

Republic of Mozambique

Rural Enterprise Financing Project (REFP)

Detailed design report

Main report and appendices

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Contents

Cur	rency	equivalents	iii
Wei	ghts	and measures	iii
Abb	revia	tions and acronyms	iv
Map	of th	ne project area	vi
Exe	cutive	e Summary	vii
Log	ical F	ramework	xiii
١.	Stra	tegic context and rationale	1
	A.	Country and rural development context	1
	B.	Rationale	4
II.	Proj	ect description	6
	A.	Project area and target group	6
	B.	Development objective and impact indicators	10
	C.	Outcomes/Components	10
	D.	Lessons learned and adherence to IFAD policies and the SECAP	18
III.	Proj	ect implementation	22
	A.	Approach	22
	B.	Organizational framework	22
	C.	Planning, M&E, learning and knowledge management	23
	D.	Financial management, procurement and governance	24
	E.	Supervision	26
	F.	Risk identification and mitigation	26
IV.	Proj	ect costs, financing, benefits and sustainability	28
	A.	Project costs	28
	B.	Project financing	29
	C.	Summary benefits and economic analysis	29
	D.	Sustainability	28

Appendices

Appendix 1:	Country and rural context background	31
Appendix 2:	Poverty, targeting and gender	45
Appendix 3:	Country performance and lessons learned	65
Appendix 4:	Detailed project description	69
Appendix 5:	Institutional aspects and implementation arrangements	107
Appendix 6:	Planning, M&E and learning and knowledge management	113
Appendix 7:	Financial management and disbursement arrangements	119
Appendix 8:	Procurement	133
Appendix 9:	Project cost and financing	139
Appendix 10:	Economic and Financial Analysis	157
Appendix 11:	Draft project implementation manual	195
Appendix 12:	Compliance with IFAD policies	197
Appendix 14:	Contents of the Project Life File	211
Appendix 15:	Financial Management Assessment Questionnaire (FMAQ)	212

List of Tables

Table 1: REFP Risks, Impacts and Mitigation Measures	26
Table 2: Project components by financiers	29
Table 6: An Illustration of Physical Implementation Progress Reporting Template	115
Table 7: An illustration IFAD's Results and Impact Management System (RIMS)	117
Table 8: Summary of FM Risks and mitigating actions	124
Table 9: FM Actions Summary	129
Table 10: Summary of Procurement Risks /Findings and Actions (Risk Mitigation Ma	ı trix) 134
Table 11: Thresholds for Procurement and Review Methods	136
Table 12: Inflation and Exchange rates for COSTAB	139
Table 13: REFP breakdown components and financiers	140
Table 15: Expenditure accounts by financier	141
Table 17: Expenditure accounts by components – Totals including contingencies	143
Table 19: Project Components by Year - Base costs	145
Table 20: Project Components by Years - Investment/Recurrent Costs	146
Table 21: Detailed cost table - sub-component 1.1	147
Table 23: Detailed cost table - sub-component 1.3.	149
Table 25: Detailed cost table – component 2.2	151
Table 27: Detailed cost table - component 3 (continued)	153
Table 29: Detailed cost table - component 3 (continued 3)	155
Table 31: Income analysis	160
Table 32: Loan structure and IFAD contribution	161
Table 34: Sensitivity Analysis	162
Table 35: REFP Economic Analysis	164
Table 36: Full sensitivity analysis	165
Table 38: Tomato shade net, 0.1ha – Economic analysis	167
Table 39: Cassava small processing unit – Financial budget	168
Table 41: Cassava farm, 1ha – Financial budget (without project)	170
Table 43: Cassava farm, 1ha – Economic analysis	172
Table 45: Livestock – Financial budget (with project)	174
Table 47: Fishery model – Financial budget (without project)	176
Table 48: Fishery model - Financial budget (with project)	177
Table 50: Naval carpenter – Financial budget	179
Table 52: Aquaculture - Production model	181
Table 53: Aquaculture – Financial budget	182
Table 54: Aquaculture – Economic Analysis	183
Table 56: Small barbershop - Economic Analysis	185
Table 58: Maize crop model	187
Table 59: Crop pattern - maize and beans farm	187
Table 60: Maize and beans farm - Financial budget	188
Table 62: Soya beans crop model	190

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report

Table 63: Sesame crop model	191
Table 64: Sesame and soya crop pattern	191
Table 65: Sesame and soya beans farm - Financial budget	192

Currency equivalents

Currency Unit = Mozambique Metical (MZN)

USD1.0 = 60.0

Weights and measures

1 kilogram = 1000 g 1 000 kg = 2.204 lb. 1 kilometre (km) = 0.62 mile 1 metre = 1.09 yards

1 square metre = 10.76 square feet
1 acre = 0.405 hectare
1 hectare = 2.47 acres

Abbreviations and acronyms

ADB African Development Bank

AMOMIF Associação Mocambicana dos Operadores de Microfinanças (Mozambique Microfinance

Association)

ASCA Accumulating Savings and Credit Association

AWPB Annual Work Plan and Budget

BOM Banco de Moçambique

BNI Banco Nacional de Investimento CBO Community Based Organization

CHAPANI Coastal HIV/Aids Prevention and Nutrition Improvement Project

CSPE Country Strategy and Project Evaluation
COSOP Country Strategic Opportunities Paper

CTA Confederation of Business Associations of Mozambique DARSP Division of Agricultural Research, Statistics and Policy

DPEF Provincial Directorate of Economy and Finance

DPO Development Policy Operation

EU European Union

FAO Food and Agricultural Organisation of the United Nations

FARE Fundo de Apoio a Reabilitção da Economia

GAPI Sociedade de Gastao e Financiamento para a Promocao de Pequenas Projectos de

Investimentos sarl

GoM Government of Mozambique

HH Household

ICB International Competitive Bidding

ICO IFAD Country Office

IIAM Mozambique National Institute for Agricultural Research

INE National Statistics Institute

IOE Independent Office of Evaluation (IFAD)

IOF Innovation and Outreach Facility

KM Knowledge management

LOC Line of Credit

mCel Mobile phone operator

MG Matching grant

M.I.S. Management Information System
 MASA Ministry of Agriculture and Food Security
 MEF Ministry of Economy and Finance
 MSME Micro, small and medium enterprises

MTR Mid-Term Review

MZN Metical (domestic tender)
M&E Monitoring and Evaluation

PAFIR Programa de Apoio às Finanças Rurais

PARP Poverty Reduction Action Plan PCR Project Completion Report

PEDSA Plano Estratégico para o Desenvolvimento do Sector Agrário

PFI Participating Financial Institution
PIM Project Implementation Manual
PMU Project Management Unit

PNISA National Agricultural investment plan PQG Plano Quinquenal de Governo

PRODIRPA Securing Artisanal Fishers' Resource Rights Project

PROMER Rural Markets Promotion Programme ProParceria Community Investor Partnership Project PROPESCA Artisanal Fisheries Promotion Project

PROSUL Pro-Poor Value Chain Development Project in the Maputo and Limpopo Corridors

PQG Mozambique 5 Year Plan PSC Project Steering Committee Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report

RIMS Results and Impact Management System

RFP Request for Proposal

RPMU Regional Project Management Unit

RFSP Rural Financial Intermediation Support Project (engl. translation of PAFIR)

SECAP Social, Environmental and Climate Assessment Procedures

SME Small and Medium Enterprise

SO Strategic objective

SOCREMO Sociedade de Gastao e Financiamento para a Promocao de Pequenas Projectos

SoE Statement of Expenditure

SP Service Provider ToT Training of trainers

TUP Targeting the Ultra Poor (graduation programme)

USD United States Dollar

WHH Women headed household

Map of the project area

Mozambique

Rural Enterprise Finance Project (REFP)

Design report





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 | 31-07-2017

Executive Summary¹

Strategic Context – Mozambique combines superior potential in agriculture and fisheries with ready domestic and regional markets for its produce. There is an abundance of the key production factors of land and labour: some 799,380 square kilometres of land and 26.5 million population. On the other hand, access to technical support, and the availability of adapted finance for capital to expand and intensify rural micro, small and medium enterprises (MSMEs), for example, fisheries and agricultural production have over recent years become increasingly critical constraints that IFAD's target group has raised during a number of supervision support missions for PROMER, PROSUL, PROAQUA, PROMER, PROPESCA, PRODIRPA projects.

Some 70 per cent of the population of Mozambique resides in rural areas; the lack of effective technical support coupled with access to affordable finance has had the biggest negative socio-economic impact on the national populace. Unemployment is a pressing concern that underpins IFAD's intervention within the rural agricultural economy. According to the National Statistics Institute (2014/15) unemployment in Mozambique stood at 38.4 per cent nationwide and even higher for the female (39.8 per cent) and youth populations (41.4 per cent). In a country with a population growth of 2.8 per cent and consequently, a high share of young women and men constituting 52.8 per cent of the population, rural women and rural youths are in permanent danger of being left behind in the process of rural transformation and socio-economic development.

The policy environment in Mozambique is based on the five –year Plan of the Government of Mozambique (**Plano Quinquenal de Governo**, **PQG-2015-2019**). This **National Strategy 2015 – 2019** is the government's key document setting the strategic context for the developmental state. This strategic policy document focuses on creating a balanced and sustainable macro-economic environment that enables the primary sector to enhance productivity and improve the rural income base². The Third Priority in the National Strategy demands an increase in the production and productivity of all sectors dealing with agricultural production³. This should be achieved through facilitating the access to finance for agricultural producers, and in particular for smallholder farmers and family-owned farms⁴.

However, operational, capacity and liquidity constraints of the financial sector - triggered by a debt crisis in the banking sector - made the sector unable to meet the demand for financial services from smallholder farmers, agricultural entrepreneurs, and non-agricultural entrepreneurs in all sectors of Mozambique, and especially felt hard in rural areas. In addition to significant capital demand for large infrastructure projects, the crisis had adverse results on access to finance of a large section of the population. Thus, as a recovery strategy, the central bank had to apply unusual monetary policy measures to stabilize a strongly declining exchange rate with historically high interest rates. These recent developments have reduced debt financing of smaller and rural based economic units considerably. These detrimental effects are likely to prevail over the coming years and are not expected to ease until after the national elections in 2019.

The five—year Plan of the Government of Mozambique (Plano Quinquenal de Governo, PQG-2015-2019), which setup the macroeconomic enabling environment and policy stability is augmented by specific agricultural sector policies. Firstly, the **Plano Estratégico para o Desenvolvimento do Sector Agrário** (PEDSA), the Strategic Plan for Agriculture, focusing on a transformation of

⁴ Section 40 (b).

¹ Mission composition: The Mission was led by Robson Mutandi, Country Director, with the participation of the following team members:; Jonathan Agwe, IFAD Lead Advisor, Richard Batamanye, Financial Management, Alaudio Chingotuane, Economic and Financial Analysis; Rufino Duvane, M&E and Knowledge Management, Motsoasele Leballo, Enterprise and Business Development and lead writer, Ilario Rea, Climate Change& Safeguards, Tiffany Minjauw, Climate Change & Safeguards, Biswan Mohanty, Financial Regulation Policy and Supervision, Joylyn Ndoro, Targeting, Gender and Youth, Wolday Amha*, Financial Intermediaries Strengthening, Beatrice Sabana, ASCAs and Graduation Promotion, Custodio Mucavele. Alternate Mission Leader; Marian Odenigbo, Senior Technical Specialist, Nutrition, Francesco Rubino Land & NRM; Rauno Zander, Financing Instruments, and Emerson Zhou, Cost-sharing and matching grant mechanisms.

² Imprensa Nacional de Mocambique, sections 5 and 6.

³ Section 38 (i).

^{*}Dr. Wolday Amha tragically passed away in a vehicle accident on 06 September 2017.during the finalisation of this REFP design.

agriculture towards a modern, commercial and inclusive primary sector. The PEDSA 2010-2019 refers to secure access to sufficient quantities of nutritional food as a fundamental human right. The document gives emphasis to producing and diversifying food, especially basic foods, in order to improve citizens' nutritional status and reduce the level of chronic malnutrition. Secondly, the **National Agricultural Investment Plan** 2014-2018 (PNISA) as an investment instrument, aligned with PEDSA, embraces the idea of supporting smallholder farmers to cultivate a wide variety of nutritious foods and to research, introduce and widely disseminate bio-fortified varieties of staple foods.

The debt crisis precipitated an already deteriorating economy; Mozambique's Gross Domestic Product (GDP) dropped to 3.3% in 2016, down from 6.6% in 2015. The World Bank's growth forecast for 2017 has been revised downwards from 5.2% to 4.8% to factor in the effects of likely fuel shortages and the continued effects of restrictive monetary policy. Official figures highlight a substantial slowdown in growth for most sectors; tight monetary policy (as a response to the debt crisis) and high prices also contributed to growth deceleration.

However, there are signs that external pressures are easing. The Mozambican Metical appreciated by 10% against the U.S. dollar between October 2016 and February 2017 as reduced liquidity and an adjusting trade balance began to take effect. Inflation, driven by exchange rate variations, has started to decelerate. Central bank reserve levels increased in the three months to end-January 2017 with effects of policy measures introduced in the last quarter of 2016 materializing.

Development Challenges

Mozambique's rapid economic expansion over the past decades has had only a moderate impact on poverty reduction, and the geographical distribution of poverty remains largely unchanged. According to the 2016 Human Development Report of United Nations, 55 per cent of the population in Mozambique live below the poverty line; whilst severe poverty affects 44 per cent of the population. However, overall poverty has declined at a much slower pace since 2003, falling by only 4 percentage points to reach 52 per cent in 2009⁵. Between 1997 and 2009, population growth outpaced poverty reduction, increasing the number of Mozambicans living in extreme poverty by 400,000 to a total of 11.2 million. As a result Mozambique still ranks as one of the countries with the highest poverty levels (69 at the USD1.9 PPP)⁶. In some rural provinces, poverty levels can be as high as 70 per cent.

The government of Mozambigue should be commended as they are currently implementing domestic policies and strategies that are designed to address these challenges in a sustained and planned manner. Actions required to combat poverty are reflected in the Poverty Reduction Action Plan (PARP 2011-14). The PARP concentrates on increasing agricultural production, promoting the development of MSMEs and an investment in human and social development. Poverty is still predominantly a rural phenomenon in Mozambique, where 67 per cent (2016)⁷ of poor households are located. As a result, the country continues to face challenges in food and nutrition insecurity and 80 per cent of the population cannot afford the minimum cost for an adequate diet. Half a million children aged 6-23 months are undernourished and 34 per cent of the population is chronically food insecure. The country is still a net importer of cereal and livestock products. Mozambique's stunting prevalence for children under the age of five is high at 43 per cent, with higher prevalence in rural areas. These problems are further aggravated by HIV (10.5 per cent of the population are affected. the country is ranked 8th globally), and chronic exposure to weather-related hazards. Two out of three people live in the coastal areas and are vulnerable to disasters such as storms, cyclones, and flash floods. The El-Niño induced drought in 2014/16 left an estimated 2 million people in the Central and Northern parts of the country acutely food insecure.

Rationale – Mozambique has a substantial potential for growth in the agriculture and fishery sectors. A number of sub-sectors and value chains are presently not delivering the uniform reliable qualities and quantities that the market requires. Production systems are in need of upgrading, commercializing and of further integrating the single value chain layers into a robust and predictable set of agricultural and fisheries supply chains.

The Rural Enterprise Financing Project (REFP), a national project, is also fully aligned to the GoM's national policies and strategies on rural development and poverty eradication and especially as

⁵ World Bank (2016) Accelerating Poverty Reduction in Mozambique: Challenges and Opportunities

⁶ World Bank (2016) Accelerating Poverty Reduction in Mozambique: Challenges and Opportunities

World Bank data (2016) http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?view=map

outlined in the Government's Agenda 2025. This Project is a direct response to the following issues identified in the Agenda 2022 policy document: a) low access to adapted (appropriate, affordable, and innovative) financial capital for smallholder farmers; and b) lack of improved technologies that has hindered rapid development of the agricultural sector. This initiative will contribute to GoM's desire to ensure that rural households generate 80% of their income directly from agricultural activities, and only the remaining 20% from economic activities related to other sectors

The current IFAD portfolio in Mozambique has prioritized agricultural and fishery sector development through different area-based projects. These projects have produced significant numbers of beneficiaries which are better trained and equipped. However, access to adapted finance remains the major constraint for enlarging their agriculture, aquaculture and non-agricultural businesses. Against this background, and in part as a consequence of the concerns highlighted by the October 2016 GoM National Conference on Microfinance and Rural Finance; focus has been placed on: a) GoM and other development partners should establish lines of credit for the financing and refinancing of the entire agricultural value chain; b) financial literacy is key for the inclusion of rural populations into the formal financial sector; c) the dissemination of mobile banking and other innovative technologies should be expanded and intensified in rural areas; d) in the context of vulnerability to climate change, agricultural insurance should be key to shared risk of smallholder farmers to cope with adverse weather events.

To this end, the Directorate of Treasury of the Ministry of Economy and Finance has been requesting a focused project with rural finance in the centre of activities and not just as a complementary focus. The Government wants to respond to the current crisis scenario in rural finance by promoting a stimulus with alternative financing mechanisms that can result in higher client volumes and thus help to kick-start the rural financial sector out of its current sub-optimal state. IFAD is responding to this request with the development of the REFP. Project development proceeded in close collaboration and mutual sharing of experiences between the Fund and the Directorate of Treasury.

Given the relevance of innovative financing mechanisms for the rural sector in general and in particular for the fledgling micro and small enterprise sector, the focus of this project is proposed to be national; thus ensuring that the current scattered and isolated activities in the different IFAD supported projects would be coordinated, harmonized and fine-tuned so as to emphasise and leverage complementarities and promote economies of scale at implementation level.

Project Area – Although a national project, it is proposed to start the REFP in provinces/districts where other IFAD projects have generated a potential pool of applicants for financial services that would usefully be managed first by a new national rural financing project. From there, REFP would then sequentially move towards other areas on a demand basis and at the end, cover all 10 provinces in the country.

Beneficiaries and Target Group –The number of direct beneficiaries is estimated at 287,700 individuals engaged in agriculture, fisheries and non – agriculture MSMEs.

The Project direct beneficiaries would be inclusive of poor men and women involved in agriculture, fisheries and non-agricultural MSMEs as a source of livelihood and income. The project will also target youth (young boys and girls). REFP will implement an inclusive targeting strategy to ensure that benefits are distributed to a large number of smallholder poor farmers, and poorer and vulnerable members of the communities. Women will account for at least 50 per cent of the target REFP beneficiaries and youth not less than 20% (of which 50% will be young girls). The focus on the poor and disadvantaged will ensure that coverage of REFP services will reach out remote, underserved communities and financially excluded population.

Targeting strategy: A strategy for gender mainstreaming and the social and economic inclusion of youth and other vulnerable and marginalised groups has been designed to achieve the following objectives.

- Ensure that men, women, youth and vulnerable/marginalised groups participate and benefit equitably under the Project.
- Reduce the gender gap and discrepancies across different social groups by improving economic development, human status, as well as social and economic empowerment.

 Build awareness about gender mainstreaming, and social and economic inclusion among all Project stakeholders: men, women, community members, Service Providers (SPs) and Provinces.

The strategy will be operationalized along three pillars of activity to: (i) provide direct-targeted interventions (i.e. financing instruments viable for all target groups with focus on more vulnerable and financially excluded) and investments to women, youth and the most vulnerable to boost their economic development status and social capital; (ii) ensure full representation of men, women, youth and all social groups in community-level institutions and decision-making processes; and (iii) provide targeted information, education, capacity building to all stakeholders regarding gender awareness as well as on HIV, nutrition and related social aspect.

Both components will benefit men, women and youth and financing instruments as well as dedicated activities will be tailored to the different groups and vulnerability level. Under component 1 it is expected that direct beneficiaries, among men, women and youth, will benefit from the Crowding in Fund (20,000), while other beneficiaries (20.000) will be assisted under the Graduation Promotion and Outreach Programme resulting in (i) Increased incomes and assets through establishment of profitable enterprises facilitated by access to financial services (ii) Increased savings by beneficiaries (iii) Improved food security (iv) Improved health and nutrition. The latter being particularly relevant for women and young women in reproductive age. Another 169,400 direct beneficiaries (men and women) are expected to access the Line of Credit.

Women constitute a large percentage of ASCAs's member and they will receive, through subcomponent 2.1, better financial services and stronger local institutions. An average of 100,000 beneficiaries, of which 50,000 women will be capacitated through financial literacy trainings. Given the presence of young men and women as part of ASCAs, this activity will also benefit youth. In addition, 7,000 ASCA members will benefit from the training on climate resilient technology and nutrition related activities. It is expected that under subcomponent 2.2 about 63, 370 agri-enterprises, fishing enterprises and non agricultural enterprises will benefit from Business Development Services (BDS) Support and non-financial services provided to Target Beneficiaries, in partnership with PROMER, PROSUL, PROPESCA and BAGC; The project will also include activities exclusively directed to men and women: 5,000 women and youth will participate as incubate start up agri-entreprenuers and non agri-entreprenuers.

