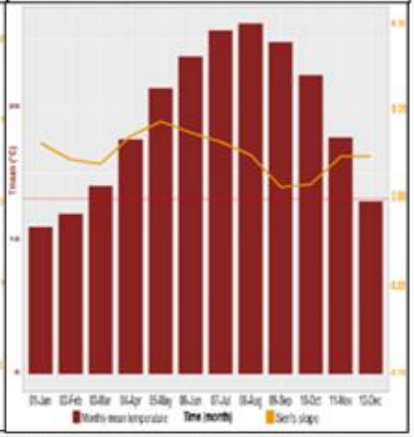
South Area

Area: 1656 km2
Population: 950,996
Pop. Density: 574.2 /km2
Total water pumped (2014): 13.6 M m3 domestic; agricultural: no data
Cultivated Land Area (2011): 171.6 km2
Percentage land cultivated: 10.3%
Livestock (2013): 337,833 (5,968 cows, 258,763 sheep, 73,102 goats) 204 head/km2 of total area
Source: Palestinian Central Bureau of Statistics 2016
Average Altitude MASL: 452 m
Slope: 9% (>10°)

Monthly Rainfall and Sen's slope 1981-2016



Monthly Rainfall and Sen's slope 1981-2016



Past climatic data

Rainfall

Differently from the other regions, the trend of annual rainfall shows some change in time from 1981, increasing from around 500 mm/y to more than 600mm /y. Thus, it can be noted a cycle every 6 to 8 years. Monthly rainfall seems to decrease over time in Feb, Mar and Nov and increase in Jan.

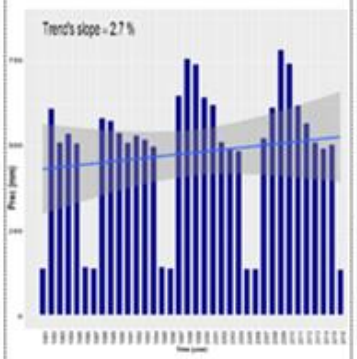
Temperature

The trends of max and min temperature are similar to other regions and seem to increase for both seasons and is significant for May-Oct season. Indeed, the monthly mean temperature is increasing over time for the majority of the months (except Sep and Oct) and especially from Apr to Jul.

NDVI[2]

The trend of the vegetation index for both seasons is quite stable, even though the May-Oct season seems to decrease.

Annual rainfall

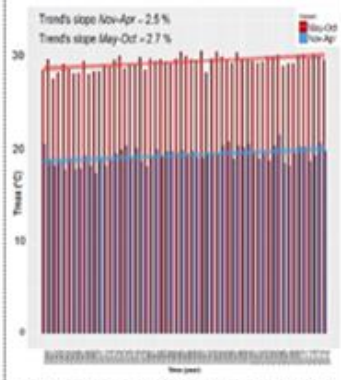


Data source: CHIRPS/Climate Hazards Group-USGS. 1981-2016

Seasonal[1] NDVI

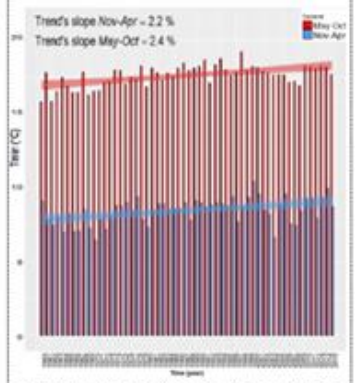
Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA. 2000-2016

Seasonal[1] Max temperature



Data source: University of East Anglia Climatic Research Unit (CRU). 1960-2015

Seasonal[1] Min temperature



Data source: University of East Anglia Climatic Research Unit (CRU) 1960-2015

Possible Impacts

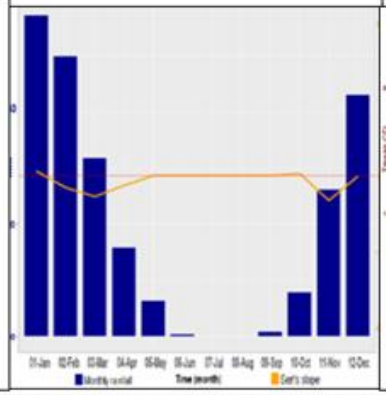
The increase of temperature in most parts of the year, together with increase in rainfall could bring positive impacts to production, however rainfall distribution is also important and rainfall is foreseen to concentrate more during the winter. This increased benefit not being available probably for summer crops if the water is not stored in reservoirs or tanks to face dry months or years (cycle). Besides, the high density of livestock in this area where the vegetation index is low could worsen possible current environmental issues (i.e. overgrazed rangelands) and could deteriorate even more the landscape if measures are not taken to manage and rehabilitate land (natural pasture, forage production).