Project Goal and Development Objective – The Project Goal is to contribute to rural household livelihood improvement. The specific Project Development Objective is to increase the availability of, access to, and use of adapted (appropriate, affordable, and innovative) inclusive sustainable financial services, and technical support services in rural areas.

The project development objective will be achieved through interventions of REFP in the form of the following two main components: a) improved access to and usage of adapted financial products and services for rural (smallholder farmers and non-farmer) entrepreneurs for investment, and b) capacity building and support to rural smallholder farmers, non-farmer entrepreneurs and institutions that support them. As a result, REFP is expected to impact on the household income and asset levels of at least 287,700 direct beneficiaries and influence the Government of Mozambique planning and funding programmes on agricultural, non-agricultural, agri-preneurial and non agri-preneurial investments related to successful models particularly and increased level of uptake of inclusive and sustainable financial services programmes in rural areas for the resource poor.

Project Components – The Project's development objective will be achieved through the effective implementation of two operational components.

Component 1: Improved access to adapted financial services for rural entrepreneurs

This component offers a menu of alternative financing instruments that are adapted to the different financial capacities and requirements of the targeted smallholder farmers and fishers and rural agricultural enterprises, non-agricultural enterprises, agri-preneurs and non agri-preneurs.

Subcomponent 1.1. A Graduation Promotion and Outreach Programme will accelerate the processes of (i) bringing in very poor people (i.e. the last mile or the bottom end of the income pyramid) to a level where they are creditworthy and can be integrated into mainstream rural financial

services, and (ii) innovating digital delivery channels (DFS) for agricultural and rural finance products and services, providing a platform to link the poor to a wide range of FSPs and other stakeholders to strengthen their innovation initiatives. Both elements of this sub-component will be implemented with assistance from a dedicated technical assistance arrangement and where feasible, recruited from qualified local service providers

Subcomponent 1.2. A Crowding-in Fund (CIF) will offer a tripartite cost-sharing with matching grant mechanism to enable loan applicants with bankable propositions that are not able to attract full private sector financing to get access to part loan financing under the project.

Subcomponent 1.3: Establishment of adapted innovative refinancing instruments to finance rural enterprises – This subcomponent will be linked closely with subcomponent 1.1 and will involve the establishment of a Line of Credit (LOC). The LOC will function as a classic financing and refinancing arrangement between the financial institutions and the rural agricultural and non-agricultural entrepreneurs who qualify to address their liquidity challenges. Qualifying rural agricultural and non-agricultural entrepreneurs will access the LOC funds under market-based pricing conditions, after fulfilling criteria set with the Financial Intermediaries, in particular the Fund Manager (BNI).

Component 2: Capacity building and support for institutions and rural entrepreneurs – This component will provide training to rural agricultural and non-agricultural entrepreneurs and support to institutions working with rural agricultural and non-agricultural entrepreneurs. Activities will be complementary to component 1 activities and be organized in two operational sub-components.

Subcomponent 2.1: Support to essential local institutions - The complementary capacity development in REFP will focus on the following priority areas: (i) skills and knowledge development for staff of financial institutions to provide improved and adapted financial services to the IFAD target groups; (ii) assisting the financial institutions in designing policies and developing financial tools or products to meet the needs of the rural agricultural and non-agricultural enterprises and MSMEs; (iii) exposing and linking the financial institutions to good practices including, particularly but not limited to, smallholder agricultural finance and finance for fisheries; (iv) enhancing the mobility of the staff of financial institutions to serve the rural agricultural and non-agricultural financially excluded population through opening branches or using other innovative approaches (such as mobile money, agency banking and other digital financial services - DFSs) and expand their outreach in remote districts; (v) conducting a mapping study of ASCAs and providing a linkage route for 7,000 most mature ASCAs to formal financial institutions; (vi) supporting the establishment of a profit-based Union for ASCAs; (vii) establishment of a database for MFIs and promote their social performance management through the Mozambique Association of MFIs (viii) provide institutional and technical support to transform the FARE fund into a sustainable institution; (ix) assist the microfinance regulatory department of Bank of Mozambique to establish sustainable MFIs and promote financial literacy and consumer protection; and (x) establishing and strengthening the "Development Finance Coordination" secretariat under the Ministry of Economy and Finance the Ministry of Economy and Finance is one of the key players in implementing Mozambique's National Financial Inclusion Strategy. The project will seek to strengthen the capacity of the ministry to develop and monitor the implementation of rural finance policies.

Subcomponent 2.2: Business development support – will be delivered with a main menu of BDS options and a special BDS initiative for disadvantaged rural women and rural youths. Smallholder farmers, fisheries and rural micro and small enterprises will receive their support based on a Needs Assessment for BDS among the REFP specific target groups. Based on this, the BDS process will likely provide training, facilitation of access to inputs, facilitation of access to financial services offered through component 1 of REFP, marketing support and advice in value addition activities and services. Suitably qualified and experienced BDS service providers will assist with implementation of this subcomponent. This arrangement should be monitored for sustainability and revisited at MTR to determine if extra measures are required to ensure sustainability and ability of clients to meet the cost of this service when external project funding comes to a close.

Direct action for priority **women and youths** target groups: REFP will directly target 5,000 youths aged 18-35, and 5,000 women from all the provinces for income generation trainings. Similar to the Graduation Promotion and Outreach Programme activities in component 1, this will provide accelerated support to segments of the population that are particularly disadvantaged and in need of special support. Through partnering with current IFAD assisted projects, and government initiatives, the target group for BDS training could easily be doubled. REFP will implement Incubator start-up

agri/aquapreneurial and entrepreneurial national youth and women programmes to create agribusiness, agripreneurial and non-agricultural opportunities for 5,000 beneficiaries' constituting of youth (2,500) and women (2,500) in rural areas.

.Component 3: Project Management

This component will provide for and strengthen the capacity at central, provincial and district level, covering the costs of a central and three regional PMUs.

Approach – REFP will build on the experience of PAFIR/RFSP, a national rural finance programme supported by IFAD and the African Development Bank that was closed in 2014. It also builds on emerging lessons learned from other IFAD supported projects that are implementing rural finance components in their projects areas. REFP will further provide a hub for all aspects of development finance also to these current IFAD projects and has the potential to consolidate and streamline current rural finance activities that sometimes overlap and duplicate approaches.

Organisational Framework – REFP will be integrated into the Ministry of Economy and Finance and operate with a semi-autonomous PMU housed within BNI, the **Banco Nacional de Investimento**. Three regional offices will support the functions of the central proposed to be in Maputo. At province level, REFP will receive the support of local and provincial government staff and of field staff associated with BNI and FARE (if available) as well as locally based service providers.

Project Costs and Financing – Total project costs including price and physical contingencies, duties and taxes are estimated at USD 72.5 million. Of this amount, USD 55.9 million is foreign exchange content, and around USD 13.1 million corresponds to duties and taxes. The project will be implemented over a period of six years. The costs are distributed as follows between the three components: (i) Component 1: Improved access to adaptive financial services for rural entrepreneurs, totalling USD 51.4 million; (ii) Component 2: Capacity building and support for institutions and rural entrepreneurs, USD 10.6 million; and (iii) Institutional Support and Programme Management, USD 10.5 million.

Benefits and Beneficiaries – REFP is expected to benefit 287,700 direct beneficiaries; both for the financial support and for the capacity development core components of BNI, special accelerated initiatives for priority target groups will be initiated: A Graduation Promotion and Outreach Programme window for very poor rural people will be established so as to bring them up to a level where they become creditworthy with bankable propositions and reached through digital financials services from participating financial service providers – FSPs, (e.g., rural micro finance institutions - MFIs, mobile network operators – MNOs, financial NGOs - FNGOs, commercial banks, etc.). For component 2, an incubator programme for rural women and unemployed youth will ensure that the most productive will receive technical training and skills development support in order to furnish them with the skills to sustain themselves from the income generating activities.

Logical Framework

Results Hierarchy	Indicator Name ⁸	Baseline	Mid-term	End Target	Source	Frequency	Responsibility	Assumptions
Goal: To contribute to rural household livelihood improvement	Proportion (%) of rural households with improvement in asset ownership index (RIMS/ORMS 3 rd level)	TBD	20%	60% by YR6	National statistics, impact surveys, baseline and PCR	Baseline and PCR	National implementing institutions and PMU	The economy will continue to grow and the political enabling environment will remain stable
Development Objective: to increase the availability of, access to, and use of adapted (appropriate, affordable, and innovative) inclusive sustainable financial services, and technical support services in rural areas	Number of direct beneficiaries accessing adapted financial services	TBD	120,000	287,700 direct beneficiaries of which 57,540 are youth (28,770 male and 28,770 female) and 230,160 are both male (115,080) and women (115,080)by Yr 6	Project progress reports, impact surveys, baseline and PCR	Baseline, Project progress reports and PCR	National implementing institutions and PMU	Economic and weather conditions prevail favourable Macro-economic indicators will remain favourable
Component 1:Improved acce	ss to adapted financial services fo	or rural entreprer	eurs					
Outcome 1: Increased accessibility to diverse inclusive financial products and services has improved the livelihoods and resilience of rural smallholder farmers, agroentrepreneurs, non-agricultural entrepreneurs and enterprises.	services	TBD	50%	100%	Project progress reports	Semi-annual, Annually	PMU, fund manager	Rural entrepreneurs willing and participate actively in implementation of financial services
Output 1.1. Graduation Promotion and Out-reach Programme established and operationa	Number of persons in rural areas who have completed the graduation programme and are actively involved in income generating activities (RIMS/ORMS)	0	4,000direct beneficiaries	20,000 direct beneficiaries of which 4,000 youth (2,000 male and 2,000 women), and 16,000 are both male (8,000) and female (8,000)	Financial Institutions reports, Supervision Mission reports	Semi-annual, Annually	PMU, IP	Ultra-poor people able and willing to participate in the programme

⁸ Indicators refer to Project area.

Indicator Name8 **Results Hierarchy** Baseline Mid-term **End Target** Frequency Responsibility Assumptions Source Output 1.2 Crowding-in Fund Number of rural Entrepreneurs 4,000 direct 20,000 direct Financial Institutions Semi-annual PMU, IP established and operational supported by the Crowding-in beneficiaries/ beneficiaries/entreprene reports, Supervision Annually Rural entrepreneurs willing Fund disaggregated by gender entrepreneurs urs of which 4,000are Mission reports and attracted by the available Crowding-in fund with at least 50% women and 20 youth (2,000 male and % youth (RIMS/ORMS) 2,000 female) and 16.000 are both male (8,000) and women (8,000)PMU, IP Output 1.3 Line of credit Number of rural Entrepreneurs 30,000 direct 169, 400 direct Financial Institutions Semi-annual Rural entrepreneurs willing established accessing targeted LOC beneficiaries beneficiaries of which, reports Supervision Annually and attracted by the (RIMS/ORMS) available LoC 33,880 are youth (16,940 Mission reports male and 16, 940 female), and 135,520 are both male (67,760) and female (67,760). Component 2: Capacity building and support for institutions and rural entrepreneurs Sub -component 2.1: Support to essential local institutions 25% 75% PMU. IP MFIs are interested in Outcome 2: Institutional (Number) percentage of partner Financial Institutions Annually financial service providers with capacity enhanced of FIs reports extending services in rural financial self-sufficiency above delivering sustainable and appropriate financial support 100% (RIMS/ORMS) for rural smallholder farmers. agro-entrepreneurs and nonagricultural entrepreneurs. Output 2.1.1 Capacity Number of persons in rural areas 7.469 million 20.000 direct 100,000 direct Financial Institutions Annually PMU. IP MFIs are interested in building on financial literacy trained on financial literacy (77%) of the beneficiaries in beneficiaries of which extending services in rural reports and business planning (RIMS/ORMS) rural adults financial literacy 20.000 are youth (10.000 training provided ii are financially male and 10,000 female) training excluded9 and 80.000 are both male (40,000) and female (40,000) Output 2.1.2 Financial Number of financial institutions TBD 15 40 Fls Financial Institutions Annually PMU, IP MFIs are interested in institutions strengthened supported (RIMS/ORMS) reports extending services in rural

⁹ FinScope study of Mozambique (2014)

Indicator Name8 **Results Hierarchy** Baseline Mid-term **End Target** Frequency Responsibility Assumptions Source Output 2.1.3 Sustainable Number of active/ functional 20,292¹⁰ 22,292 (an 27,292 ASCAs (an Project progress Annually PMU Rural entrepreneurs willing ASCAs with leadership ASCAs strengthened incremental of incremental of 7,000 reports and Annual and attracted by the disaggregated by gender 2,000 ASCAs) ASCAs) Survey report available services RIMS/ORMS Output 2.1.4 Community Number of ASCA group 2,000 ASCAs 7,000 ASCAs members Project progress Annually PMU Member of ASCAs and rural members supported to based institutions (ASCAs membersiii reports and Annual entrepreneurs willing and sustainably manage natural members) strengthened on Survey report attracted by the available resources and climate-related climate resilient technology information services and nutrition related activities Number of persons/households 2.000 ASCAs 7.000 ASCAs members Project progress PMU Member of ASCAs and rural Annually provided with targeted support to members reports and Annual entrepreneurs willing and improve their nutrition attracted by the available Survey report information services Subcomponent 2.2: Support to business development services and market linkages TBD 1 Status of BDS in DFIs. IPEME. PMU DFIs and Financial Output 2.2.1: Study on Reporting on number of Once-off **Business Development Business Development Services** Mozambique Survey Financials Institutions, Institutions willing to share Services (BDS) activities being other survey reports information and activities report undertaken by Development within BDS partners and GoM (RIMS/ORMS) Identification of Rural Output 2.2.2: Business Number of agri-enterprises, TBD 24,000 63,370 Project progress Bi-Annually PMU Development Services (BDS) reports and Annual agua-enterprises & nonentrepreneurs willing and Support/ non-financial Survey report attracted by the available agricultural enterprises services provided to Target accessing facilitated nonnon-financial services Beneficiaries, in partnership financial services with PROMER, PROSUL. (RIMS/ORMS) PROPESCA and BAGC Output 2.2.3: Identification of Number of target beneficiaries **TBD** 2,500 5,000 Project progress Bi-Annually PMU Target beneficiaries are target group members to with incubated start-up agri- and reports and Annual interested in becoming participate as incubate start-Survey report non-agri entrepreneurs. incubated agriup agri-entrepreneurs and entrepreneurial and nonnon agri-entrepreneurs agri-entrepreneurial trainees **Component 3: Project Management** Outcome 3: Capacity of Number of central and regional 1 central PMU 1 central PMU and 3 Project progress Annually PMU PMU strengthened at central, PMUs established and 3 regional regional reports, food survey provincial and district levels **PMUs** and Supervision Mission reports

¹⁰ Facts on FSDMoç Saving Groups Study shared with FARE as per July 2017.

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report

*Up to 15 indicators including a few optional RIMS indicators. In addition to these, RIMS mandatory indicators must be added. **The distribution of indicators is illustrative ***Intermediate targets for the Goal and Outputs are optional.

Strategic context and rationale

A. Country and rural development context

- 1. **Political and Economic Context.** Mozambique has over the last two decades experienced an average economic annual growth rate of above 7 per cent, sustained by macroeconomic liberalization, market-based reforms, massive public investment in infrastructure and large flows of foreign direct investment. Gross National Income (GNI) per capita of USD 590¹¹ in 2015 was up from USD 296 in 2005. The real Gross Domestic Product (GDP) per capita grew from USD 313 to about USD 529 from 2005 to 2015. The real GDP in 2015 was composed of 53.2 per cent services, 25.2 per cent agriculture and 21.5 per cent industry¹².
- Financial Sector Context Mozambique is currently faced with an economic crisis. This was triggered by a debt burden of USD 9.89 billion, representing over 90 per cent of the country's GDP in 2016¹³. It also results from a crisis in the banking sector with the liquidation of one smaller bank and emergency capitalization out of public resources of one of the medium-sized commercial banks. These two factors, coupled with significant capital demand for large infrastructure projects, had adverse results on the access to finance of a large section of the population. This was because liquid resources in the sector are in much shorter supply; this scarcity of funds, coupled with the fact that the central bank had to apply monetary policy measures to stabilize a strongly declining exchange rate, have resulted in historically high rates of interest. These are due to a high central bank reference rate by comparison, and to well-known efficiency challenges of prevailing commercial banks that result in high real spreads levied on debt transactions. It is important to note that in the specific country context of Mozambique, these detrimental effect are likely to prevail over the coming years and are not expected to ease until after the national elections in 2019. The central bank, the Banco de Moçambique (Bank of Mozambique or BOM) continues to try to manage the fiscal and monetary policy challenges; and to has succeeded in stabilizing the foreign exchange rate of the domestic currency, the Metical (MZN).
- 3. **In terms of financial inclusion**, Mozambique is ranked 23rd out of 55 developing countries under the Economist Intelligence Unit's 2015 Microscope index. Approximately 60 per cent of the population are financially excluded, while 16 per cent use informal financial service providers and only 20 per cent use the formal banking system¹⁴. The financial sector is underdeveloped and still bank-dominated, while access to adapted/affordable/inclusive financial services is lower in rural areas. Mozambique has however recently developed a new *Financial Inclusion Strategy*, designed to increase access to financial services from 24 to 60 per cent of the population by 2022.
- 4. **Poverty and Rural Development Context** Mozambique's estimated population in 2015 was 27.9 million and is growing at an annual average rate of 2.8 per cent (2015)¹⁵. Rural population annual growth was measured at about 2.4 per cent and urban growth about 3.6 per cent. Overall, the quality of life in both rural and urban areas has relatively improved, with a life expectancy increasing from 48.7 years in 2000, to 55 years in 2014. The country's HDI increased marginally from 0.209 in 1990 to 0.418 in 2015, ranking Mozambique at 181 out of 188 countries¹⁶. Despite this relative progress on human and social development, poverty and its causes remain a persistent challenge to overcome. About 68.7% and 54.7% of the population live below the international poverty line of USD 1.90 per day and the national poverty line of USD 0.5 per day, respectively.
- 5. **Agriculture and Smallholder Farming Context** With a total surface area of 779,380 km², 36 million hectares of which is arable land, Mozambique offers considerable agricultural potential. The country has ten different agro-climatic zones in ten Provinces, and only 10 per cent of its 36 million hectares of arable land as well as 2 per cent of its irrigation potential is currently utilized¹⁷. The agricultural and fisheries sector in Mozambique are largely represented by

¹¹Atlas method – World Bank data

¹²World Bank data: http://databank.worldbank.org/data/reports.aspx?source=2&country=MOZ

¹³The Royal Institute of International Affairs 2016 – How can Mozambique manage its debt crisis?

¹⁴ African Economic Outlook - Mozambique 2016,

¹⁵ Ibidem

[&]quot;Ibidem

¹⁶UNDP – Human Development Report, 2016

¹⁷Agenda 2025 – Government of Mozambique - http://www.mpd.gov.mz/index.php/documentos/instrumentos-de-gestao-economica-e-social/agenda-2025/83-agenda-2025/file?force_download=1

smallholders, who represent about 99 per cent of the sector. Agriculture and fisheries therefore remain one of the principal sources of income for rural communities, representing a livelihood source for almost 81 per cent of the in-country labour force. Agriculture generates 80 per cent of the income of rural households, which account for 94 per cent of the country's agricultural production. However, the sector suffers from very low productivity and limited access to markets: less than 10 per cent of the households market their surpluses. The major constraints to agricultural development that affect smallholder farmers in particular include: limited access to improved inputs, extension (support) and finance; as well as poor market linkages¹⁸.

- 6. Agricultural market conditions have improved over the last few years, with significant increases in demand for both food products and export crops. The number and diversity of agricultural market agents are increasing, from farmers' associations, small/medium size traders to larger trading companies and agri-businesses, some of which provide support to smallholder farmers.
- 7. **Gender and Women's Empowerment** Women in Mozambique are disproportionately represented in both rural and urban areas. However, they constitute a little under 53 per cent of the population and are the majority of rural producers. Over 95 per cent of rural women work mainly in subsistence agriculture, compared to 66 per cent of rural men. About 70 per cent of the women are illiterate as compared to 40 per cent of the men. In agriculture, women are mainly engaged in food-crop farming and are mainly responsible for household food security and wellbeing. Men tend to be engaged in cash-crop farming and non-agriculture employment which also increases their migration patterns, leaving women, children, the sick and elderly in the villages. As a consequence, women's work load has dramatically increased over the past few years. The situation is exacerbated by other factors which affect women's low productivity in the sector such as the small size of agricultural holdings and unequal access to affordable/adapted services and infrastructure.
- 8. **Food Security and Malnutrition** The country continues to depend on food imports to satisfy a large portion of its domestic needs, particularly edible oils and staple food crops; about 35 per cent of total food imports originate from South Africa. In 2015, food imports accounted for 12 per cent of the national imports¹⁹. Mozambique continues to experience food insecurity and malnutrition. According to the World Food Programme 2016 report on malnutrition in Mozambique, 43 per cent of children under 5 are stunted, with higher prevalence in rural areas²⁰.
- 9. **IFAD Country Programme** Altogether, IFAD has been active in Mozambique since 1983 and has invested more than USD 200 million financing a total of 12 Projects/Programmes that are benefiting 2,193,489 households. The current IFAD portfolio comprises four active Projects/Programmes: a) the *Rural Markets Promotion Programme* (PROMER USD 48.4 million.); b) the *Pro-Poor Value Chain Development in the Maputo and Limpopo Corridors* (PROSUL USD 44.95 million.); c) the *Artisanal Fisheries Promotion Project* (ProPESCA USD 57.9 million); and d) the *PRONEA Support Project* (PSP USD 26.77 million) without rural finance activities programmed. Alongside these, the country portfolio also has two active grants, namely *the Promotion of Small Aquaculture Project* (PROAQUA USD 3.3 million) and the *Strengthening Artisanal Fisheries Resource Rights Project* (PRODIRPA USD 0.94 million).
- 10. **IFAD Rural finance experience.** IFAD has a long history of supporting interventions in rural finance in Mozambique. The Rural Finance Support Programme (PAFIR) was implemented from 2005 to 2013. The goal of PAFIR was "to contribute to economic growth and poverty alleviation by improving the livelihoods of rural households and viability of enterprises in rural areas of Mozambique". Its development objective was to "improve the sustainable access to financial services by individuals, groups and enterprises in rural areas and create a positive and conducive institutional and policy environment for the development and sustainable provision of rural financial services". One of the most visible successes of PAFIR is the performance of Accumulating Savings and Credit Associations (ASCAs) that were supported through the project. The success under this component enabled the AfDB to continue to provide financial support to scale up some of the results of this initiative but targeted specifically at women in five provinces. In addition, PROSUL and PROPESCA also have components addressing provision of financial services to project beneficiaries. PROSUL is performing satisfactorily and is one of the more successful projects of the Mozambique programme. It

¹⁸ IFAD IOE: Country Programme and Strategy Evaluation, Mozambique; February 2017.

¹⁹USDA Foreign Agricultural Service – Mozambique 2015 Agricultural Economic Fact Sheet.

²⁰World Food Programme Country Review 2016.

was rated satisfactory at Mid-Term Review in 2016. Similarly, PROPSECA is also performing satisfactorily. PROMER had an additional USD 25 million financing approved by the IFAD December Board in 2015

- 11. PROMER The Rural Markets Promotion Programme (PROMER) aims at increasing small-scale farmers' incomes from agriculture by assisting them in marketing their surpluses more profitably. The programme became effective in April 2009, and had 4 original components: (i) developing more dynamic market intermediaries; (ii) enterprise-led value chain initiative; (iii) improving the market environment; (iv) policy & institutional support and management. In 2013, an Amendment to the IFAD Loan Agreement was signed to accommodate 11.3 million USD as additional funds from an EU grant, under the MDG programme. Two additional components, Nutritional Education (component v) and Institutional Support of National Directorate of Investment and Cooperation (component vi), and one subcomponent, support to the development of community based financial services were introduced. The programme additional financing was approved by the December 2015 IFAD Executive Board and is now expected to close in 2020.
- 12. PROSUL Pro-Poor Value Chain Development in the Maputo and Limpopo Corridors (PROSUL), this project has the goal of improving livelihoods of small farmers in selected districts of the Maputo and Limpopo corridors. With outcomes of i) Increased income for farmers producing vegetables in the project areas through increased productivity- volumes and quality of vegetables reaching both traditional and modern market segments; ii) Increased income for farmers in the project areas out of cassava production, based on proof-of-concept business models for the profitable production and marketing of cassava-based products; iii) Increased income for goat and cattle breeders in the project areas through improved production and better organized markets; iv) Selected value chain stakeholders have a timely and adequate access to a diversified range of affordable financial products, through existing or newly created financial and non-financial service providers; and v) the Centre for the Promotion of Agriculture (CEPAGRI), and specifically its delegation for the southern provinces, is supporting inclusive value chain development.
- PROPESCA Artisanal Fisheries Promotion Project (ProPESCA) aims at i) supporting the development of higher value fish, through the facilitation of sustainable increases in production and marketing of higher value fish, as well as the facilitation of the development of the value chain for higher value fish, from catch to the final market, based on an interactive assessment of the constraints, potentials and opportunities. ii) improving economic infrastructure, for a better access to fishing centres and increased availability of electricity from the national grid to support cool chains and fish processing on site, iii) developing financial services, in order to enhance the quality of livelihoods of the target group by improving the delivery, outreach, appropriateness and sustainability of financial services in artisanal fishing communities, the component would work with both the informal and formal sectors, combining the expansion and strengthening of rotating savings and credit associations (PCRs)²¹ with new measures to facilitate delivery of financial services by formal financial sector institutions. The strategy would be to expand the number of PCRs and also further develop the PCR model, through the establishment of new PCRs; capacity building of service providers/NGOs; support to formal community-based financial service providers; Financial Support to Value Chain Investments supports the attraction of financial institutions to fishing areas, a Risk Mitigation Fund, Matching Grants for Innovation and Infant Industry, Innovation Fund for Women's Enterprises; and a Specialised Business Development Services, to complement the Risk Mitigation Fund; and Technical Assistance for Financial Services, which is including Rural Financial Expertise, to be responsible for both informal and formal financial services; and ASCA Development Specialist to bring specialized experience from other countries iv) Institutional Strengthening, Policy Initiatives and Project Management.
- 14. **International development partners.** Co-funding is present in the majority of the Projects/Programmes. The European Union is co-financing EUR 27.64 million in four Projects/Programmes (PROPESCA, PSP, PROMER and PROAQUA); the OPEC Fund for International Development (OFID) co-finances PROPESCA with USD 13.53 million; PROSUL is co-financed by the Spanish Trust Funds (STF) with EUR 16.3 million and by the IFAD-ASAP contribution amounting to USD 4.9 million and PRODIRPA benefits from EUR 500,000 grant provided by the Belgian Fund for Food Security (BFFS).

²¹ ROSCAs or Poupança e Crédito Rotativo.

B. Rationale

- 15. **National policies**. In April 2013, the Government of Mozambique approved the 'Mozambican **Financial Sector Development Strategy (FSDS) 2013-2022'** with the main objective of overcoming identified challenges in financial inclusion and allowing faster development of the financial sector. The FSDS focuses on maintaining financial stability, improving access to financial services, and increasing the supply of long-term private capital to support the development of the economy. Subsequent to the adoption of this strategy, the World Bank approved the '2014-16 Development Policy Operation (DPO)' aimed at supporting financial reforms in areas of financial stability, inclusion and long- term financial market. DFID launched in May, 2014 the 'Mozambique Access to Finance Programme (MAFIP)' which was joined by other donors and was designed to initiate financial activities aimed at improving financial inclusion.
- 16. Based on this, the Government of Mozambique adopted the **National Inclusion Strategy** (2016-22). This strategy is focused on three pillars: (pillar 1) Access to and use of financial services; (pillar 2) Strengthening of financial infrastructure; and (pillar 3). Financial consumer protection and financial literacy. As the implementation of this strategy has commenced, it is expected to create necessary conditions for accomplishment of its goals: It is planned that by 2022, 100 per cent of the districts will have at least one formal access point to financial services and 75 per cent of the population will have one financial services access point within 5 kilometres of their place of residence or work. Mozambique is expected to increase access to financial services from 24 per cent to 40 per cent by 2018 and 60 per cent of population by 2022.
- 17. **IFAD** has been supporting the Government in its focus on a **transformation of agriculture** towards a modern, commercial and inclusive primary sector. The most recent example of close alignment with the **Plano Estratégico para o Desenvolvimento do Sector Agrário** (PEDSA) has been the value chain focus in PROSUL.
- 18. Recent financial sector policies reflect the need to respond to the crisis in 2015 with a more restrictive monetary policy regime and resulting high rates of interest. These are expected to remain higher than the long-term average until after the next national elections scheduled for 2019. On the other hand, the central bank has been promoting a variety of rural financial institutions and policies that are focused on increasing outreach and service penetration of financial institutions into the rural sphere.
- 19. **Responding to emerging policy challenges.** The Directorate of Treasury of the Ministry of Economy and Finance directly coordinates the IFAD Country Programme. Based on IFAD global rural finance experience and specific emerging requirements in the Mozambique country context, the Directorate has been requesting a focused project with rural finance as its central activities and not just as a complementary focus. The Government wants to respond to the current crisis scenario in rural finance by promoting a stimulus with alternative financing mechanisms that can result in higher client volumes, and thus help to kick start the rural financial sector out of its current sub-optimal state. IFAD is responding to this request with the development of the **Rural Enterprise Financing Project (REFP)**. Project development proceeded in close collaboration and mutual sharing of experiences between the Fund and the Directorate of Treasury.
- 20. **National focus.** Given the relevance of innovative financing mechanisms for the rural sector in general, and in particular for the fledgling micro and small enterprise sector, the focus of the REFP is purposely designed to be national in reach. An all-country focus would also ensure that the current scattered and isolated activities in the different IFAD supported projects would be more effectively coordinated, harmonized and fine-tuned as required through a national PMU.
- 21. **Smallholder farmers and artisanal fishermen.** The demand for financial inclusion in rural Mozambique is affected by the level of agricultural production and productivity in both agricultural, fisheries and non-agricultural enterprises,, the poverty level, access to education, financial literacy status, availability of finance institutions (financial service providers) in rural areas providing demand driven financial products/tools, and commitment of government to champion the implementation of the national financial inclusion strategy. Rural households and MSMEs in Mozambique are likely to be financially excluded compared to urban dwellers and larger businesses. Financial access is relatively lower in the Northern provinces compared to the rest of the regions. There is also a considerable gender difference in financial inclusion between rural and urban areas. About 92 per cent of women in rural Mozambique were financially excluded compared to 31 per cent

in urban areas. Moreover, financial inclusion is extremely low in rural and remote areas, among the entrepreneurs and MSEs and poorer people in the country

- Rural micro and small enterprises. In the context of Mozambique, small enterprises are classified as those with less than ten employees and medium enterprise with employees between 11 and 50. Large enterprises operate with more than 50 employees. 98.6 per cent of Mozambican firms are composed of micro and small enterprises. Informal businesses can be very small (usually single proprietors, and often on a part time basis). The MSME sector already contributes a significant 20 per cent to the country's revenues²². Several studies argue that the urban structure of the financial sector, awareness of funding opportunities, lack of adequate guarantees or collateral, and the absence of small business support services constitute the main specific challenges that small firms in Mozambique have to face. In spite of this, some 80 percent of the national population and 75 percent of the MSEs in Mozambique are excluded from accessing loans from the formal banking sector. Lending to rural entrepreneurs and MSEs is considered by banks as risky. Nearly nine of ten MSE owners are based in rural areas. Policy makers now prioritize the development of the MSME segment also in rural areas, since experience shows that a durable and robust development path is more securely based on a large number of smaller actors, rather than on a few key industries with their dependence of respective world markets and developments.
- Rural finance institutions. The comparatively small banking sector in Mozambique with 17 banks and 642 branches in 2017 lends mainly to corporate customers, particularly to large firms engaged in trade activities in urban areas. Agricultural loans accounted for only 3 per cent of total lending of the banking sector; causing a key challenge to inclusive growth of rural agriculturally based communities in Mozambique. Another challenge is the concentration of branch networks in the capital city (Maputo) and southern provinces. In 2017, the 33.3 per cent of all bank branches were located in Maputo. Out of the 158 districts in the country about half are without bank branches. In view of this, the Bank of Mozambique has issued a directive on the location of bank branches. A bank intending to expand its activities will have to locate one in three of its proposed branches in one of 79 priority under-banked localities (33 in three Northern provinces, 37 in four Central provinces and nine in two Southern provinces). In addition to insufficient outreach, there is also scope for innovation: in terms of an entire systems of Rural Banks to form part of an integrated banking/financial services network, but also process innovations (digital finance) and product innovations. In the current crisis and post crisis scenario of the financial sector, funds within the institutions themselves for research and development are curtailed and financial institutions focus on what they perceive to be safer clients: larger and well collateralized repeat borrowers from the corporate sector. A project to generate scalable and concrete technical solutions in retail and rural finance can thus potentially make a contribution to the larger rural transformation process.
- The microfinance sector involves 11 micro banks (with 33 branches in 2015), 8 credit cooperatives, 12 saving and loans organizations, and more than 380 micro credit operators, and community based financial organizations such as "Accumulating Savings and Credit Associations" ASCAs.
- 25. ASCAs are grassroots level community-based financial institutions where member savings are pooled for the purpose of lending, and thus affording members the opportunity to borrow as needed. The primary focus in these groups is on generating small incomes from savings. This is achieved by lending out of the group corpus fund for small amounts and emergency purposes, but for comparatively high rates of interest compared to interest rates in the formal financial sector. ASCAs include the lower end of the rural population that are excluded from accessing financial services from the formal financial system. Self-selection of the group members and peer pressure on repayment has created a robust basis for the sustainability of the ASCAs. According to a recent (2017) study by the DFID Financial Deepening Trust, in 2017, 20,292 ASCAs operated in 79 per cent of the districts with 386,731 members, 65 per cent of which were women. The accumulated savings of ASCAs was about 1.8 billion MZN (29 million USD), while their social fund was about 19 million MZN (305,000 USD). On the other hand, any intervention to expand and promote the activities of ASCAs should be based on needs of members. Invariably ASCAs also provide the economies of scale necessary to make a business case to formal finance providers. If mature ASCAs are linked and consolidated into a network or an union structure that can be serviced as one entity, then they can access larger loans

²² Factors influencing access to finance by SMEs in Mozambique: case of SMEs in Maputo central business district, H.M. Mogaka Osano and H. Languitone, Journal of Innovation and Entrepreneurship, 2016.

and other financial and non-financial BDS services; and at the same time becoming more attractive to formal finance providers. This can be implemented with the support of development partners and government without bringing unwanted interference.

- Mobile money and digital finance. There has been progress in promoting inclusive finance in Mozambique using mobile money and digital financial services (DFSs). Unlike the electronic banking services that enable access to one's bank account (by ATM, internet and mobile phone), mobile money does not require a bank account and a physical branch. These services allow the transfer of funds to individuals such as relatives, effect payment for goods/services, businesses via mobile phone numbers. Mobile money services are also delivered through authorized agents that lower installation and running cost compared to banks. Expanding agent banking has considerable potential in Mozambique to increase financial inclusion significantly and reducing the transaction cost by using retail and postal outlets or individual agents (including mobile money agents) to carry out basic financial services such as payment of bills, deposits, or withdrawal of money, on behalf of a bank. The Bank of Mozambique has approved the legislation on agency banking, which is expected to make a breakthrough in reaching the remote areas. The three mobile phone companies in the country (Motivel, mCel and Vodacom) have subsidiary mobile money services (e-Mola, mKesh and m-PESA). Given the 15.5 million mobile phone owners in Mozambique, there is a potential to expand the use of DFSs particularly phone-based payment systems.
- 27. **Project rationale and strategic considerations in summary:** Mozambique has an exceptionally high share of financially excluded population, in particular in rural areas and as far as women are concerned. Together with rural based micro and small enterprises, this has resulted in a considerable pool of productive economic units with financial services requirements that are not yet met. On the supply side, the challenges are likewise major. The banking sector has been weakened by the financial crisis of 2015, the MFI sector is still small and fledgling, and the large, as yet informal group of informal village-based savings groups, the ASCAs need a direction into which it can develop and graduate,
- REFP can strengthen, organise, support and to a certain degree address the demand for financial services and increase the flow of financial resources into the rural areas; particularly to rural entrepreneurs. Further, at the same time addressing existing market failures in rural finance, and accelerating rural transformation and development. Without the REFP, the current pace of the growth of financial service providers would not be possible through internal resources. This would result in an unacceptably slow growth in the provision of financial services to rural agricultural and non-agricultural entrepreneurs and MSMEs. REFP will strengthen the financial delivery capacity of the financial service providers and facilitators (government and private) in Mozambique to rural agricultural and non-agricultural entrepreneurs and MSEs even after the closure of the project. The project will deliberately pursue the greater participation of women and youth in economic activities that will lead to significant beneficial outcome of the project. On top of building the capacity of inclusive financial service providers, including ASCAs and the proposed ASCA Union, and the direct beneficiaries of the project, the REFP would also build the technical and institutional capacity of government institutions mainly the Ministry of Economy and Finance, Mozambican Association of MFIs, the Bank of Mozambique, BNI (as the REFP executing agency) and FARE (as a strategic partner and Service provider to BNI) to sustainably promote and support the delivery of financial services in the rural and remoter areas of the country. A combination of funding instruments to finance development and technical assistance is foreseen to create the necessary conditions for building up viable rural based institutions and implementing this project successfully and sustainably.

Project description

Project area and target group: REFP will have national scope and will be implemented in all ten rural provinces of the country: Manica, Tete, Niassa, Cabo Delgado, Nampula, Zambezia, Sofala, Inhambane, Gaza and Maputo Province. Selection criteria for geographic targeting will concentrate in provinces with high levels of poverty above 40% starting with the provinces with presence of ongoing IFAD-funded interventions (i.e. PROMER, PROSUL, PROPESCA, PSP and PROACQUA), as well as the areas with potential for MSME development. REFP financial support will be made available to project participants of ongoing projects that have received training and production and productivity enhancement support in both agricultural and non-agricultural enterprises. For these, lack of access to affordable capital is one of the main constraints for expansion and intensification. The total number

of direct beneficiaries receiving support from REFP is 287,700. Outreach, calculated on the basis of an average number of individuals benefiting from the MSMEs targeted. 23 The project will target 57,540 youth of which 28,770 will be young girls, 230,160 among men and women of which 50 % will be women (115,080) and 115,080 men.

- 29. **Target groups:** In Mozambique, rural smallholder households that engage in agriculture fisheries and non-agricultural MSMEs are categorised into four broad categories:²⁴: (i) Smallholder subsistence and semi-subsistence producers, (ii) Rural household (self-employed) entrepreneurs (iii) Emergent Farmers (market oriented producers) and iv) Medium Entrepreneurs (transit and stable). The criteria for defining the smallholder farmers is based on (i) landholding size; (ii) market orientation; (iii)labour input; (iv)income; (v) farming system; (vi) farm management responsibilities; (vi) capacity; (vii) legal aspect and (viii) level of organization. The primary target group of the Project consists of poor and disadvantaged rural households involved in agriculture, fisheries and MSMEs. These will include men, women, women head of household, youth including the vulnerable people. In line with the rural livelihood assessments of the country, and the ongoing IFAD portfolio, the main characteristics of the target group include i) smallholder farmers (subsistence and semi-subsistence), ii) smallholder fisher men and women, iii) other rural household and micro-entrepreneurs.
- 30. The following section highlights the characteristics of each of the smallholder categories²⁵.
- 31. **Smallholder subsistence and semi-subsistence producers**: This category will consist of poor rural households engaged in both agriculture production and fisheries. They have limited access to land, inputs, credit, markets and market information, representing about 99per cent of the agriculture sector producers in the country. These are net producers of staple crops, food insecure with no regular water and soil fertility management practices. They are under-covered by extension, and have a longer learning curve in the uptake of new technologies and approaches. They largely operate as individuals and are highly vulnerable and dependent on their farm produce. They have weak bargaining power, poor market linkages and no access to market information.
- 32. **Rural household (self-employed) entrepreneurs**: This category includes subsistence producers, engaged in various entrepreneurial income generating activities off-farm. They have limited access to finance, land, and live below the poverty line. In addition, they have insufficient production, depletion of food stocks, and have high risk exposure to rising food prices, thereby are food insecure, and exposed to acute malnutrition due to inadequate diet. They also have limited resilience to climatic shocks; therefore households are highly vulnerable, live off of farm produce, either by consuming, selling, or trading their agricultural labour. This is an important target group deserving promotion because of their potential for income and employment generation. The entrepreneurs are interested to expand their activities but have limited access to financial resources. They have limited business and technical skills, however a fully integrated approach providing credit, raw materials, technical and business training as well as marketing assistance would be beneficial for this group. They also may need small equipment to further support their business enterprises.
- 33. **Emergent farmers (market-oriented producers)** are considered as economically active, commercially viable (to an extent) and in a position to benefit from opportunities along the agricultural value chain. They will be targeted in so far as they bring experience, dynamism, innovation, and services to the poorer subsistence-oriented farmers. These emergent smallholder farmers are already involved in value chain production (existing cassava, horticulture, livestock producers and fishermen). This group is composed of both poor and non-poor, who have already graduated to market-oriented agriculture. This group has successfully increased production, applies fertilizers and some agronomic practices, and is interested in further expanding their business, increasing value-added and developing new activities that support the production and marketing of target crops.
- 34. **Small and medium entrepreneurs (transit and stable):** This category has multiple income sources and includes wages from occasional labour, salary from employees, retail, agriculture and other non-farm income generating activities. The business employs 5 to 20 workers and monthly income is between USD100 USD 1000. The group earn higher income, has resources for

²³ Tables in appendix 2 indicate the relevance of key development parameters in the 10 provinces envisaged for REFP coverage and beneficiaries by province.

²⁴ US2,50 PPP/day form CGAP (2016) National Survey & Segmentation of Smallholder in Mozambique.