[1]Season 1: May to October – Season 2: November to April. [2]The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from –1 to +1.

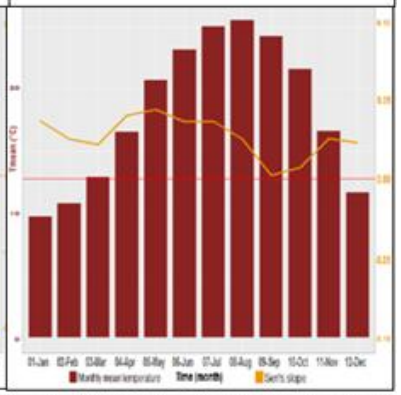
Jordan Valley

Area: 995 km2
Population: 120,416
Pop. Density: 121 /km2
Total water pumped (2014): 14.6 M m3 (domestic: 1.8; agricultural: 12.8)
Cultivated Land Area (2011): 72.7 km2
Percentage land cultivated: 7.3%
Livestock (2013): 149,309 (3,917 cows, 104,371 sheep, 41,021 goats) 150 head/km2 of total area
Source: Palestinian Central Bureau of Statistics 2016
Average Altitude MASL: -85m
Slope: 14.8% (>10°)

Monthly Rainfall and Sen's slope 1981-2016



Monthly Rainfall and Sen's slope 1981-2016



Past climatic data

Rainfall

Annual rainfalls have significantly declined since 1981, from 400mm/y in 1981 to less than 200mm/y in the past years. The trend of annual rainfall is now around 180 mm/y. however, monthly rainfall seems to have vary less abruptly, with decreases over time in Feb, Mar and Nov and increase in Jan.

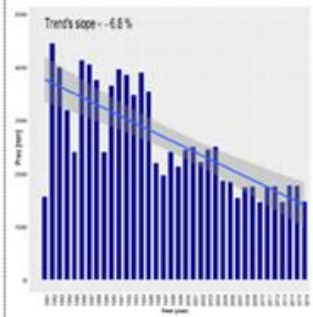
Temperature

As in the other regions, the trends of max and min temperature seem to increase for both seasons and is significant for May-Oct season. Monthly mean temperature is increasing over time for the majority of the months (except Sep and Oct) and especially from Apr to Jul.

NDVI[2]

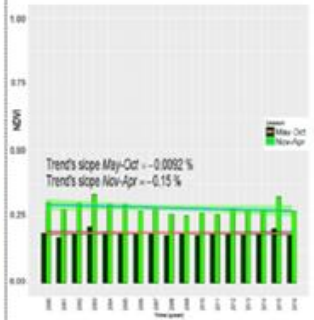
The trend of the vegetation index for both seasons is quite stable, even though the May-Oct season seems to decrease.

Annual rainfall



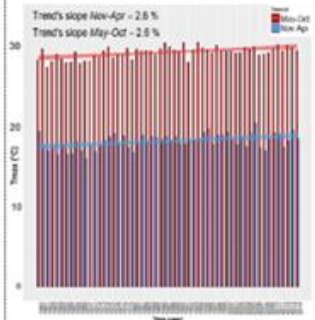
Data source: CHIRPS/Climate Hazards Group-USGS. 1981-2016

Seasonal[1] NDVI



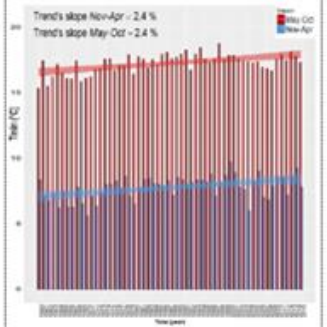
Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA. 2000-2016

Seasonal[1] Max temperature



Data source: University of East Anglia Climatic Research Unit (CRU). 1960-2015

Seasonal[1] Min temperature



Data source: University of East Anglia Climatic Research Unit (CRU) 1960-2015

Possible Impacts

The annual rainfall decrease in the region together with an increase in temperature during the majority of the months could have a negative impact for the agricultural sector. Thus, the rainfall and temperature trends seem to follow these patterns, foreseeing a decrease in annual rainfall in the next years and especially during the early stage of summer (Feb-Mar-Apr) and winter (Nov) crops. Besides, the high density of livestock in this area where the vegetation index is low could worsen possible current environmental issues (i.e. overgrazed rangelands) and could deteriorate even more the landscape if measures are not taken to manage and rehabilitate land (natural pasture, forage production).

[1]Season 1: May to October – Season 2: November to April.
[2]The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from –1 to +1.