²⁵ Draft COSOP for Mozambique 2017

addressing emergencies. The household income is split equally between agriculture and non-agricultural MSMEs. The group has been set up by policy makers, development agencies and financial institutions. The business is usually obtained through family inheritance usually originating from an agricultural base. The group can access credit for the formal financial institutions for funding MSEs operations as well as buying new equipment to replace obsolete machinery. The group is wealthy, more educated and more prepared to tackle emergency situations.

- 35. **Women** will be directly targeted as they constitute the main constituent engaged in agriculture, and the majority of the rural population. Female-headed households are amongst the poorest and their economic progression is hindered by a combination of social and structural constraints. Their access to land, knowledge, inputs, finance, high value agriculture chains and capacity to generate income is heavily curtailed by traditional gender roles that will undermine their participation unless gender is mainstreamed into all project's components. Their participation will be prioritized and in addition to mobilisation strategy, the programme will apply affirmative actions (i.e. quotas) to ensure their equitable participation and benefit from the intervention. Project implementation and management arrangements will be gender sensitive. Interventions will be aligned to the Strategy for Gender Inclusion in Agriculture (2016-2025) developed by PROSUL for the Ministry of Agriculture and Food Security.
- 36. **Youth** will constitute a direct target group because they are more likely to be resource poor, lack control over assets and have limited livelihood options, and their integration into rural economies has long-term positive social and economic consequences. Selection criteria will prioritize their participation whenever possible and a number of activities have been identified that will address their needs and priorities. Youth will be mobilised and consultation to capture their view, aspirations and expectation will be conducted. Interventions will be guided by the Gender, Youth and Social inclusion manual. In this regard, the project will consider the heterogeneity of the youth cohort i.e. Gender, level of education, interest & aspirations in determining investments.
- 37. Highly vulnerable and marginalized households i.e. HIV/AIDS affected, elderly: This group comprise child and/or female headed households and the elderly women who assume the role of carer for orphans and the sick. They are highly vulnerable due to the impact of HIV/AIDS, which retards agricultural production, and threatens food security, due to the lack manpower at crucial moments of agricultural productivity. They may also be impacted by traditional land tenure systems, where women can lose access to land All factors (HIV/AIDS, Disabilities, Elderly) influence the availability of other household members for productive activities, while they are tending to their needs. IFAD will consider cross-cutting initiatives to ensure that project interventions are sensitive to their unique circumstances, in particular through training and capacity building on production, business skills to facilitate household /group enterprise development, diversification of production, access to markets. This will also include the inclusion of HIV/AIDS Nutrition, dietary diversity & food management in extension modules.

Targeting Strategy: REFP will implement an inclusive targeting strategy to ensure that project benefits are distributed to a large number of poor rural households. The targeting measures will include self-targeting geographic targeting, direct targeting, and application of quotas for youths and women rural entrepreneurs. Self-targeting measures will ensure that Project interventions respond to the priorities and livelihood strategies of the target groups. The selected financial services along with identification of entrepreneurial opportunities will be suitable for all target groups. Direct targeting mechanisms will ensure that women, youth and specific vulnerable and disadvantaged groups (financially excluded) be assisted to access financial and economic opportunities. The Project will introduce quotas and specific targets to ensure their inclusion: women will be 50% of total beneficiaries while youth will be 20%. Specific financial instruments will be set up to serve the most disadvantaged.

38. The Graduation Promotion and Outreach Programme will target the smallholder subsistence & semi-subsistence men and women producers. They will be assisted in accessing micro loans to engage in more profitable opportunities and/or livelihood diversification to move out of poverty and vulnerability. Crowing-in Matching Grant Fund, and Line of Credit will serve rural smallholder

entrepreneurs: men, women, youth who are trained on financial literacy and business planning and entrepreneurship to access loans to engage in agriculture and non-agriculture MSMEs. ²⁶

- 39. **Gender and social inclusion strategy**. The Project gender strategy aims at equal involvement and benefits of women and men in the development of the intervention. Women and men of different ages and socioeconomic categories, including youth, will be given equal chances to participate in REFP activities and obtain equal returns. Increasing social capital among the poor is a guiding principle of the proposed Project, which emphasizes the importance of enhancing economic and social inclusion of vulnerable and marginalized groups in targeted rural communities. This will comprise unemployed youth, elderly women and men, widows/orphans, the disabled and people living with HIV/AIDS.
- 40. REFP will seek to mainstream gender-informed approaches in its design, implementation, and monitoring of activities by factoring in the different needs, constraints, and opportunities of women, men, girls, and boys across all components. Specifically, the Project will provide marginalized women, youth and other vulnerable groups with targeted interventions that recognize their different skill needs and resources compared to other members of the community.
- 41. This will be achieved through investing in capacity building at all levels, especially introducing methodologies at household level to support women to share control of income generated and decision making (that is, selected tools from the Household methodology) and for supporting nutrition sensitive related interventions.
- 42. The Project will contribute to three main outcomes for Gender Equality and Women's Empowerment (GEWE):
 - Expand women's economic empowerment through access to and control over productive and household assets. Women heading households and women in male-headed households will be empowered. Their financial, business and entrepreneurial skills will be strengthened to build small businesses and effectively engage in income generating activities (IGAs). Women will be assisted in accessing key technologies, equipment, financial and non-financial services to increase fish/agricultural production and productivity.
 - Strengthen women's decision-making role in the household and community and their representation in membership and leadership of local institutions. The use of capacity building, including household methodologies, will ensure that women are fully part of decision-making in the household and regarding economic related activities. Their participation in ASCAs (where women account over 50% of participants) will be used to encourage their membership and leadership in those groups and organisations and key committees created by the project and existing ones that will be strengthen by the intervention. In particular, the project will focus on strengthening women's leadership skills in ASCAs and in decision making positions, by providing training to women-led ASCAs.
 - Achieve a reduced workload and an equitable workload balance between women and men, girls and boys. Time and labour saving technologies as well as other type of technologies will be promoted by the project. Another main contributor for an equitable workload balance will be the application of HHs methodology at household level.
- 43. The gender and social inclusion strategy will consider lessons from existing IFAD experiences in the country, and will support women farmers/fishers to take advantage of financial services and economic opportunities provided by REFP. Moreover, women will be supported in becoming active and vocal members of relevant organizations. It will also support (i) women smallholders' farmers access to services, inputs and assets; (ii) women and youth inclusion in capacity building; and (iii) nutrition education. In consideration of women's (i) low levels of literacy and numeracy, (ii) lack of business development and management skills and (iii) limited voice, leadership and decision making capacity in organizations and business management, the Project will support the following initiatives:

Table in appendix 2 provides details on current definitions related to poverty brackets and rural entrepreneurship. The different classes of rural smallholder entrepreneurs correspond to different target segments and support strategiess within REFP:

- Financial literacy and leadership training for women. The training will work on their capacity to engage in business activities and become leaders. This activity will support women participation in groups, cooperatives and enterprises, enabling them to engage in profitable income generating activities and benefit from them. Training will target women who are already member of producers' organizations, cooperatives or private enterprises or those who have the potential to be active members of one of those. The intervention will pay particular attention to encourage women in key leadership position.
- Women and youth producers/processors will be assisted in accessing financial services to purchase relevant assets and inputs for their economic activities. They will be supported in applying for financial support.
- The Project will pay careful attention to ensure trainings respond to women's needs. To ensure their inclusion (50% participants) the extension agents will consider appropriate time, location and childcare facilities will be provided
- The Project will involve strategies to improve the nutritional status of communities involved. At community level, curriculum on nutrition will be developed and integrated in the Subsector plans for trainings. It is also proposed that the activities on specific food promotion, behaviour change communication and nutrition education will be implemented at household level using the household methodologies approach.
- Selected tools from the Household methodology, whose success has been proven under other IFAD funded initiative in Mozambique, will be used during capacity buildings at community level, to promote equal access of men and women to economic opportunities, decision-making processes and share of workload and also for improved nutrition.

A. Development objective and impact indicators

44. The Project **Goa**l is to contribute to rural household livelihood improvement. The specific Project **Development Objective** to increase the availability of, access to, and use of adapted (appropriate, affordable, and innovative) inclusive sustainable financial services, and technical support services in rural areas. The development objective will be achieved through the interventions of REFP as it effectively implements the following two main components: a) improved access to and usage of adapted financial products and support services for rural smallholder farmers, agri-entrepreneurs and non agri-entrepreneurs for investment, and b) Business development support/capacity building to rural smallholder farmers, agro-entrepreneurs, non agri-entrepreneurs and institutions that support them. Consequently, REFP is designed to impact on the levels of household incomes and assets of at least 287,700 direct beneficiaries. Thus, in the process influencing the Government of Mozambique's planning and funding of sustainable financial projects in rural areas.

B. Outcomes/Components

Outcomes

- 45. The following are expected to be the main outcomes from REFP 27 :
 - Increased accessibility to diverse inclusive financial products and services has improved the livelihoods and resilience of rural smallholder farmers, agro-entrepreneurs, nonagricultural entrepreneurs and enterprises.
 - ii. Institutional capacity enhanced of FIs delivering sustainable and appropriate financial support for rural smallholder farmers, agro-entrepreneurs and non-agricultural entrepreneurs.

46. The outcome indicators to be assessed against the above two project outcomes, and the impact indicators linked to the project objective are presented in the Log-frame. In the first year of the project, quantitative data would be collected during a sample baseline survey, which would be linked to

²⁷ Refer to the logical framework.

the focus areas or pilot during the planning process. Two other questionnaire-based sample surveys (impact) would be conducted, one towards the middle of the project (Mid-Term Review) and another during the final year (PCR). The aim of these surveys is to record the improvements in the lives of project beneficiaries. Additionally, outcome monitoring will also be followed up during implementation support / supervision missions.

47. REFP Theory of Change (ToC): The project is expected to significantly contribute towards the increase of livelihood opportunities for the target beneficiaries through inclusive financial products, business development services, and enhanced financial institutions' capacity to deliver sustainable and appropriate financial support. REFP outcomes will create the necessary pre-conditions to influence long-term change in rural financing in Mozambique. This will be achieved by strengthening the rural finance institutions in delivering a new range of products and services thus enhancing the resilience and livelihoods opportunities for the project's beneficiaries.

Components

- 48. **The objective of component 1** *improved access to adapted financial services for rural entrepreneurs* is to provide different and novel routes of providing funding to accelerate the development of the agriculture and fisheries smallholder, agricultural and non-agricultural entrepreneurial sectors in rural communities of Mozambique. REFP will operate with a flexible menu of instruments, catering to a wide range of the rural productive population. The current dearth in novel of innovative products, approaches and services for the poor smallholder farmers', agricultural and non-agricultural entrepreneurs, and fishermen financing will be addressed.
- Sub-component 1.1 Graduation Promotion and Outreach Programme (GPO) will accelerate the processes of (i) bringing in very poor people (i.e. the last mile or the bottom end of the income pyramid) to a level where they are creditworthy and can be integrated into mainstream rural financial services. GOF provides a graduation route for the very poor rural households that are not bankable in their current financial and socio-economic state. This graduation route will be carved out and supported through combining intensive handholding and technical training with the provision of small-scale investment funds for a graduation cycle of between18 and 24 months; and (ii) innovative digital financial delivery channels (DFS) for agricultural and rural finance products and services, providing a platform to link the poor to a wide range of FSPs and other stakeholders to strengthen their innovation initiatives. This will be carried out through similar technical assistance arrangements as is with the graduation promotional processes. Sub-component 1.2 Crowding-in Fund (CIF) will offer a tripartite cost-sharing with matching grant mechanism to enable loan applicants with bankable propositions that are not able to attract full private sector financing to get access to part loan financing under the project. The tripartite cost-sharing scheme will provide funding with the sub-borrower (beneficiary) making a matching contribution, the participating financial institution providing a marketpriced loan - the interest rate to be charged to the target beneficiary will take into account that the loan funds are developmental in nature and not one of profit maximisation -, and the REFP providing a matching grant. This will finance investments that do not yet have proven commercial viability, and will serve as a demonstration for participating financial institutions on supporting the viability of that specific type of project, so that this may be financed in future on purely commercial terms. Subcomponent 1.3. Line of Credit(LoC) will be set up to be accessed and utilized by small scale investors who are ready to expand and intensify their farming, fisheries and non-agricultural rural enterprise businesses. With the current pricing for funding on the domestic money market and the squeeze in liquidity, the line of credit provides a necessary temporary arrangement for mobilizing reasonably priced funds for the implementing agency.
- The objective of component 2 capacity building and support for institutions and rural entrepreneurs is to develop the capacities, at institution level (sub-component 2.1), at the level of the micro and small enterprise and the small farmer (sub-component 2.2). Subcomponent 2.1, provision of capacity building to financial institutions, complements the line of credit intervention to attract formal financial institutions in delivering financial services to smallholder farmers, rural agricultural entrepreneurs and non-agricultural MSEs. Sustainable financial institutions in Mozambique, dedicated to promoting financial inclusion, require not only funds, but also systems, products and innovations backed up by skills and capacities. To this end, the sub-component 2.1 has the objective of providing capacity building support to banks, MEF, BoM, MFIs, only-credit institutions, and ASCAs, so as they can expand their activities in rural areas and address the financial needs of rural enterprises and MSEs, particularly those owned by women and youth. The REFP is committed to supporting (where

necessary) a for-profit Union which will be an umbrella organization providing a variety of services to the ASCAs.

Subcomponent 2.2 focuses on: (i) providing skills and knowledge to agricultural and non-51. agricultural SMEs. These require non-financial and business development services tariing in order to improve their prospects of accessing financial and other technical support. In many cases this support is required for assistance in preparing loan applications and business plans, PROMER, PROSUL, and PROPESCA PSP, BAGC and IPEME, are all currently committing significant resources in the implementation of project activities of agricultural, fisheries and non-agricultural enterprises and entrepreneurial capacity development. Alignment of REFP with these ongoing projects and initiatives would likely lead to collective economies of scale through such collaborative actions; and importantly for the REFP provide incremental value addition to these other projects. The target group for REFP, 25,000 direct beneficiaries have the potential to expand their market-related activities, thereby providing improved market opportunities for smallholder farmers. The support by the REFP to agribusiness, fisheries and other business development will be achieved through the implementation of a systematic planning and capacitating process or model, utilising business development models/techniques that open channels for the target group of smallholder farmers, fishermen and non-agricultural members of the target group to gain better access to finance - provided by Components One of the REFP and other IFAD projects such as PROMER, PROSUL, PROPESCA and PROAQUA - and establish sustainable market opportunities. This sub-component will target commodity-based smallholder farmers, farming and fishery associations, registered farmer cooperatives, informal farmer and fishery organizations, and agri-businesses, at local, district and provincial levels. In order to ensure that this intervention is informed by the needs of the target group on the ground, prior to any REFP support interventions being implemented, a study for mapping smallholder farming agribusiness, fisheries, agro and agua-prenuerial opportunities, other enterprise opportunities along the value chain in Mozambique will be commissioned. It is made very clear that this mapping study is not designed to be a 're-invention of the wheel': rather a confirmation of what work in this regard is currently being undertaken in Mozambique and what added value - through collaboration and cooperation - can the BDS process within the REFP provide. It is broadly anticipated that this national mapping study will identify BDS capacity development interventions that will include, but not limited to the following

Component 1: Improved access to adaptive financial services for rural entrepreneurs (USD 51.4 million – IFAD contribution: USD 43.3 million)

52. This component will consist of three sub components namely: Subcomponent 1.1: Graduation Promotion and Outreach Programme; Subcomponent 1.2 The Crowding In Fund:: Subcomponent 1.3: The Line of Credit (LOC).

Subcomponent 1.1. The Graduation Promotion and Outreach Programme (GPO)

- 53. The Graduation Promotion and Outreach Programme will be established with an initial value of USD 12.2 million and will be implemented through two sub-windows: (i) Graduation Promotion Sub-Programme USD 6.0 million and the (ii) Outreach Expansion Sub-Programme USD 6.2 million.
- other rural people to develop their small business skills and entrepreneurship to an extent where they can become creditworthy and bankable to access mainstream rural financial institutions at the end of the graduation programme cycle. The graduation programme will also support complementary activities aimed at promoting sustainable income-generating activities, in particular (i) entrepreneurship and business skills training; (ii) financial literacy to equip beneficiaries with skills and tools for setting economic goals, budgeting and management of livelihood risks; (iii) promotion of (primarily existing) ASCAs to encourage beneficiaries to save in order to manage risks, smooth consumption and boost their resilience; (iv) linking the beneficiaries of the graduation programme to financial institutions to enable them obtain financial services to support their economic activities. The sequence of activities is designed to gradually build the capabilities of poor households to the point where they have sustainable incomes and asset base, increased resilience to economic shocks and ultimately graduating to mainstream economic activities. Experience from countries where the Graduation programme has been implemented indicates that the total cost of implementing ranges

from USD 330 to USD 650 per participant in India to about USD 1,900 in Peru. This wide range in costs reflects the differences in underlying cost structures from country to country (e.g., local salary scale, population density, and status of infrastructure), and from the emphasis placed on each of the building blocks (e.g., size and duration of consumption support). In the case of REFP, the graduation model is costed at USD 1,700 per person, which is within the range of costs incurred to implement similar programmes in other countries. Because of tight supervision and specialized skills required to identify, train and lend to very poor rural people, the graduation programme be carried out by a technical service provider specialized in carrying out graduation or targeting the ultra-poor (TUP) programmes. The service provider will be sourced through a competitive tendering process and will undertake all the graduation activities. The TSP will report to the national PMU and he/she will prepare an annual workplan for implementing the graduation activities. He /she will prepare and submit monthly reports to the coordinator

55. **(b) Outreach Expansion Sub-Programme**: The purpose of Outreach programme is to provide support to financial service providers (FSPs) (including MFIs, Microbanks, Commercial Banks, ASCAs etc) to develop and deploy appropriate and innovative financial products and alternative delivery channels (DFSs) that increase their outreach to the very poor and marginalised groups, including beneficiaries of the graduation programme. This programme will specifically target the ASCAs and their members as well as for-profit umbrella Unions of ASCAs. The project will support initiatives including development of digital finance products, agency banking, insurance products, contract farming, value chain financing, term-finance for agriculture, weather index-based insurance for livestock, technological solutions that help reduce cost of service delivery such as M-Pesa, use of point of sale devices, biometric data storage, and pilot testing financial graduation approaches etc. The outreach facility will finance (i) Technical assistance to assist FSPs to develop new products and alternative delivery channels (ii) a cost-sharing (On a 30-70 basis) to meet the cost of deploying a new technology to improve outreach to marginalised areas/groups, establishing branches in remote areas, etc. The cost per intervention will be capped at maximum of USD 10,000. The programme will encourage outreach expansion solutions which leverage either additional donor funding or a cost sharing arrangement with commercial stakeholders, such as insurance companies, telecoms firms, leasing companies, market intermediaries, etc.

Subcomponent 1.2 The Crowding In Fund.

- The Crowding in Fund aims at improving access to finance for otherwise un-bankable small and medium sized enterprises (farmer groups, inputs suppliers, aggregators buying from smallholder farmers/fisherman, transporters, processors). CIF will offer a tripartite cost-sharing with matching grant financing tool to enable potential loan applicants with risky but bankable propositions to get access to loan finance under the project. The three parties to CIF will be the beneficiary, REFP and the participating financial service provider (commercial bank, MFI, etc). The facility will support investments in productive assets such as on farm production equipment, post-harvest machinery and equipment, rural transportation and processing equipment thereby allowing beneficiaries to accumulate assets that they can offer as collateral to access loan finance. Strengthening and growing the agribusinesses through fixed asset investments and balance sheet reinforcement is expected to result in more bankable enterprises and broader access to long-term private capital, which promotes SMEs' ability to expand and grow and become more productive and profitable. The main value for financial intermediaries is that this 'blended finance' approach, i.e. the leveraging of grant funding for credit, significantly decreases credit risk and enables financial intermediaries to invest in a customer segment they previously were not able to do business with. For investees, the combination of grants and credit reduces the cost of traditional credit and enables access to collateral previously not available
- 57. CIF will be established with an initial value of USD 5 million and be deployed in the form of inkind matching grants (procurement of fixed assets for the investees), with a maximum individual grant size of USD 5,000 per investment. For each eligible investment, the beneficiary will contribute 20 per cent of the cost, the participating financial institution 40 per cent and the project 40 per cent. It is envisaged that due to the nature of activities of traders, processors, farmer associations and other non-farm rural MSMEs, most of the grants will be small within the range of USD 3,000-USD 5,000. The actual grant amount will depend on the requirements of the proposed investment.

58. CIF is one of two sub-windows under the Umbrella Fund. It will be managed by the BNI Fund Manager.

Subcomponent 1.3: Line of Credit (LOC)

- 59. **Rationale:** 80 per cent of the population is economically connected to agriculture and fisheries. On the other hand, credit to the rural sector is limited, covering the financial requirements of only 2.3% of the farm holdings in the country and 25% of the MSMEs. The overall challenge of REFP is to stimulate investments in the rural and agricultural sector and to reduce the gap between the demand for debt financing in rural areas and the existing institutional supply. The line of credit will be an immediate stimulus by improving the availability of loan finance for agriculture and rural small enterprises. In the medium to long term, financial institutions will then benefit from capacity building (TA) measures through REFP to increase outreach of bank services to rural areas. In sum, the project supported lending facility can provide immediate relief to the capital starved farm and rural enterprises Rates of interest at all intermediation levels will be commercial with positive rates of interest for each intermediation level.
- 60. **Demand supply considerations:** Monetary policy responses of the central bank to the banking sector crisis resulted in sustained high reference rates. As an unwanted side effect, interest rates for credit to the private sector became too expensive for potential borrowers. Banks and other financial institutions at the same time reduced their loan books as a response to the crisis and preferred to invest liquid resources in the local money markets. In this environment with unusually high price tags for loans and financial institutions being more averse to risks, an external line of credit reached high levels that led to that became extraordinary current crisis in the financial sector. This credit facility under REFP will be implemented as a demand-based rural financing instrument for leveraging funds of select commercial banks and MFIs for on-lending to some 39,700 clients comprising individuals, groups, associations and other collectives in remote rural areas of the country. This will involve an intermediary institution for managing funds, coordinating with PFIs, appraising proposals of PFIs, releasing refinance and monitoring implementation to ensure quality of lending & repayment. It will require active participation of PFIs to fulfil the objectives of the programme, which would provide them opportunity to develop experience and knowledge in lending for agri business and other activities for rural clients.
- 61. IFAD financing for REFP LOC will amount to USD 27.1 million and both first and second tier financial institutions contribute 20 per cent each of the REFP loanable resources on a pari passu basis. The facility will be managed by BNI as the apex financial institution under REFP with on-lending to participating financial institutions for sub-loans to end borrowers. The size of loan will range from USD 100 to USD 5,000 per borrower. The REFP credit facility will reach a total of about 62,370 sub-borrowers.
- 62. Interest rate levels along the intermediation chain will be in line with the interest rate policies as applied in PAFIR: The apex financial institution lends at a rate above the BOM reference rate and participating financial institutions then adjust REFP rates in line with similar products they offer to a similar clientele. In view of the exceptionally high interest rate environment that is projected to prevail for some time, a formula is proposed whereby in the Subsidiary Loan Agreement with the PFI the difference between the PFI average costs of funds and the (significantly lower) lending rate of the apex financial institution to the PFI is stipulated. At least 70 per cent of the cost savings of the PFI from the access to cheaper REFP funds will then be applied in reducing the sub-borrower interest rates accordingly. The interest rates will be commercial since they are net positive at all levels of the intermediation chain and near market rates with the savings of the PFI from accessing REFP loan funds carried forward to the end borrower.
- 63. The subsidiary loan agreement with the participating financial institutions to manage the loan funds could include benchmarks in terms of annual lending and recovery targets, technical financial and management reporting on performance of this institution and the credit facilities placed in this PFI.. BNI will select PFIs in close collaboration with the PMU. An initial inventory study of the microfinance sector in Mozambique is proposed.
- 64. In order for the different rural financing sub-windows to avoid negative environmental and social impacts and strengthen ENRM and climate resilience to benefit on the livelihoods of the beneficiaries, REFP will set ENRM and climate resilience criteria in the selection process for the

loans. The ESMP will make explicit reference to the IFC Exclusion List28 outlining investments not eligible for project support. This set of criteria will integrate the country's own safeguards regulation²⁹ where required to avoid any activity known to unequivocally pose serious environmental and social risks. The MFIs supported by REFP should engage in the promotion of environmental awareness and eco-efficiency among clients while simultaneously limiting their exposure to lending risks caused by social, environmental and climate issues. The MFIs should provide opportunities to positively influence their clients' environmental and social performance by engaging in active environmental and social screening. However, the large majority of MFIs in Mozambigue do not have in place a mechanism for environmental screening of credit applications nor for mitigation of environmental risks of the financed activities. Thus, the project will capacitate these institutions on this subject and support them also through a senior environmental and social consultant hired on a retainer basis within the PMU who will be responsible for the i) implementation of capacity building on climate and environmental aspects of REFP, and ii) the monitoring of social and environmental compliance. As specified in the SECAP Review Note (Appendix 13) an increasing lender liability approach adapted to the different client characteristics can be adopted to mitigate environmental and social impacts that could be generated by REFP supported activities. This involves the use of financial intermediaries to support environmental and social protection agencies in enforcing relevant regulations. One possibility is to formalize the enterprises to ensure compliance with existing government regulations governing business registration, taxes, zoning, minimum wage and social security provisions, and environmental protection. This approach will also benefit the National Directorate of Environment (DINAB) on institutional knowledge and data collection activities. 30

Component 2: Capacity building and support for institutions and rural entrepreneurs (USD 10.6 million – IFAD contribution USD 9.4 million)

65. This component will consist of two sub components namely: Subcomponent 2.1: Support to essential local institutions; Subcomponent 2.2 Business Development Support.

Subcomponent 2.1: Support to essential local institutions

66. The main outputs of this subcomponent consist in (i) providing skills and knowledge to the staff of the financial institutions to better serve parts of the rural population who do not have adequate access to financial services; (ii) assisting the financial institutions in designing polices and develop financial tools or products to meet the needs of the rural enterprises and MSMEs; (iii) exposing and linking the financial institutions to good practices; (iv) enhancing the mobility of the staff of the financial institutions to serve the rural financially excluded population through opening branches or using other innovative approaches (such as mobile money and agency banking and other DFSs) and expand their outreach in remote districts; (v) conducting a mapping study of ASCAs and linking 5,000 mature ASCAs to formal financial institutions; (vi) supporting the establishment of for-profit Union for ASCAs; (vii) establishment of a database for MFIs and promote social performance management through the Mozambique Association of MFIs (viii) provide institutional and technical support to transform FARE into a sustainable financial institution and (ix) assist microfinance regulatory department of Bank of Mozambique to establish sustainable MFIs and promote financial literacy and consumer protection.

67. Climate change and Environmental mainstreaming – As highlighted in Annex 13 Mozambique is one of Africa's most vulnerable countries to climate change. The occurrence of climate related hazards such as droughts, floods and cyclones is increasing resulting in loss of livelihood and economic assets. In this regard, MFIs represent a potential opportunity to promote adaptation of smallholder farmers and entrepreneurs and invest in adequate technologies required to respond to climate variability and change (and consequently enhance loan repayment capacity). While increased access to finance and exposure to technologies will generate autonomous adaptation, REFP will

 $\label{lem:http://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/ifc+projects+database/projects/aips+added+value/ifc_project_exclusion_list$

²⁸ See IFCs Project Exclusion List

²⁹ Environmental Law (Law no. 20/97). The latest regulation was established in 2015 (Decree 54/2015).

The Environment Directorate (DINAB) within the Ministry of Land, Environment and Rural Development (MITADER) is the designated authority for the application of the Environmental Law and the management of the National safeguards regulation.

encourage capacity building in climate change adaptation and sustainable ENRM. This includes trainings for the MSMEs in the agribusiness sector, local institutions (including extension staff) and farmers and fishermen on climate change adaptation, the promotion of green technologies, etc. and the capitalization of climate risk management capacities. This would possibly reduce the overall vulnerability of the investment to climate related hazards. A Senior Environmental and Social consultant will be hired to join the PMU on a retainer basis to conduct capacity building exercises as well as biannual social and environmental assessments. Access to early warning systems (EWS) and reliable and timely weather information through existing channels will finally compound the package provided to increase beneficiaries' resilience to adverse climatic events. Moreover, MFIs will be capacitated to better assist REFP beneficiaries responding to adverse climate events and avoid investments which may result in potential adverse environmental impacts. Where appropriate, MFIs should also be informed of the existence of Local Adaptation Plans (PLAs) elaborated within the National Climate Change Adaptation and Mitigation Strategy framework. This may inform the MFIs lending criteria and ensure an effective use of resources at district level.

- 68. **Nutrition Mainstreaming** Although Mozambique had made some progress in reducing poverty and undernutrition, the country is still facing food insecurity especially for households living in rural areas who are vulnerable to climatic hazards and natural disasters. For instance, the decline in fish supply, coupled with a growing human population can result in a 70% decrease in protein availability by 2030 as compared to 1995. The Mozambican diet is dramatically low in terms of micronutrient value and is poor in protein. This project seeks to engage the target beneficiaries through the graduation programme interventions on nutrition education and sensitization sessions.
- 69. The nutrition initiatives will be implemented by extension workers with the assistance of nutrition experts and in collaboration with identified potential partners. The initiatives entail mentorship and training with the focus on vulnerable households, malnourished women and children. The key nutrition-sensitive activities will comprise of: i) increased food diversification with integrated nutrition education; ii) training on improved processing, storage and preservation of food; iii) support to SETSAN on Monitoring and Evaluation in Nutrition-sensitive interventions. REFP will leverage synergies on nutrition outcomes with the initiatives in other IFAD-supported projects working in same locations to maximise the facilities and other resources already in place.
- 70. **Policy Advocacy and Strengthening** working with Ministry of Finance and Bank of Mozambique, the REFP within the life of the project will include activities aimed at strengthening the policy and regulatory framework including those outlined through desktop and action-research Studies to establish the policy gaps, promoting policy advocacy forums, capacity building support for policy formulation and implementation.

Sub-component 2.2: Business Development Support - BDS

- 71. This sub-component is designed to support Mozambique's rural development in the agricultural, fisheries and non-agricultural business sector on its way towards increased commercialization and rural transformation. Sub-component activities cover smallholder agriculture, fisheries and non-agricultural rural entrepreneurs and off-farm micro and small enterprises in general. Further ensuring that the capacity development strategies and activities pursued will increase access to financial and business development services by the target group.
- 72. REFP support for business development services to agribusiness, fisheries and other business development can be achieved through the implementation of a systematic planning and capacitating process, utilising business development techniques that open channels for the target group of smallholder farmers, fishermen and non-agricultural members of the target group to gain better access to finance provided by component 1 of REFP. A related objective will also be to make existing market linkages at different levels of the chain more durable and predictable.
- 73. To this end, sub-component activities will target smallholder farmers, farming and fishery associations, registered farmer cooperatives, informal farmer and fishery organizations, agri-

32 https://www.rare.org/mozambique

³¹ Mozambique's National Climate Change Adaptation and Mitigation Strategy (NCCAMS 2013 – 2025). http://www.cgcmc.gov.mz/attachments/article/148/National%20Climate%20Change%20Strategy_lowerres.pdf

businesses, and other rural non-agricultural entrepreneurs at local, district and provincial levels to build and strengthen their capacities. A capacity building needs assessment will be carried out first to ensure that this intervention is informed by the needs of the target group on the ground, identifying smallholder farming agribusiness, fisheries, agri-and-aquapreneurial opportunities, other enterprise opportunities along the value chain in Mozambique will be commissioned. Based on this demand assessment, the BDS process will likely provide training, facilitation of access to inputs, facilitation of access to financial services offered through component 1 of REFP, marketing support and advice in value addition activities and services.

74. Direct action for priority **women and youths** target groups: REFP will directly target 2,500 youths aged 18-35, and 2,500 women from all the provinces for income generation trainings. Similar to the graduation programme in component 1, this will provide accelerated support to segments of the population that are particularly disadvantaged and in need of special support. Through partnering with current IFAD assisted projects, and government initiatives, the target group for BDS training could easily be doubled. REFP will implement a national Incubator start-up entrepreneurial programme to create agribusiness, agri-preneurial and non-agricultural opportunities for youth and women in rural areas.

Component 3: Programme Management (USD 10.5 million – IFAD contribution USD 9.5 million)

- A Project Management Unit (PMU) set up at BNI, will be responsible for overall project implementation. The main responsibilities of the National PMU will include: (i) annual work planning and budgeting (ii) financial management; (iii) procurement, including contracting of service providers; project facilitation in the three regions - through the three regional PMUs - and (vi) Reporting, monitoring, evaluation and knowledge management. The PMU will be composed of a team of individual consultants contracted through competitive bidding and managed by a Project Coordinator. The PMU will be organised into three units covering the planned target geographical regions. The core project management unit will be based in Maputo City. Three regional project management units will be established as follows: one unit will be based in Beira and will oversee project implementation within the central region covering Manica, Sofala, Zambézia and Tete; another unit will be based in Nampula and will be responsible for coordinating project activities in four Northern provinces of Nampula, Zambezia, Cabo Delgado and Niassa; a third unit will be based in Xai Xai, Gaza and will be responsible for overseeing project activities in the Southern Region consisting of Gaza, Inhambane and Maputo Provinces. It is considered not effective to assign responsibilities for coordinating the Southern Region to the National Project Management Unit as the unit may not have adequate time to engage stakeholders spread across three provinces in addition to discharging its national responsibilities.
- 76. Staff members of the PMU will be recruited as individuals by BNI through a competitive process that complies with national general accepted public sector recruitment processes or those of IFAD (whichever is the more appropriate). Physically, the National PMU (NPMU) will be housed at BNI offices in Maputo City. Staffing of the unit will include:
 - Project Coordinator: Serves as the operational head of the PMU with responsibility for guaranteeing delivery of planned outputs, planning, monitoring and reporting;
 - Finance Manager with overall responsibility for financial management and financial reporting
 - **Procurement Officer:** Responsible for developing the annual project procurement plan and facilitating all procurement activities
 - Accountant to support financial manager in maintaining accounting records and day to day management of accounts;
 - M&E/Knowledge Management Specialist: designing M&E system, overseeing baseline and impact studies and surveys, preparation of progress reports;
 - Rural Finance Specialist to oversee implementation of project financial instruments, ; capacity building and support for institutions and rural entrepreneurs

- Outreach Officer to oversee implementation of graduation and outreach activities;
 capacity building and support for institutions and rural entrepreneurs
- Support Staff (drivers, administrative and clerical)
- 77. The project will also have part time experts that will be recruited and mobilised as required. This will include a senior **Environmental and Social (E&S** consultant hired on a retainer basis within the PMU who will be responsible for the i) implementation of capacity building on climate and environmental aspects of REFP, and ii) the monitoring of social and environmental compliance., a **Gender and Youth Officer** to ensure that REFP activities adequately mainstream women and youth priorities/targets; and a **Human Resources Specialist** who will liaise with the BNI Human Resource Management and Procurement on all contracting matters. Provision has been made in the budgets to mobilise other unspecified experts that may be required during implementation of the project.
- 78. **Regional Project Management Units (RPMUs).** These units will be responsible for identifying project investment opportunities as well as monitoring activities under implementation. The regional units will also have responsibility for developing mechanisms for ensuring complementarity of donor- and NGO-supported rural finance activities in the region. The RPMU will be hosted by the Provincial Directorate of Finance in the respective Provincial Governments where they will be operating. Each Unit will be made up of:
 - Regional Coordinator: identification of project investment opportunities, providing implementation support to service providers, coordinating REFP activities with other rural finance initiatives
 - M&E Officer: Collection of regular data and information on the project, preparation of regional progress reports, coordinating regional knowledge management activities
 - finance/administrative officer: office management, financial management of financial resources assigned to the regional office
 - Support Staff (drivers, administrative and clerical)

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

- 79. Lessons Learned from IFAD supported projects and programmes There are a number of lessons that can be drawn from the past and ongoing experiences of IFAD investments in Mozambique. Both the past experience from the Rural Finance Support Programme (PAFIR), and the experiences from the ongoing ProPESCA, PROMER and PROSUL Projects/Programmes offer a robust basis for the understanding of the challenges in rural finance in IFAD Programmes in Mozambique. In particular, REFP is well placed to draw lessons from the closed Rural Finance Programme (PAFIR), and to learn from the on-going activities in the various financial services components currently implemented in the ongoing IFAD-supported Projects/Programmes.
 - a) Well-focused, realistically targeted interventions can add value at sector level. The value added in the sector can be seen from the growing demand for the piloted financial services interventions that have performed satisfactorily as evidenced in the 2015 PAFIR PCR Report, the latest 2016 MTR report for PROSUL, the 2016 Supervision Mission Report for PROSPESCA and the 2016 Supervision mission Report for PROMER all of which point towards a growing and unmet demand for financial services in project areas. This needs to be followed with well-defined indicators that measure both quantitative and qualitative achievements:
 - b) A set of key financial and technical performance indicators for rural finance institutions are important. Transparent reporting of these indicators through financial institutions that are properly regulated and supervised can improve management practices and overall project performance
 - c) PAFIR experience indicated that complementary technical assistance can create the demand for the services as well as strengthen delivery systems to meet such demand.
 - e) High quality Fund management is key to dispensing successful credit and accompanying grant functions.

- f) Participating financial institutions at each level and for each component need to be carefully screened and selected using IFAD's Rural Finance Policy with its Decision Tools screening procedures
- g) REFP design was also closely guided by the conclusions and recommendations of the recently concluded CSPE by IOE that recommended more focused re-engagement of IFAD in a stand-alone and more focused and dedicated rural finance programme. REFP is a direct response to this recommendation and conceptualized as a first phase to an envisaged long-term engagement as was recommended by the IOE Report.

80. Lessons Learned from projects and programmes supported by other development partners in Mozambique

- 81. As stated in the GoM's Vision 2025, access to rural finance is considered one of the key drivers in the improvement of rural people's livelihoods. Hence many development partners have made an effort to align their projects and programmes with the Government's goal of improving economic development through improved financial inclusion also as a means to to stimulate agricultural production" and rural transformation. Hence, alongside IFAD's past and ongoing projects, REFP will not only contribute to the GoM's vision, but also benefit from similar projects and programmes currently ongoing on planned for rural Mozambique. Some of the most relevant ones to REFP are described below.
 - Mozambique Access to Finance Programme (MAFiP). This program is funded by the U.K. Department for International Development (DFID) and is implemented through Development Associates Incorporated (DAI). The project seeks to facilitate financial inclusion through a number of different financial services, with the objective of reaching more than 2 million people and 650 businesses in rural Mozambique. In doing so it seeks to promote the development of a stronger financial sector, by improving its regulation, infrastructure and supervision, and creating a favourable economic and social environment for domestic and international investments. The project is ongoing and hand will run through the period 2014-2019.
 - **Financial Sector Deepening (FSDMoç)**³⁴. As per the above, the FSDMoç project is also funded by DFID and implemented through DAI, with the core objective of being the core financial inclusion facilitation unit for the households and businesses targeted also by MAFiP, with the goal of creating a series of public and private partnerships.
 - SUSTENTA. This a World Bank financed project that will seek to benefit more than 700,000 farmers in northern Mozambique, more specifically in the provinces of Zambezia and Nampula (and is expected to possibly extend into Cabo Delgado and Niassa). The project is implemented through the Ministry of Land, Environment and Rural Development, and among other components, has articulated it design in line with the GoM's vision to promote integrated sustainable rural development, for example through access to finance and financial services (Um Distrito, Um Banco), one of the five strategic points of the Government's Programa Estrela, Desenvolvimento Rural Integrado e Sustentável (Integrated Sustainable Rural Development Program), 2015–2019. Hence one of the key program development objectives is to "increased access to finance for agriculture and forest-based VCs participants" 35.
 - **Beira Agricultural Growth Corridor (BAGC)**³⁶ initiative (2011-2017). Funded by a number of donors (mainly DFID), the BAGC has been implemented by AgDEVCO. The initiative has sought to provide appropriate low-cost financing mechanisms to fund investments for small and medium size farmers, whilst improving the linkages of the latter with the private sector. The project specifically worked through three types of proposed financial support: (i) patient capital; (ii) "social venture capital"; and (iii) working capital facility³⁷.

35 http://documents.worldbank.org/curated/en/160861467817940751/pdf/PAD1497-PAD-P149620-OUO-9-IDA-R2016-0161-1-Box396267B.pdf

19

³³ Vision 2025 – Government of Mozambique.

³⁴ http://fsdmoc.com/

³⁶ http://www.agdevco.com/uploads/reports/BAGC_Investment_Blueprint_rpt19.pdf

ibidem

- **Agro-Empreender**³⁸. This program is funded by the Danish International Development Agency (DANIDA), and is implemented through GAPI. With a total of MZN320 million, it seeks to improve agribusiness and market linkages in Mozambique. More specifically it has worked in trying to provide specific financial products for agribusinesses, and in addition a specific line of credit for youth. Alongside this, it has also supported and financed local financial intermediaries (micro banks, rural banks, etc.), all with the goal of improving rural markets. The three lines of credit include the following: (i) Financial credit for agribusiness; (ii) Financial credit for young entrepreneurs (*Agro-jovem*); and Financial credit for the re-financing of microcredit for agribusinesses and local financial intermediaries.
- Feed the Future Agricultural Innovations (INOVA). The project has just been launched, and will run through the period 2017-2022. It has the goal of reducing poverty in rural Mozambique by (amongst others) strategically leveraging funds within the project to cofinance investments with the farmers and agribusinesses targeted. In order to do so the project will collaborate directly with financial institutions, village savings and loan associations (ASCAs), and other, to provide specific lines of credits to allow smallholder farmers to access specific agricultural inputs. The project is a USAID-funded project falling under the Feed the Future program, and is implemented through DAI. It can somewhat be considered a successor to the previous Innovation for Agribusiness (InovAgro I, II) project (2010-2017), which also sought to link farmers with financial institutions and specific lines of credit.
- 82. In the cases listed above, there is more than just a simple overlap of objectives, but also a geographical overlap and complementing especially in Zambezia and Nampula Provinces. In addition, all of the ongoing IFDA supported projects, (PROPESCA, PROMER and PROSUL) bring a set of core lessons that have informed REFP's design. The demand for access to credit lines that are tailored to the needs of each stakeholder participating in the value chain has been flagged out not only within the projects, but also in the recent CSPE, thereby further validating the Government's and REFP decision to include a line of credit in this project.. Most of the projects already included (smaller) forms of credit for smallholders and businesses (eg through. matching grants), and the presence of a national project specifically working on improved access to financial services will go a long way to fill this gap.