Appendix 14: Contents of the Project Life File

577. The project life file (PLF) for RELAP lists all documents used as background information for the design of the project, as well as different documents prepared by IFAD as design is progressing. The list of persons met during design is attached in annex 1 of this appendix.

A. Palestine background documents, policy and assessments

- National agricultural sector strategy (NASS) 2017-2022, resilience and sustainable development, MoA, November 2016
- National agricultural sector strategy (NASS) 2014-2016, resilience and sustainable development, MoA, 2014
- National policy agenda (NAP), 2017-2022, putting citizens first, State of Palestine, December 2016
- Climate change adaptation strategy (CCAS) and programme of action for the Palestinian Authority, Environment Quality Authority and UNDP, December, 2010
- Initial National Communication Report to UNFCCC, EQA, 2016.
- National adaptation plan (NAP) to climate change, Environment Quality Authority, 2016
- Nationally Determined Contributions, EQA, 2017.
- Analysis of climatic variability and its environmental impacts across the occupied Palestinian territory, The Applied Research Institute – Jerusalem (ARIJ), September 2012
- Palestinian agricultural production and marketing, between reality and challenges, The Applied Research Institute – Jerusalem (ARIJ), March 2015
- Draft public procurement bill, State of Palestine, Council of Ministers, 2014
- Public procurement regulation, State of Palestine, Palestine Cabinet, 2016

B. Donors, including UN, background documents and assessments

- UN Country team, Common country analysis, 2016
- West Bank and Gaza, Public expenditure & financial Accountability, World Bank, June 2013
- West Bank and Gaza, Doing business report, World Bank, 2017
- West Bank and Gaza, Investment climate assessment, fragmentation and uncertainty, World Bank, 2014
- West Bank and Gaza, Public expenditure review of the Palestinian Authority, towards enhanced public finance management and improved fiscal sustainability, 2016
- Livelihood baseline profile, West Bank and the Gaza Strip, FAO, 2013
- Palestinian Food Security Sector Q2-2017 update, FAO and WFP
- Area C and the future of the Palestinian economy, World Bank, 2014
- Gender profile, Palestinian Territories final report, JICA, January 2016
- The status of youth in Palestine, Sharek, 2009

C. IFAD documents prepared during design

- Pre-inception CPMT meeting, minutes, 9 March 2017
- Aide-mémoire, inception mission, 23 March 2017
- Pre-OSC CPMT meeting, minutes, 26 April 2017
- RELAP concept note, 11 May 2017
- OSC minutes for RELAP, 6 June 2017

- Pre-detailed design CPMT meeting, minutes, 5 September 2017
- Detailed design CPMT meeting, minutes, 3 October 2017
- Project Design Report, Detailed design, October 2017
- RELAP concept note for the Green Climate Fund (submitted on 26/10/2017)
- Aide-mémoire, final design mission, 12 December 2017

D. In country CPMT participants

- Abdullah Lahlouh, Deputy Minister, Ministry of Agriculture (MoA), Ramallah
- Ammar Salahat, Acting Director General of Agricultural Land Directorate, MoA, Ramallah
- Ibtisam Abuhaija, Director, Climate Change Department, MoA, Ramallah
- Samar Daghash, Director of Procurement Department, MoA, Ramallah
- Imad Najjar, Director Admin Section - Internal Audit Unit, MoA, Ramallah
- Laila Sbaih, General Director, International Relations, Ministry of Finance and Planning (MoFP)
- Dr. Nedal Katbeh-Bader, Minister's Advisor for Climate Change and National Focal Point for UNFCCC and IPCC, Environment Quality Authority (EQA)
- Dr. Azzam Saleh Ayasa, Head of Programme, FAO Jerusalem
- Julia Swaling, Programme Officer, FAO Jerusalem
- Nathanael Dominici, Programme Officer, FAO Jerusalem