Adherence to IFAD Policies

- 83. **Compliance with IFAD's Strategic Framework 2016** IFAD's fifth Strategic Framework covers the period 2016-2025, serving as an overarching policy guideline to provide direction to IFAD's work, and as a key instrument for consolidating IFAD's development effectiveness. It responds to the new global environment and positions IFAD to play a crucial role within it by enabling the transformation of rural areas in a manner that is both more inclusive and sustainable. The framework has three strategic objectives:
- 84. SO1: **Increase poor rural people's productive capacities** investing in rural people to enhance their access to and control over assets and resources. REFP supports this SO by aiming to increase people's access and use of client oriented and sustainable financial services in rural areas.
- 85. SO2: Increase poor rural people's benefits from market participation improving the engagement of poor rural people in markets for goods, services and wage labour. REFP aims to improve rural household livelihoods through Subcomponent 2.2: "Business Development Support" with business plan validation and by fostering market linkages.
- 86. SO3: Strengthen the environmental sustainability and climate resilience of poor rural people's economic activities. REFP recognizes the key importance of environmental sustainability to ensure continued profits and improved livelihoods. The integration of capacity building activities on climate change adaptation and the environmental sustainability of REFP is detailed in the appended SECAP Review Note.
- 87. IFAD promotes policy engagement in projects in order to reach two main objectives: (i) help create an enabling environment for implementation and achieving the project's impact, and (ii) help create the conditions for a large number of rural population to move out of poverty. It is a key element of the scaling up agenda. IFAD's role is not intended to advocate for specific policy outcomes; it is rather to assist Governments to use the experience gained in innovative and change

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³⁸ http://gapi.co.mz/agro-empreender/

oriented IFAD supported projects in the design or reform of policies, and to facilitate dialogue among national stakeholders on key policy issues. REFP recognizes the importance of harmonization with existing structures and places emphasis on utilising relevant systems, where adequate, that are already in place.

- 88. **Compliance with IFAD Rural Finance Policy** This Policy (2009) has six guiding principles to be applied at the micro-, meso- and macro levels: (i) support access to a variety of financial services; (ii) promote a wide range of financial institutions, models and delivery channels; (iii) support demand driven and innovative approaches; (iv) encourage in collaboration with private sector partners market-based approaches that strengthen rural financial markets, avoid distortions in the financial sector and leverage IFAD's resources; (v) develop and support long-term strategies focusing on sustainability and poverty outreach; and (vi) participate in policy dialogues that promote an enabling environment for rural finance.
- 89. Consistent with the goals of the Policy, REFP will support a number of demand-driven and innovative approaches to rural financial services: including i) developing and validating basic business plans, financial literacy and community-based microfinance; ii) technical assistance to selected financial service providers to strengthen their capacity to service smallholder farmers as well as technical assistance directly to smallholders; and iii) scale up ideas and actionable projects to increase the reach of financial services in rural areas and introduce novel approaches.. The line of credit is applied in concurrence with the Policy. In line with the IFAD Rural Finance Policy that permits the use of lines of credit in specific and well defined circumstances and sector environments.
- 90. Compliance with IFAD Policies on Natural Resources Management and Climate Change Strategy The goal of IFAD's ENRM policy is to enable poor rural people to escape from and remain out of poverty through more productive and resilient livelihoods and ecosystems. REFP follows these principles by aiming to render the rural enterprise activities more sustainable and resilient to climate shocks.
- 91. IFAD's Climate Change Strategy notes that IFAD's goal is to maximize the fund's impact on rural poverty in a changing climate. Climate change has been actively considered in the design of REFP, more specifically within the SECAP Review Note. REFP will aim to increase smallholders' climate resilience by encouraging the diversification of income streams and promoting climate adaptive practices.
- 92. Compliance with IFAD's Targeting Policy Reaching the Poor (2010) IFAD's policy on targeting defines its priority target group as the poorest rural people with productive potential. REFP will apply a strong pro-poor social inclusion strategy for the disadvantaged categories in particular women, women headed households and youths, as well as HIV affected entrepreneurs to enable them to participate in and benefit from capacity building initiatives and access loans that will empower them to establish viable rural on and off farm MSEs. Youth and women beneficiaries will each account for 50 and 20 per cent of the target group and these will benefit from capacity building in entrepreneurial and business skills, access to finance (loans) to engage in micro to small scale enterprises, and the provision of mentorship to these youths.
- 93. Compliance with IFAD's Gender Equality and Women's Empowerment REFP is guided by the three succinct precepts set out in the *IFAD Policy on gender equality and women's empowerment* (2012): promote economic empowerment to enable rural women and men to participate in and benefit from profitable economic activities; enable women and men to have equal voice and influence in rural institutions and organizations; and achieve a more equitable balance in workloads and in the sharing of economic and social benefits between women and men. Women and women-headed households (WHHs) represent a key vulnerable group that will receive direct targeted intervention under REFP. The project prioritises mainstreaming gender equality and women's empowerment as integral to effective approaches to rural financial services.
- 94. **SECAP –** a detailed analysis of the Social, Environmental and Climate Assessment Procedures is available as an appendix to this report.

Project implementation

A. Approach

95. REFP will build on the experience of PAFIR, a national rural finance project supported by IFAD and the African Development Bank that was closed in 2014 as well as emerging lessons learned from PROMER. PROSUL and PROESCA that are implementing rural finance components in their projects. As a nationwide project that will be closely aligned with the ongoing area based projects, REFP will initially build on the human capital created by these projects and provide financing to those small entrepreneurs, farmers and artisanal fishermen that are ready to invest in their undertakings, and then move from this base to ultimately cover all 10 REFP provinces of the country. REFP will further provide a hub for all aspects of development finance also to these current IFAD projects and has the potential to consolidate and streamline current rural finance activities that sometimes overlap and duplicate approaches.

B. Organizational framework

- 96. The Ministry of Economy and Finance will be responsible for overseeing implementation of the Project. The day to day oversight will be assigned to the **BNI** as the lead project agency implementing the project on behalf of the MEF, the borrower.
- 97. The project shall establish a **National Project Steering Committee** to serve as the governing body of the project. The Steering Committee shall be chaired by the Permanent Secretary of Economy and Finance and made up of representatives of the Ministries of Agriculture, Fisheries, Industry and Trade and Labour; Confederation of Business Associations of Mozambique (CTA), civil society organizations, National Union of Farmers, Bankers Association, Central Bank, MFI and FARE. This will provide strategic guidance towards the achievement of project objectives and contribute to the higher-level sector policy and strategic goals. It will also be responsible for review and approval of Annual Work Plans and Budgets, and annual reports. **Regional Project Consultative Groups (RPCGs)** would be set up in each of the three regions of the project. They would be essentially resource bodies for the project to allow the PMU and BNI confront issues, debate constraints affecting the project, reviewing project approaches, strategies and AWPBs, and act as a forum for coordinating financial service institutions, government bodies, and other parties and organizations operating in the project area. Each RPCG would be chaired by the Provincial Head of the MEF or a representative.
- A Project Management Unit (PMU) set up at BNI, will be responsible for overall project implementation. The main responsibilities of the National PMU will include: (i) annual work planning and budgeting; (ii) financial management; (iii) procurement, including contracting of service providers: project facilitation in the three regions; and (vi) reporting, monitoring, evaluation and knowledge management. The PMU will be organised into three units covering the planned target geographical regions. The core project management unit will be based in Maputo and supported by three units based in Beira, Nampula and Xai Xai. The national PMU will be comprised of a Project Coordinator, Financial Management Specialist, Accountant, Procurement Officer, M&E Officer, Innovation/ Outreach Officer, a Rural Finance Specialist and support staff all competitively recruited and employed on performance based contracts. The project will also have part time experts that will be recruited and mobilised as required. This will include an Environmental and Social (E&S) specialist to promote capacity building on climate adaptive practices, a Women/Youth Officer to ensure that REFP activities adequately address the needs of women and youth and a legal expert to provide legal services on contracts. Provision has been made in the budgets to mobilise other unspecified experts that may be required during implementation of the project. The Regional Management Units will be composed of a Coordinator, M&E Officer and Administrative Officer and support staff. The project will have access to funds to finance Technical Assistance where needed. This technical Assistance will be delivered through public and semi-public sector strategic partners as well as contracted service providers from eth private sector when necessary. To spread delivery risk for the project and minimise costs, service providers will be identified based on their regional competence and will be supervised by the respective Regional PMUs.
- 99. REFP will also offer a structure to tie the multiplicity of different existing funds under IFAD projects under one consolidated Umbrella Fund in BNI. This umbrella fund manager (BNI) will manage the main technical assistance and support funds under REFP (i) to different types of support

to financial institutions, (ii) to sub-borrowers or VC actors, and (iii) to ASCAs and their members but also possibly expanding to other areas such as digital finance, etc. Suffice it to say that the PMU will be a separate entity from the Find Manager.

C. Planning, M&E, learning and knowledge management

100. The integrated participatory planning, monitoring and evaluation (M&E), Learning and knowledge management (KM) system will be developed in accordance with the government frameworks and within IFAD guidelines. It will have three main objectives: steer project implementation; support economic decisions and policymaking; and share knowledge and scale up good practices.

Planning

101. **Detailed Planning** and budgeting of REFP activities would be carried out based on the AWPB involving the PMU, BNI and other implementing agencies/ stakeholders in a participatory process where the Provincial Directorate of Economy and Finance (DPEF). The PMU would be responsible for preparing the annual budget and work project for the two main components including its subcomponents. In addition, the PMU of REFP in coordination with BNI and MEF will be responsible for the overall consolidation of the AWPB. The PMU will send the AWPB to IFAD 30 days prior to the end of each Project Year for no objection. The PMU will consolidate the Project's quantitative financial and physical output data in the planner tool template, which could be an excel based Management Information System.

Monitoring and evaluation

- The M&E system will have a three-level structure, consisting of output monitoring, outcome monitoring and impact evaluation. Output monitoring will comprise the monitoring of physical and financial inputs, activities and outputs, both planned and actual. Outcome monitoring will assess the use of outputs and measure their benefits at beneficiary level. Impact evaluation will assess and measure the change in selected variables between the beginning and the end of the Project or a later selected date. The main instruments for the impact evaluation are the Project's Baseline Survey and Project Completion Report. A list of the final indicators will be defined in the start-up workshop using the log frame as a starting point. This will include relevant first, second and third level indicators of IFAD's Results and Impact Management System (now ORMS) and will be gender disaggregated as appropriate. AWPBs will provide the annual targets for first level monitoring. The PMU M&E, under the supervision of the Project Coordinator will have lead responsibility for the coordination of all M&E activities of the Project and consolidating relevant information.
- 103. The PMU/REFP in collaboration with BNI as Lead Implementing Agency would be responsible for collecting and storing key M&E data on their activities. These data would be analysed and consolidated by the PMU at HQ in collaboration with the regional PMUs for purposes of the AWPB and Progress Reports. Monitoring of outcomes and impact could be outsourced to consultants whose activities would be coordinated by the PMU's M&E staff. The indicators would be defined in compliance with IFAD's Results and Impact Management System (RIMS).

Learning and knowledge management

- Learning and Knowledge management will be implemented as an integral part of the REFP, in recognition of the fact that the Project will be identifying, testing, demonstrating and disseminating approaches with innovative technologies. The project will support a major learning process to overcome some of the conceptual barriers and raise awareness about the piloted models. The REFP M&E system will form the foundation of the knowledge management and learning system and will be a primary instrument of information capture and storage, based on the indicators detailed in the results framework. Tools such as case studies, stakeholder interviews and surveys will be used to deepen an understanding of the factors contributing to successes and failures, and to enable full documentation of impacts from the field and beneficiaries.
- 105. The learning and knowledge management activities will include (i) impact studies comprising a Baseline Survey and Completion Report; (ii) Thematic and Technical Studies on the Graduation Promotion and Outreach Programme as well as the Graduation Programme; (iii) information dissemination campaigns about the Programme; (iv) preparation of publications and

visibility/video materials; (v) in-country knowledge networking through periodic seminars and workshops; (vi) Progress Reports; and (vii) capacity building activities of PMU/REFP staff. In turn, all these are expected to ensure that knowledge being captured by the PMU and implementing partners are utilised to generate lessons and best practices to be widely shared with all key players including public institutions, the IFAD country team and others.

- 106. REFP's sequential approach to scaling up will also follow an in-built learning loop, with M&E and knowledge management playing key roles during all stages of the development pathway: from the very poor that will be part of the graduation programme to mainstream small farmers and emerging rural entrepreneurs that will broaden and deepen their access to financial services. Particular attention would be paid to women and youths beneficiaries and their special objectives and requirements. The project M&E will regularly collect the results and lessons learned in order to fine tune its approaches, especially the innovative models. Once these critical elements have been effectively operationalised, the project can be scaled up to all 10 provinces of the country.
- During the final year of Project implementation, as part of the preparation of the IFAD-required Project Completion Report/Impact Assessment (PCR), the M&E data collected over the Project implementation period will be used as part of a detailed assessment of Project achievements. In particular, this will compare changes in the livelihoods of beneficiaries that relate to the implemented Project activities against the situation documented in the Baseline Study. The Project Completion Report will share lessons learned and development experience.
- 108. The Project will carry out some feasibility studies of possible developments of geographical areas for which local communities have requested Project interventions. The studies would investigate the viability of business enterprises or entrepreneurship interventions and identify the types of activities that can be supported through component 2 (Capacity building and support for institutions and rural entrepreneurs).
- 109. **Progress Reports** will have two primary objectives: (i) to record the progress of implementation, for the period under review, compared against the targets and objectives including key selected indicators from IFAD's Results and Impact Management System (RIMS) set out in the Design Project Document and the AWPB; and (ii) to confirm the degree to which the Borrower is in compliance with the conditions of the financing agreement. The key quantitative tables of the Progress Reports will be generated using a simple excel templates.

D. Financial management, procurement and governance

- 110. **Financial Management.** A National Project Management Unit (NPMU) will be established under the supervision of the **Banco National de Investimento**/ National Bank of Investment (BNI), comprised of, among others a Project Coordinator, Financial Management Specialist, an Accountant and a Procurement Officer competitively recruited and employed on performance based contracts. The NPMU will be supported by three regional project management units will be established as follows: one unit will be based in Beira and will oversee project implementation within the central region; another unit based in Nampula for the Northern provinces and a third unit based in Xai Xai responsible for overseeing project activities in the Southern Region. **Fundo de Apoio a Reabilitçao da Economia**/ The Economic Rehabilitation Support Fund (FARE), has been identified as an potential implementing agency for activities related to ASCAs. Fiduciary assessments of the two GoM institutions have been carried out returning a high risk. The design of the financial management arrangements have taken this into consideration and mitigating measures provided for.
- 111. On the basis of the above, accounting will be a hybrid system that has elements from the GoM's Financial Management procedures mixed with IFAD project financial management requirements where GoM procurements are found inappropriate especially for the products and implementation modalities envisaged under the project. TOMPRO accounting software which will be procured and configured at project start-up to meet IFAD reporting requirements will be used. BNI, with the authority of Ministry of Economy and Finance (MEF) will open a separate designated account at the Bank of Mozambique solely to receive IFAD loan funds. Funds will flow into a project operating account held at a commercial bank acceptable to both GoM and IFAD from which payments for services/goods and transfers to Regional Project Management Units (RPMUs) and implementing partners will be done. Financial management activities at the Regional Management Units will be kept lean with most/major payments centralised at the NPMU and the Umbrella Fund Manager.

- The project will be implemented on the basis of approved Annual Work Plans and Budgets (AWPBs). The budgeting process will be done jointly by BNI/NPMU and implementing partners. NPMU will consolidate the budget, present it for approval by the Project Steering Committee and submit the estimates to MEF for inclusion in the National estimates. A No Objection from IFAD will be required for each AWPB during the implementation. Budget submission to IFAD will be by 60 days prior to commencement of each fiscal year/budget year as required by the IFAD General Conditions.
- 113. The BNI Internal Audit will provide internal audit services to the Umbrella Fund and the NPMU. The BNI internal audit department will include REFP in their internal audit plan and internal audit reports or implementation action plan of internal audit recommendations will be required by IFAD at least once a year. External audits will be done in accordance with IFAD audit guidelines and audit reports and the related management letters will be submitted no later than six months after the end of each fiscal year. The external audit will be carried out by a private audit firm as IFAD continues to engage with the **Tribunal Administrativo** (TA) -Mozambique's Supreme Audit Institution for consideration of taking up of the audits.
- 114. **Exception to General Conditions**: The design mission proposes that as a mitigating measure against the failure by GoM to provide counterpart financing and in consideration of a request from GoM, an exception to Section 11.01(a) of the General Conditions be granted. IFAD loan should cover taxes and duties but this would be reviewed during implementation or at a joint IFAD/GoM Mid-Term Review of REFP, to determine whether the loan should continue to cover taxes. Provision under Section 11.01(c) of the General Conditions will be applicable; thus, the use of any proceeds of the financing to pay for taxes will be subject to IFAD's policy of requiring economy and efficiency in the use of its financing. Therefore, if IFAD will determine that the amount of any such tax is excessive, discriminatory or otherwise unreasonable, the fund may by notice to the borrower reduce the percentages of eligible expenditures to be financed under the financing agreement.
- 115. The PMU will develop and implement a Project Implementation manual (PIM) which will include a comprehensive financial management section. Separate detailed manuals for the different financing windows will also be developed to address specific implementation modalities. The financial management arrangements including, staffing, budgeting, accounting, funds flow, disbursements, financial reporting, internal controls and auditing are detailed at appendix 7.
- 116. **Procurement** Procurement will be governed by public procurement regulations under Decree number 5/2016 of 8 March, 2016. This regulation guides the tendering of public works, supply of goods and provision of services to the state. The decree requires that public procurement fulfil a number of criteria including legality, public interest, transparency, openness, equality, competitiveness, impartiality and good financial management. The overall procurement responsibility under REFP will rest with MEF with delegated powers to BNI in accordance with thresholds. In accordance with the IFAD Procurement Handbook, international competitive bidding (ICB) will be carried out in accordance with the World Bank guidelines. As far as practicable, all procurement will be done competitively. Details of procurement arrangements of REFP are in appendix 8.
- 117. **Governance** The project shall establish a National Project Steering Committee (NPSC) chaired by the Permanent Secretary of the Ministry of Economy and Finance (PS/MES) to serve as the governing body of the project. The Steering Committee shall be made up of representatives including the Ministries of Agriculture, Fisheries, Industry and Trade and Labour; a director from the Confederation of Business Associations of Mozambique (CTA) representing the private sector, a director proposed by civil society organizations, a director proposed by the National Union of Farmers, representative of Bankers Association and an MFI representative, BNI and any other relevant organisations working for the achievement of objectives of REFP.
- 118. At regional level, Regional Project Consultative Groups (RPCGs) would be set up in each of the three regions of the project. They would be essentially resource bodies for the project to allow the NPMU and BNI to confront issues, debate constraints affecting the project, reviewing project approaches, strategies and AWPBs, and act as a forum for coordinating financial service institutions, government bodies, and other parties and organizations operating in the project area. As BNI does not have representation at Regional level, the PS/MES will nominate Regional chair for each.
- 119. The National Steering Committee (NPSC) will provide strategic guidance towards the achievement of Project objectives and contribute to the higher-level sector policy and strategic goals.

This will also be responsible for review and approval of Annual Work Plans and Budgets, and annual reports.

E. Supervision

120. REFP will be jointly supervised by IFAD and the Government of Mozambique. Emphasis in the supervision will be on a joint learning and assessment of achievements and opportunities for scaling up against the overall objective of an effective project implementation. In addition to the annual supervision missions, there will be six-monthly implementation support missions and, if warranted, these could be fielded also more frequently with a view to identify and directly address early any emerging issues with a potential to negatively impact on the project implementation. To the extent possible, there will be a continuity in the composition of the supervision and implementation support missions in order to increase mission effectiveness. The most important skill sets to be represented on IFAD supervision and implementation missions will include (i) a local government specialist, (ii) project organization and management specialist, (iii) finance technical specialist, (iv) an experienced financial management specialist, and (v) a socio-economic, environmental and climate assessment (SECAP) specialist.

F. Risk identification and mitigation

121. REFP is ambitious in its scope, objectives and orientation towards parts of the rural population that make up the IFAD target group. Risks and uncertainties can be related to climate, institutions, the general economic and specific financial sector environment as well as to governance administration and infrastructural issues in a large country such as Mozambique. The main risks are presented hereunder:

Table 1: REFP Risks, Impacts and Mitigation Measures

Risk	Impact and Probability	Mitigation Measures				
GENERAL						
The first project phase coincides	Political considerations may result	All selected institutions need to be				
with different elections culminating	in undue interference into the	, ,				
in national elections in 2019	project implementation	and robust and operate at arm's				
		length from political interference				
TARGETTING						
Elite capture of project benefits	Poor households may not benefit	Participatory monitoring of the				
	from the project.	project to ensure the intended				
		target group benefits from the				
		project. The project will use bio				
Draiget tergeting approach not or	Community board targeting	metric registration of beneficiaries				
Project targeting approach not or incorrectly understood by local	Community-based targeting approaches create conflict and	Raise community awareness on the methodology and objective of the				
communities	stigma within the community.	exercise				
Graduation Promotion and Outre	ach Project					
After the graduation cycle, the	Fall back into extreme poverty	The project cycle needs to be				
supported household will not	once the project financed	adequately long (18 - 24 months)				
manage to maintain income status	investment assets are exhausted	and the service provider				
		specialized and experienced				
Calls for proposals for the DFS for	Rejection because of inadequate	REFP to be detailed and				
the poor (outreach) may not result	proposal quality	explanatory with indication of				
in proposals with adequate quality		sources of assistance for applicants				
		compiling proposals				
Crowding-In Fund						

Risk	Impact and Probability	Mitigation Measures
Risk Ability to mobilize participating financial institutions	Impact and Probability Inadequate number of financial service providers (FSPs) to implement activities under the facility	Mitigation Measures The market has a number of local financial service providers with experience in these types of product. The respective Managers of these sub-funds under the Umbrella Fund, will have responsibility for mobilising the FSPs to participate The LOC provides a financial window for support to micro, small and medium enterprises that will be channelled through selected participating Institutions. This should act as a further incentive to participate
Capacity of beneficiaries to raise required matching contribution	Insufficient financial strength will result in only better financially endowed people to use the facility	The beneficiary matching contribution has been let at a low level of 10% which should be within reach of bankable MSM enterprises. The uptake levels will need to be closely monitored during implementation to determine if these levels turn out to be a barrier to participation.
Line of Credit		
Participating Financial Institutions' (PFIs) limited outreach constraining them to provide financial services to the target population.	Projects financed through the externally financed loans would finance only applicants close to branches and in semi-urban environments.	Where possible, loans would be channelled to off-takers in contractual arrangements beneficiaries. The off-takers will retain the proceeds among smaller sub-borrowers. Credit delivery innovations through technology adoption would be encouraged. As far as possible, loans will be disbursed to enterprises who are part of/who can be part of structured value chains
Capacity Building to Financial Ins	stitutions	
High inflation rates (about 22% in 2017) pushed the lending interest rate of finance service providers in the rural areas up to unsustainable levels.	financial institutions as well as loan demand and loan repayment performance	Technology improvements (Digital financial services – DFSs) promoted by REFP and the transformation from credit-led to saving-led institutions can shield against adverse effects as can the putting in place an efficient management and governance system.
ASCA support in particular for the for-profit union at district level or local level will take a lot of time	Informal and complex structure within and between the ASCAs do not allow for progress with the required pace for their professionalization and consolidation.	ASCA support should be conceptualized with a medium to long term focus beyond the duration of REFP. The sustainability of the depends on the strength of member ASCAs and the value

Risk Impact and Probability **Mitigation Measures** addition of the for-profit Union to members **Business Development Support** Target beneficiaries and non-The special focus on more remote The PMU, with the support of the rural communities and artisanal agriculture rural value chain strategic partners in the NPSC, fishermen and other niche participants are not appropriately must undertake a coordinated and markets needs to be a priority for informed, and thus do not access well-planned outreach and the PMU and district level staff appropriate BDS technical information dissemination process assistance in a timely manner. in all 10 districts, so as to inform communities about the value of the REFP. Also, the PMU will undertake outreach (sessions to inform rural communities how to access the provisions of the REFP. Climatic variation and change and Environmental issues Destructive climate related events Given the Mozambican climatic REFP will emphasize planning for characteristics the probability of could affect beneficiaries' long term financial service extreme and adverse climatic provision. Proposed financial potential to pay back loans. events to occur and negatively service mechanisms will be impact on project financed rigorously tested and business interventions has to he models/ pro-forma estimates will be considered high. purposely modest to accommodate climate driven or macro-economic impacts. REFP will aim at increasing households' resilience in the short run, by increasing financial buffers. Over time, increased savings and incomes driven by investments will reduce exposure to extreme weather events. Environmental impact of small-The potential negative impacts of The MFIs supported by REFP will each intervention are expected to scale infrastructure (i.e. clearance engage in the promotion of minor only and of vegetation, loss of habitat, environmental awareness among accumulation of negative impacts water run off disruption, improper the project beneficiaries while will pose a significant risk. waste management etc.) limiting their exposure to lending risks caused by social, environmental and climate issues (avoiding supporting business plans that have potential adverse environmental impacts).

Project costs, financing, benefits and sustainability

A. Project costs

Total project costs including price and physical contingencies, duties and taxes are estimated at USD 72.5 million. The project will be implemented over a period of six years.

REFP investments will be spread between three components: (i) Component 1: Improved access to adaptive financial services for rural entrepreneurs, totalling USD 51.4 million; (ii) Component 2: Capacity building and support for institutions and rural entrepreneurs, USD 10.6 million; and (iii) Institutional Support and Programme Management, USD 10.5 million

Table 2: Project components by financiers

	IFAD		Private Sector		Beneficiaries		GoM		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Improved access to adaptive financal services for rural entrepreneurs										
The Graduation and Outreach Programme	10,188.7	83.5	997.5	8.2	100.0	0.8	915.2	7.5	12,201.4	16.8
2. The Crowding in Fund	6,000.2	51.0	4,002.5	34.0	1,000.0	8.5	758.4	6.4	11,761.1	16.2
3. Line of Credit	27,087.3	98.6	-	-	-	-	382.9	1.4	27,470.2	37.9
Subtotal	43,276.2	84.1	5,000.0	9.7	1,100.0	2.1	2,056.5	4.0	51,432.7	70.9
B. Capacity building and support for institutions and rural entrepreneurs										
Support to essential local institutions	6,469.1	94.5	-	-	-	-	378.5	5.5	6,847.5	9.4
Business Development Support	2,882.6	76.9	-	-	-	-	868.1	23.1	3,750.7	5.2
Subtotal	9,351.7	88.2	-	-		-	1,246.5	11.8	10,598.2	14.6
C. Programme Management	9,520.7	90.6	-	-	-	-	985.2	9.4	10,505.9	14.5
Total PROJECT COSTS	62,148.6	85.7	5,000.0	6.9	1,100.0	1.5	4,288.3	5.9	72,536.8	100.0

Project financing

- 124. REFP will be financed by: an IFAD loan (USD 62.1 million, 85.7 per cent of total project costs), Government of Mozambique (USD 4.3 million, 5.9 per cent of total project costs), the Private Sector, which includes Banks and Microfinance Institutions (USD 5 million, 6.9 per cent of project costs) and the project beneficiaries (USD 1.1 million, 1.5 per cent of total project costs). Based on the IFAD's single currency framework the IFAD loan will be provided in USD on highly-concessionary terms, subject to the availability of USD resources. REFP will absorb the entire allocation of the PBAS cycle 2018-2021 for Mozambique (USD 62,148,581). Finally, the IFAD loan will finance taxes.
- 125. The Government of Mozambique will finance the salaries (on a pro-rata basis) and other related costs of its own staff participating and supporting the implementation of REFP

Table 3: Project categories of financing by financier

	IFAD		Private Sector Beneficiaries			aries	GoM	1	Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Equipment & Materials	426.8	100.0	-	-	-	-	0.0	-	426.8	0.6
Vehicles	775.4	100.0	-	-	-	-	-0.0	-	775.4	1.1
Consultancies	14,507.9	75.2	997.5	5.2	100.0	0.5	3,686.0	19.1	19,291.4	26.6
Credit, Guarantee Funds	32,537.3	86.7	4,002.5	10.7	1,000.0	2.7	-	-	37,539.8	51.8
Training	5,380.6	100.0	-	-	-	-	0.0	-	5,380.6	7.4
Workshop	1,282.8	100.0	-	-	-	-	0.0	-	1,282.8	1.8
Salaries & Allowances	6,018.3	98.4	-	-	-	-	98.7	1.6	6,117.0	8.4
Operating Costs	1,219.6	70.8	-	-	-	-	503.6	29.2	1,723.2	2.4
Total PROJECT COSTS	62,148.6	85.7	5,000.0	6.9	1,100.0	1.5	4,288.3	5.9	72,536.8	100.0

Summary benefits and economic analysis

- 1. **Project profitability indicators.** The overall Economic Internal Rate of Return (EIRR) of the Project is estimated at 17.2%. The Economic Net Present Value (ENPV) is MZN 4,101 million, or USD 68.3 million, based on a Social Discount Rate (SDR) of 10%, as per the World Bank chosen rate for the evaluation of its investments. As ENPV is positive and the EIRR is above the Social Discount Rate (10%) the project is deemed economically viable and acceptable for investment.
- 2. **Sensitivity Analysis**. The sensitivity analysis evaluated the robustness of the proposed interventions. Proxies analysed were: reduction of project benefits (due, for example, to failure of the capacity building initiatives of the project), increase in project costs, delays in project implementation (of 1 and 2 years), as well as an increase of the failure rate of the loans.

- 3. The sensitivity analysis also assessed the result in the delay of overall project benefits by one or two years (all production models). The results of the analysis show that the reduction of project benefits of up to 15% do not endanger the economic suitability of the project. However, were benefits accrued from the project to drop to around 20%, ENPV would drop to negative values, with the EIRR becoming lower than SDR, rendering the project no longer economically viable.
- 4. An increase of project costs of a maximum of 30% would not seriously imperil the project. ENPV remains positive and EIRR is well above the SDR.
- 5. An increase in the failure rate of the loans of up to 35% (from its base value of 20%) would still maintain ENPV above zero, and EIRR above the SDR. However, were the failure rate to reach 40%, ENPV would drop below zero and EIRR would become lower than the SDR, rendering the projet no longer economically viable.
- 6. Finally, a delay in accrual of project benefits of up to 2 years would render the project economically inviable.

Sustainability

- 126. **Economic/Income Sustainability –** the main focus of REFP is to strengthen the income generating base of households targeted by REFP as well as those targeted by ongoing other IFAD supported projects through (i) provision of external financing to strengthen investments and enable working capital purchases, as well as (ii) support for capacity building measures to bring potential subborrowers up to a level where they can productively absorb external loans and generate their incomes more predictably.
- 127. **Environmental Sustainability** The environmental sustainability of REFP depends on (a) ensuring that FSPs do not support entrepreneurial activities that degrade the environment and natural resources, and (b) increased beneficiary capacity of climate change adaption practices, risk management, and environmental awareness. The environmental sustainability of REFP will be assured by continuous monitoring of FSPs' compliance with environmental and social regulations and by the creation of incentives to these providers to mainstream environmental and social issues in their approach. REFP capacity building support, through trainings and workshops, will ensure that REFPs benefits will be accrued beyond the lifetime of REFP. REFP will seek to ensure environmental sustainability in all its interventions by promoting environmentally sound and sustainable resource use practices. The trainings will strengthen beneficiaries' capacities to recover from climate-induced shocks through the adoption of climate smart models tailored to the specific environmental and climate context. Throughout the project cycle, evidence on the potential to reduce vulnerability and increase production through the integrated, efficient and sustainable use of land and water waste resources will be generated, thus contributing to the overall environmental sustainability.
- 128. **Institutional Sustainability –** REFP supports institutions from village level (ASCAs) to provincial and central level. With its focus on financial services, the interest rate spreads over the different intermediation levels need to cover costs and risks. This is ensured through linking lending rates from the union financing institution to the central bank reference rate, so that rates remain positive in real terms and proper spreads and incomes are generated for all intermediaries in the financial intermediation chain. As the REFP is implementing improved infrastructure, access to finance, Business Development Support to rural micro and small entrepreneurs, private and public sector institutions will be recipients of strong, and detailed capacity building support. This will enable them to continue providing support to the target beneficiaries beyond the lifespan of the REFP. Finally, a detailed analysis of risks and proposed mitigating measures that corresponds to each of the subcomponents is included in this report with a view to identify institutional sustainability challenges early and early remedial action, when required.

Appendix 1: Country and rural context background

Mozambique has a total area of 799,380 km², with 786,380 km² being occupied by land and 13,000 km² by inland water³9. The country borders with Malawi, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe, and has a total coastline of 2,470 km⁴0. It is home to approximately 26.4 million people (of which 43% are under 15), with a population density of 33,1 inhabitants per square kilometre and a population growth set at 2,7%⁴¹ in 2016. At its independence in 1975, Mozambique was already facing a difficult economic crisis and the successive civil war from 1977 to 1992 further impoverished the country, rendering it one of the poorest in the world. The 1992 Mozambique Peace Agreement represented the end of the 16 year civil war, and the 1994 elections were the first step towards the reintegration of productive social and economic activities⁴².

Economy. The country is still considered a low income country⁴³ and has grown at an average rate of circa 6-8% in the period between 2005-2015, one of the strongest performances in the continent, but faced a slowdown in 2016, with growth averaging at 3,8%. Nonetheless, forecasts predict 2017 to experience more growth than the previous year, mainly in virtue of an increase in coal exports and development of the natural gas deposits in the north, that have the potential to become one of the largest investments in Africa. The Gross Domestic Product (GDP) in 2016 was USD 11.01 billion, with agriculture accounting for 25% of GDP, industry for 22% and the services sector for 54% ⁴⁴. The Gross National Income (GNI) per capita was in the same year was of USD 480⁴⁵. The country has faced a number of problems related to acquire loans that pushed the country into a debt crisis over the past few years. The International Monetary Fund (IMF) had suspended the country's stand-by credit facility in 2016, and a revised-borrowing framework is currently ongoing with the IMF in order to secure a new economic programme⁴⁶.

Inflation rates experienced an all-time high of 27% in November 2016, but this rate has since undergone a downward trend in 2017, mostly reconnected to a greater currency stability and by the normalisation of food prices⁴⁷. In parallel, the US dollar gained largely against the metical, to gradually relax in 2017. Nonetheless, the national currency is highly at risk of fluctuations, and the country may face financial instability linked to the restructuring of the sovereign debts. Forecasts see the metical reaching a final average of MZN 65.1 for USD 1 by the end of 2017.

Politics. The 2014 elections saw the victory of the National Front for the Liberation of Mozambique (FRELIMO), with Mr. Filipe Giacinto Nyusi being appointed as President of the Republic of Mozambique. The next elections are expected be held in October 2019. Since independence FRELIMO has stably been in power, and after a period of blockade and tension with the opposition party, the Mozambique National Resistance (RENAMO), the country appears to be experiencing a period of cease fire and relative political stability. This appears to have had positive effects also on the will of foreign investors to look at Mozambique as a partner, especially foreign companies that have largely invested in the extractive industries, mainly coal and natural gas. Therefore, one of the Government's key priorities is to guarantee macroeconomic and political stability, so as to continue prompting investments in the extractive sector, as the revenues from the gas sector are expected to

Mozambique.http://www.ine.gov.mz/estatisticas/publicacoes/anuario/nacionais/anuario-estatistico-2016; World Bank country data - http://data.worldbank.org/country/mozambique

http://www.ine.gov.mz/estatisticas/publicacoes/anuario/nacionais/anuario-estatistico-2016

31

³⁹ Statistical Yearbook - Government of

⁴⁰ Central Intelligence Agency, World Fact Book - Country Data https://www.cia.gov/library/publications/the-world-factbook/geos/mz.html

⁴¹ Statistical Yearbook – Government of Mozambique

⁴² USAID - https://www.usaid.gov/mozambique/history

⁴³ World Bank Country Data - http://data.worldbank.org/country/mozambique

⁴⁴ Ibidem

⁴⁵ Ibidem - Atlas method

⁴⁶ Economist Intelligence Unit – Mozambique Country Report 2017 (July 2017)

⁴⁷ Ibidem

start rising in the upcoming guinguennial. This sector is expected to be the major driver of growth in the mid-term with large actors from the gas industry investing onshore and offshore facilities.

Poverty. Poverty has declined at a much slower pace since 2003, falling by only 4 percentage points to reach 52% in 2009⁴⁸. Between 1997 and 2009, population growth outpaced poverty reduction, increasing the number of Mozambicans living in extreme poverty by 400,000 to a total of 11.2 million. As a result Mozambique still ranks as one of the countries with the highest poverty levels (69% at the USD1.9PPP)⁴⁹. The unemployment rate for 2016 was 24,4%⁵⁰ Mozambique, with youth unemployment reaching as high as 41,4%⁵¹. also holds position 181 in the Human Development Index (HDI), with an HDI value of 0.420 and a life expectancy at birth is set at 55.5 years⁵². In 2016 slightly over 10% of the population between 15-49 years of age were HIV positive, and the mortality rate of under-5 children per 1,000 births, was 79.

The country's low agricultural productivity is the result of a lack of appropriate technologies and supports. In addition, produce markets are generally distant, unreliable and uncompetitive for smallholder farmers, who depend on traditional farming methods, low-yield seed varieties and manual cultivation techniques. Alternative sources of income outside agriculture are few. In times of scarcity, poor rural people have little to buffer them from food insecurity. Overall, poverty in rural Mozambique is marked by isolation, inadequate infrastructure and the consequent lack of access to goods and services⁵³. The road network is in very poor condition, and only about 51%⁵⁴ cent of rural people have access to safe water. Rural poverty is also closely related to lack of access to. The recent National Poverty Assessment⁵⁵ indicates that poverty has reduced from 54.2 percent in 2008 to about 49.2 percent in 2014. This is further confirmed by the multidimensional poverty situation based on nonmonetary dimensions⁵⁶, which suggests improvements - almost half of the population was categorised as deprived in all six dimensions⁵⁷ in 1996-97, by 2014/2015 this deprivation had reduced to about 14 percent.

Agriculture. Agriculture is the foundation of the economy in Mozambique. It contributes 25% ⁵⁸ of the Gross Domestic Product and 60% of export revenue, and circa 81% of the population is involved in agricultural activities. In addition, approximately 70% of the population live in the rural areas, rendering the agricultural sector key to the economic development of the country⁵⁹. Major agricultural products include cotton, cashew nuts, sugarcane, tea, cassava, corn, coconuts. sisal. citrus and tropical fruits, potatoes, sunflowers but also beef production and a rapidly expanding poultry sector. Of the available land only 16% is currently being fully cultivated 60. Agricultural production is largely organized in small, hand-cultivated units of land. Ninety-seven percent of production comes from 3.2 million subsistence farms, with an average size of 1.2 hectares⁶¹. Smallholder farmers in Mozambique largely practice rain-fed agriculture, use traditional low varieties of crops, low-intensity fertilizer, minimal pesticides and minimal cultivation techniques. The country's low productivity results from lack of appropriate technology and support. In addition, produce markets are generally distant, unreliable and uncompetitive. Alternative sources of income outside agriculture are few; hence poor rural people

http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report_Name=CountryProfile&Id=b450fd57&tba r=y&dd=y&inf=n&zm=n&country=MOZ

⁴⁸ World Bank (2016) Accelerating Poverty Reduction in Mozambique: Challenges and Opportunities

⁴⁹ World Bank (2016) Accelerating Poverty Reduction in Mozambique: Challenges and Opportunities

⁵⁰ World Bank - http://data.worldbank.org/country/mozambique

⁵¹ https://fred.stlouisfed.org/series/SLUEM1524ZSMOZ

⁵² UNDP Human Development Report 2016

⁵³ IFAD - https://www.ifad.org/documents/10180/bf1817c4-7061-40d6-9291-4512691f15fd

⁵⁴ World Bank -

Poverty and Well-Being in Mozambique: Fourth National Poverty Assessment (IOF 2014/15)

⁵⁶ Poverty and Well-Being in Mozambique: Fourth National Poverty Assessment (IOF 2014/15)

⁵⁷ first level primary school, no access to safe water, inadequate sanitation, grass roofing, no electricity, and very limited possession of durable goods ⁵⁸ World Bank (2016) Accelerating Poverty Reduction in Mozambique: Challenges and Opportunities

⁵⁹ UNDP 2016 - http://www.mz.undp.org/content/mozambique/en/home/countryinfo.html

⁶⁰ USAID; World Bank

⁶¹ CGAP (March 2016); National Survey & Segmentation of Smallholder Households in Mozambique

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 1: Country and rural context background

have few options to cope with shocks. Agriculture investment forecasts see an increment in the agricultural sector by 1.8% in 2016, with a foreseeable peak in investments in 2017 (10,5%) and 2021 $(8.1\%)^{62}$.