Annex 1, Appendix 14. List of main people met during design

First name	Surname	Phone	Email	Organisation & Position	Comments
Abdullah	Lahlouh		abdullah_slh@yahoo.com	MoA, Deputy Minister of Agriculture	Mission objective and confirmation of MOA support to application to GCG
Tareq	Abulaban	+970 598 931 066	taareq@hotmail.com	MoA, Director General of Agricultural Marketing	Define involvement of DG in RELAP
Wajdi	Odeh	+970 591 055 829	wajdiodeh00@yahoo.com	MoA, Director of Land Reclamation	/
Raal	Al-Aghbar	+970 598 931 075	Ralaghbar@gmail.com	MoA, Director of Fertilisers	/
Ciro	Fiorillo		ciro.fiorillo@fao.org	FAO Jerusalem, Head of FAO Office in the West Bank and Gaza	Define collaboration FAO-RELAP for GCF application
Azzam Ahed Husein Saleh	Ayasa		azzam.saleh@fao.org	FAO Jerusalem, Head of Programme	
Julia Hedtjärn	Swaling	00972 (0)54 802 6907	Julia.Swaling@fao.org	FAO Jerusalem, Professional Officer – Water Resources	
Nina	Koeksalan	0039 06 570 55538	Nina.Koeksalan@fao.org	FAO Rome, Climate Change Officer	
Yasuto	Takeuchi	00972-3-6958291	Takeuchi.Yasuto@jica.go.jp	JICA Tel Aviv, Assistant Representative	No possible co-financing, JICA only involved in TA
Faqih	Nasser	00972-2-6268200	nasser.faqih@undp.org	Poverty Reduction Team Leader.	Discussion on UNDP possible cofinancing/tbc
Handosh	Naila	00970 (0)2 241 5130/(0)2 297 5984	handoshn@taawon.org	TAAWON, International Fundraising Unit Director	No possible co-financing, perhaps in-kind, if wanted/tbc
Zackaria	Sabella	00972 (0)548120416	z-sabella@dfid.gov.uk	DFID Senior Policy and PDMP Programme Manager	Information on matching grant mechanism and PIM
Nedal	Katbeh-Bader	00970 (0)2 2403495	n72065@hotmail.com	Minister's Advisor for CC; and UNFCCC & IPCC Focal Point	Define collaboration with FAO-IFAD-MOA-EQA under GCF application
Laila	Sbaih		mofirdg@palnet.com	GD, International Relations / MOFP	Discussion on designated accounts and flows of funds
Younes	Yameen	+970 592 998 871	younes_yameen@dai.com	PMDP Market development Advisor	Sharing of matching grant procedure manual
Mohammad	Nuseibeh	+970 599 521 595	mohammad_nuseibeh@dai.com	Palestinian Market Development Programme, Deputy Team Leader	

Majd	Al-Suwafeh		majd-994@hotmail.com	MOA, GIS Department	Info. on agricultural road standards, design capacity and possible improvement.
raed	Abu-Alrob		eng.raed21@hotmail.com	MOA, Water and Irrigation Department	Info. on current irrigation and water management practices and possible intervention
Nazir	Azar	+970 595 910 023	nezar@escd-pal.org	Economic and Social Development Center, Agricultural engineer	/
Hassan	Aborab	+970 592 070 116	hasaa@maan-ctr.org	Ma'an Development Center, Agricultural engineer (MAAN)	NGOs implementing partner of PNRMP – Possible implementing partners for RELAP (competitive selection)
Murad	Alhousani	+970 597 916 991	murad@lrcj.org	Land Research Committee (LRC)	
Muqbel	Abu Jeish	+970 598 904 466	muqbel@pal-arc.org	Agricultural Development Association (PARC)	
Mahmoud	Hussein	+970 599 990 933	mah.bsoul@hotmail.com	Peasants Union (PU), General Secretary	
Wadji	Bsharat	+970 598 931 087	wajb_65@yahoo.com	Palestinian Agricultural Credit Institution (PACI), Director	Newly created GoP institution (to start operation in 2018)
Maha	Heneiti	+970 599 234 727	maha.heneiti@reef.ps	Reef Finance (REEF), Finance Manager	MFI implementing partner of PNRMP
Motaz	Rezeqallah		motaz.rezeqallah@reef.ps	REFF, Central area Manager	
Ashraf	Anaptawey			MoA, Deputy Director Finance & Admin Directorate	Discussion on MoA accounting system and audit system
Saed	Khalifi			MoA, Director of Project Accounting Department	
Khalil	Allami			MoA, Finance Manager	
Mohamad	Rabea			MoFP, General Director of General Supplies Department	Info. on MoA procurement system and mechanism
Samar	Daghash	+970 598 931 060		MoA, Director of Procurement Department	
Shereen	Samhan			MoA, Procurement Officer	
Ismat Munir Abu	Rabea	+970 599 521 331		State Audit & Admin Control Bureau, Director Economic Sector	
Nura	Muslamani			UWAC, Procurement Officer	NGO implementing partner of PNRMP - Possible implementing partner RELAP (competitive selection)
Yazan	Tarteer	+970 598 944 221		UWAC, Accountant	

Lina	Tutunji	+972 599 671 518	ltutunji@worldbank.org	World Bank (WB), Senior Procurement Specialist	Discussion on procurement system in Palestine
Imad	Najjar			MoA, Director Admin Section - Internal Audit Unit	/
Riham	Hussein	+972 595 988 859		WB, Financial Management Expert	/
Jad	Isaac		jad@arij.org	Applied Research Institute-Jerusalem (ARIJ)	Possible NGO implementing partner for RELAP