In order to prompt the development of the agricultural sector the GoM's Strategic Plan for Agricultural Development (PEDSA) for the period 2014-2020 will largely focus on i) increasing agricultural production and productivity and its competitiveness; ii) improving infrastructures and services for markets and marketing; iii) using land, water, forest and fauna resources in a sustainable way; iv) establishing a legal framework and policies that are conducive to agricultural investment; and v) strengthening agricultural institutions. These objectives furthermore stem from Mozambique's Agenda 2025 document, which advocates for an "integrated, prosperous, competitive and sustainable agricultural sector". These efforts are expected to trickle down and have direct positive effects in regard to guaranteeing food security across the country, and also setting the ground for smallholder farmers to participate in the market in a competitive and sustainable way. The Agenda 2025 also states that agriculture, fisheries and agro-processing are all registered in the Agenda 2025 as activities that require medium and long-term investments, and that, though representing high-risk activities for the banking sector, they are all key to the national value addition and employment creation. The fisheries sector contributed to circa 3% of the GDP in 2012, with a total catch of 208,000 tons. Of this 0.3% came from industrial fishing, 10% from semi-industrial, and 89% from artisanal fishing, with only 0.4% deriving from aquaculture investments⁶³. Both coastal and especially inland fisheries have high potential and the Fisheries Master Plan (FMP) 2010-19 is fully aligned with the previous Action Plan for Poverty Reduction (PARP, 2010-14), with the objective of increasing investments in the fisheries sector as a tool for poverty eradication in the country.

Natural Resources. There is a big potential for the protection and sustainable management of the country's vast natural resource base. The country has over 36 million hectares of arable land and circa 40 million of natural forests (70% of the country), and terrestrial and marine protected areas account for circa 10% of the total territorial area⁶⁴. Of the land available only 10% is currently in use, and of this 90% is reconnected to the rural or family sector⁶⁵. There are ten different agro-ecological zone, characterized by very divers rainfall patterns and types of soil. This diversity, from an agroecological point of view, represents a great potential for the development of different agricultural crops across the different provinces. Mozambique also has 15 water basins, sharing 9 of these with its neighbouring countries. Mozambique unfortunately also experiences many cases of land degradation. deforestation and overfishing, and these, summed to the strong impact of climate change, all represent risks and challenges that the GoM is seeking to tackle by 2025.

The PEDSA indicates Mozambique's alignment with the guidelines of the Comprehensive Africa Agriculture Development Programme (CAADP) in regard to the sustainable management of natural resources, and apart from the countrywide land tenure regularization program launched in 2015 (Terra Segura) that seeks to issue land certificates to 5 million individuals, the PEDSA will also focus (amongst others) on the country's Re-afforestation Strategy, the National Forestry Plan and the Irrigation Strategy. The focus on natural resource management is furthermore visible in the Five-year Government Plan for 2015-19⁶⁶, that seeks to largely promote forestry (and agriculture) as key areas of investment for the GoM, and the National Sustainable Development Program (NSDP). In virtue of the many untapped opportunities there is a strong interest of foreign capital to invest in agriculture, hence land requests have rapidly increased over the past decade, alongside numerous investments (planned and ongoing) in both the forestry and fisheries sector.

33

⁶² Economist Intelligence Unit – Mozambique Country Report 2017 (July 2017).

⁶³ "Support to the Fisheries Sector of Mozambique 2013-2017" - http://www.iceida.is/media/verkefnagagnabanki/Support-to-the-Fisheries-Sector-of-Mozambique-2013-2017---Programme-Document-Common-Fund.pdf ⁶⁴ World Bank -

http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report_Name=CountryProfile&Id=b450fd57&tba r=y&dd=y&inf=n&zm=n&country=MOZ

65PEDSA 2010-19 - http://www.safi-research.org/wp-content/uploads/2015/10/2010 PEDSA FINAL-English 22 Nov.pdf

⁶⁶ Plano Quinquenal do Governo 2015 - 2019

Policy, regulation and supervision in the context of rural finance in Mozambique

1.1 REFP- Policy Issues

The Project Development Objective of the REFP is to increase the availability of and access to appropriate, adapted, inclusive and sustainable financial services in rural areas. During the course of the 6 year implementation period of the national project, several policy issues relating to the financing of target entrepreneurs in agriculture and allied sectors, are likely to emerge. Exploring policy options and studying policy implications of various proposed interventions and addressing the policy issues as they emerge during the course of implementation would pave the way for adopting the right strategy for successful implementation of the project. Identifying suchpolicy issues and finding possible means of addressing the issues assume significance.

1.2 Rural Finance Policy Environment

The details of Rural Finance environment in Mozambique and various enabling factors and hindrances in the environment are explained in the paper, placed as the Appendix. As evident therefrom, the financial services are purveyed by both the formal and informal sector. The formal sector comprises credit institutions, financial companies and capital markets supervised by the BM and insurance and pension market institutions supervised by the ISSM. In addition, there are semi-formal institutions that are not supervised or regulated such as community- based organisations (ASCAs), individual agents (money lenders) and market linkage institutions (outgrower companies). The credit institutions include commercial banks, micro banks, credit cooperatives, E. money Institutes, Leasing Companies, Investment companies, Savings and Credits Organisations and micro credit operators. The rural financial institutions viz.19 commercial banks,11 microbanks, 380 Micro credit operators, 9 credit cooperatives,12 savings and loan organizations and ASCAs are likely to be involved in the delivery of financial services to the target population under REFP. The nature of the financial institutions and the policy and strategic interventions, required at various levels particularly from the Central Bank, Government of Mozambique and related institutions are outlined below:

2. Commercial Banks: Outreach and financial Services:

There is wide regional/provincial imbalance in branch distribution. The branches of Commercial Bank, which were 612 in 11 provinces in 2015 have increased to 642 at the end of May 2017 and 33.3% percent of branches are concentrated in Cidade Maputo province. Only 77 districts out of 163 continue to be unbanked, warranting further intensification of banks' branches in the uncovered districts for credit dispensation. Distribution of financial institutions is skewed and provinces like Zambezia, Gaza and Inhambane where the incidence of smallholders is high has a smaller proportion of financial service providers.

Mozambique's banking sector is dominated by five large banks, Millennium BIM, BCI, Standard Bank, Barclays, and Moza Banco. These banks own around 90.0% of the sector's assets. In general, commercial banks do not serve smallholders, and those with a lending portfolio in agriculture serve medium to large clients operating in more organised value chains. Only 4 commercial banks arededicated to microfinance effectively targeted small holders.

Credit is concentrated in urban areas, leaving productive sectors such as agriculture and MSME industry with less access. The policies, procedures, structure and loan products required for lending to the informal sector are largely absent in commercial banks. 87% of the MSMEs are in rural areas and have little or no access to credit as they are beset with problems like inability to offer adequate collaterals, poor market linkages, business weaknesses, financial illiteracy and requirement of small loan amounts. The limited outreach and the reluctance of banks to lend to the agriculture and MSME businesses, indicate that there is a strong need to nudge and equip them into lending to these sectors.

2.1Bringing Policy thrust / Orientation at GOM, BM and financial institutions for RF/RE:

Notwithstanding the branch licensing regulation issued by BM for encouraging banks in opening branches in rural areas and GOM's "One District, One Bank' programme encouraging CBs to set up agencies in the unbanked district, still a long way is left to ensure full financial inclusion. Agriculture credit stood at 3.4%, which could meet financial requirement of 2.3 % of farm holdings. Thus, much more focus is needed at the corporate policy and strategy level of banks and the creation of enabling

environment by BM/GOM to redirect financial services for agri-business. These could include upscaling the agency arrangement, intensifying digital financial services ,bringing speed and efficiency in financial service delivery in rural areas ,providing incentives to their HR for rural postings and business &building up their skill and insight for rural finance. GOM is required to create a facilitating environment by improving physical and digital infrastructure, and making rural finance a profitable business proposition for banks. Apart from need-based and demonstrative financial and promotional support to the stakeholders under REFP, continuous dialogue with BM,BOM and banks may be held for trying out various policy options to bring out paradigm shift in banks' approach and innovation in the financial services to ensure scale, economy and timeliness in services.

- **2.2 Capital scarcity in the financial system:** Several factors such as lack of interoperability in the payments infrastructure, tying up large proportions of bank funding to petroleum imports and auxiliary mega projects, compulsory lending to the Government, insufficient deposit mobilisation lead to liquidity constraints and contribute to high cost to income ratios of banks. These result in focus on high value corporate and retails lending and inability to serve the traditional middle to low income clientele. It also increases the cost of services, thereby making many products unaffordable to them. There is need for a comprehensive study of these and other factors that impact rural finance and recommend specific measures to augment the resources of formal financial services, especially in the micro finance sector. The broad-based study of the financial sector with a focus on policy could be useful for policy corrections in financial sector under aegis of BM.
- 2.3. **Maintaining Financial Stability**: The banking sector is in the midst of a crisis, with banks like Moza being taken under BM control and another, Nosso Banco having its license withdrawn on the grounds of mismanagement and inadequate capitalization. Banks will face further headwinds in the form of weak deposit growth in 2017, as the population's savings decline in real terms due to persistence of high inflation (over 26%). Weak domestic savings is affecting the country's development, especially in rural areas where more than 80% of the population lives. BM studies indicate that only 2 percent of the population, estimated at over 25 million had positive savings. *REFP should spearhead a savings-led approach in credit dispensation*.

2.4. Introduction of New Policy & Regulations:

Policy initiatives may be taken to evolve/ put in place credit guarantee scheme and crop insurance scheme. The Central Bank should progressively work towards de-risking agricultural finance, paving the way for increasing participation of commercial banks. In view of the expansion of agency banking and mobile banking, Central bank may consider issuing more comprehensive regulation and guidelines in key areas. Initiation of Policy dialogues and provision of evidences/inputs, based on studies to BM, GOM and financial institutions under REFP would be useful.

3. Micro Finance Institutions (MFIs):

3.1 There are 10 Micro Banks and 380 micro credit operators which are termed as MFIs that exclusively service the micro finance sector. None the less, the microfinance sector's growth has been stagnant, with total number of clients remaining below 200,000 and declining loan portfolio. Several limitations and issues have been affecting the microfinance sector /institutional growth and development. The eventual improvement of their financial performance parameters would facilitate their complying with the eligibility criteria and eventual participation in REFP.

3.1.1 Micro Banks

Similar to banking sector, the micro finance sector is highly concentrated with a few (5) micro banks holding over 80% of the loan portfolio and 60% of the borrowers. Micro banks have limited outreach – only 36 branches that are thinly distributed across provinces. They offer limited services because microfinance regulations requires micro banks to obtain authorisation from BM before offering savings services. BM does not authorise the micro banks to offer such services if it considers the bank's internal control system inadequate. Hardly any micro banks mobilise deposits. Due to liquidity constraints and high cost of funds, the micro banks have high interest rates (38-52% annually) which may strain the medium to long term sustainability of smallholder customer business. The banks are also constrained by the inability of the smallholders to provide adequate collateral. All these impact the expansion of microfinance operations.

3.1.2 Micro Credit Operators (MCO):

Micro credit operators served 54,566 clients in 2016 with credit volume is 590,974 (000 MT). These operators are highly dependent on development partners as they are unable to fund their portfolio through deposits. There is wide variation in the size of business and outreach of MCOs as reflected in FSD Moc study. They are largely concentrated in Maputo City and province (80%). Their products and services are more suited to the income profile of small holders, but regulatory restrictions on micro credit operators on providing savings restrict their capacity to meet smallholder requirements.

3.2 Policy and sector development Issues:

- 3.2.1 The absence of up-to-date data- base on the state of the sector is hampering planned and systematic developmental efforts for furtherance of the sector. The data-base on microfinance sector, rural finance and agricultural finance is not generated periodically. Similar is the fate of cooperative credit and ASCAs. In the absence of any otherapex developmental authority for rural finance, the Central Bank may be approached toembark upon digitization and compilation of such data regularly and put it in public domain, if necessary with support of REFP and other donor-driven projects in the financial sector.
- 3.2.2 With a view to enabling the MFIs (micro banks, micro credit operators) to have a larger role in the project, it will be necessary for BM to focus on their individual health, system and process engineering, HRD and governance aspects. A road map for their transformation and upgradation (e.g. from Micro credit Operator to Micro Bank), prospective business plan for 6 years in that direction would be warranted. An in-depth study under REFP would help in bringing out the status and perspectives in the direction. While exploring perspectives of Line of credit under REFP, besides assessment of credit potential, the avenues of introduction of credit guarantee, institutional protection system and wider coverage under private credit bureau might be pursued.
- 3.2.3 The regulatory framework including reporting requirement of Micro Banks is the same as that of commercial banks. A separate regulatory and supervisory framework including reporting framework commensurate with the size and business level of the MFIs is deemed necessary. *BM might be given necessary inputs, based on international experience, facilitated through exposure visits.*
- 3.2.4 Micro credit operators and others which are not deposit-taking institutions do not get adequate oversight and guidance in terms of self-regulation/ supervision. With the AMOMIF being weak and playing no role in promoting self- regulation in micro credit operators, it would be appropriate for GOM and BM to consider instituting a Self- Regulatory Organization (SRO) or entrusting/delegating to certain institution the non- prudential supervision of these institutions, which can fill the void and help in orderly and faster growth of MFI sector. SRO could assume policy dialogue, build up data through appropriate reporting arrangements, ensure compliance to codes of conduct and regulatory norms among member organizations and facilitate over all sector development. In India, MFIN and Sa Dhan, the two micro finance associations have been designated as SROs by the Reserve Bank of India (Central Bank), with suitable regulations to perform the expected functions. AMOIMF may be strengthened under REFP to assume such role eventually.
- 3.2.5 The objective of multi-fold policy initiatives and institutional development measures suggested asabove under REFP is intended to bring in sustainable institutional architecture for financing and graduating rural entrepreneurs, even after closure of the project.

4. ASCA - Status:

4.1 As per FSD MO-FARE study, there were 12,481 ASCAs, covering 2, 27,279members in the country. ASCAs serve as village level savings and credit associations and play a predominant role in the informal sector and a large segment of their members are engaged in agricultural and allied activities. FARE has reported that 18 organisations were promoting ASCAs in 2014, though a recent research yet to be published by FSD Moc identifies 25 promoter organisations. Several efforts have been made to form, strengthen and link ASCAs to financial institutions and there have been varying degrees of success. Their efforts have been directed towards making ASCAs and theirmember's bankable, promoting growth of savings of individual members and enhancing their financial awareness. ASCAs provide an opportunity to rural people to join together, trust each other, save and use group funds for consumption, emergency loans or partly production loans, thereby facilitating

socio -economic impact., , they have proved themselves the best channel to provide last mile connectivity. Being mostly stand alone institutions, they, however, exhibits general weakness in terms of safety of funds, lack of homogeneity and solidarity of groups, accounting and book- keeping deficiencies, lack of avenues to obtain higher credit facility for growth and sustainability, absence of an umbrella /apex organization to provide promotional support for development and maturing of the sector and lack of up-to-date and reliable data. Considering overall potential of ASCAs, in ensuring financial inclusion of the target people under REFP, following policy initiatives and strategic steps could possibly be taken:

4.2 Issues and Initiatives

4.2.1 Strengthening and linkage of grassroots level institutions with mainstream finance: There is a need to forge a link between the formal and the informal channels to optimise flow of credit and other financial services to the rural areas. These perspectives have not been adequately explored by studying various policy and strategic option by policy-making institutions in Mozambique. Under REFP, the need for an enabling regulatory framework for formal financial sector to forge saving and financial services link with the informal sector should be advocated. A comprehensive study under REFP may be supported which could examine the scope of comprehensive policy package with related regulation on linkage routes. It couldsuggest road map for orderly growth and development of the sector; it could map the sector and bring out concrete data on the progress, trends, systems and practices of ASCAs including possible ways for digitization of ASCAs for generation of continuous data, on sustainable basis.

4.2.2Instituting an Apex body of ASCAs: With the developmental efforts envisaged under the project, it is likely that a number of ASCAs would be linked with MFIs/banks and will graduate to strong savings – led channels with higher credit prospects, with potential to transform into group/ individual enterprises in agri business and allied sectors. Hence, the possibility of an Apex Body to assume developmental role to bring about orderly development including saving and financial linkage of ASCAs with banks/MFIs may be expored. If an apex development bank is set up with supervisory powers, it can assume a supervisory, financial and developmental role for the entire sector other than banks (micro credit organizations, cooperatives and ASCAs). Study /exposure visit by policy-makers to some of thecountries having broad-based Apex institutions (e.g. India, Bangladesh, and Uganda)may be considered...

5. Cooperative Credit Institutions

The 9 credit cooperatives and 12 savings and loan organisations in Mozambique. They can both accept deposits and extend credit, though the savings and loan organisations can only lend to their members. Their loan products are aligned to client profile and hence provide small loans for up to 9 months and accept a guarantor instead of collateral. However, their loans are provided at 36 % annually are higher than commercial banks. Credit cooperatives have limited physical outreach because they are in only 5 provinces, Maputo City (4), Gaza (1), Tete (1), Nampula (2), and Cabo Delgado (1) and in 2015 served only 1101 customers. Their total credit portfolio in 2015 stood at 1,776,593 (000 MT) and volume of deposits at 1,677,599 (000MT). Although general law on cooperative was passed in 2009, the scale of operation of credit cooperatives has not made much headway. Mozambican Association of Promotion of Modern Cooperatives (AMPCM) has been set up with membership of 2234 cooperatives and pre-cooperatives comprising over 1 million members. (Mostly non-credit) for policy advocacy. The cooperative credit sector is not cohesive and functions in an isolated way without an Apex body (other than AMPCM) for policy direction, monitoring, promotional and financial support and overall development. There is need for an exclusive apex institutional architecture for cooperative credit institutions for orderly growth and development.

6. Policy Dialogue and implementation framework:

6.1. REFP through national (NPSC) and regional level fora (RPCG) will pursue policy advocacy measures on emerging themes, based on studies and experience. It will place for BM's consideration evidence-based issues like(a) the need for differential prudential/non-prudential regulation supervision and reporting framework for different set of financial institutions;(b) ensuring transparency in reporting financial performance, terms and conditions of credit including interest rate calculation methods by financial institutions; (c) providing savings thrust in rural sector to make savings as collateral substitute. It will also collaborate in the development of broad-based policy for

agency banking, digital finance and other innovative delivery models. The REFP seeks to make BM an important stake holder of the project and a part of the consultative mechanism. It will provide inputs on policy issues to BM from time to time. Joint efforts will be directed to remove policy constraints in introducing innovations in financial products and services (credit, savings, remittance and insurance), digital financial services, contract farming/out grower arrangements, etc.

- 6.2 REFP will be implemented in close collaboration with various Ministries of the Government of Mozambique. It will pursue with GOM for setting up of a Rural Finance Unit in the GOM, particularly Ministry of Economy and Finance /Ministry of Land, Rural Development and Environment to give focused attention to development of rural finance policy and implementation of strategy. The project will pursue and collaborate with GOM for providing policy thrust for rural agribusiness and entrepreneurship, development of rural basic infrastructure (power, road and telecom),mandatory provision of service providers and extension services, formulating a sectoral/value chain development policy, particularly in agriculture& fisheries , providing price support for all potential crops, development of crop insurance for major crops as a de-risking measure, establishing an institutional mechanism for credit guarantee for small entrepreneurs, and addressing constraints in documentation for access to finance and imbalance in rural finance access points.
- 6.3 REFP will strive to enhance application research for policy- making on emerging themes. It will support appropriate institution(s) for the purpose. The project will set up a standing forum for policy development and promote participatory process for policy discussion and dissemination. Such policy forums were supported by IFAD in its programmes in Zambia, Lesotho and Uganda. It will also support convening of policy seminars, workshops and learning programmes on policy themes during the implementation period.
- 6.4 In the implementation process, there have been bureaucratic delays in various levels in the Government. Mozambique stands very low in the ranking of Ease of Doing Business. Policy would be meaning full, if it is implemented through right strategy with skill, speed and scale.
- 6.5 There is emerging need for process reengineering and technology application at various institutions involved in rural finance. On the other hand, financial literacy /awareness of target population to enhance demand side of rural finance for achieving the goal of REFP.
- 7. **FAD's Rural Finance Policy**: The above policy interventions suggested are in compliance with IFAD's Rural Finance Policy, encompassing wide range of financial services, introduction of innovative delivery models, bringing in collaborations in policy-making, striving long term strategies/sustainability of institutions, introduction of demand-driven services and policy-dialogues for creation of enabling environment.

Annex 1

1. Rural Finance Policy Environment in Mozambique

1.1 Introduction

- 1.1.1Agriculture plays a key role in the economy of Mozambique, contributing 25 percent of the Gross National Product and 20 % of export revenues. More than 80 % of the population are economically connected to the agriculture and fishery sectors. Yet agriculture credit constitutes a miniscule proportion of the total credit to the economy. During the period 2012 to 2015, the contribution of agriculture to total credit to the economy varied between 2.2 percent to 5%. In 2015, credit to agriculture stood at 3.4 %. This was sufficient only to cover the financial requirements of 2.3% of 3,920,058 farm holdings in the country.
- 1.1.2 The SME sector too did not fare better with more than 75% being financially excluded from the formal banking sector. There are 4.9 million MSMEs, of which only 6% are fully registered and another 14% are licensed by districts and/or municipalities, implying that a large majority are in the informal sector. 92.7% of these are individual entrepreneurs. 6.6% are micro enterprises employing 1-4 employees and a mere 0.7% are small with 5-49 employees. Less than 2% of the individual entrepreneurs, micro and small micro enterprises have access to overdraft, working capital loan or fixed asset loans; whereas the medium sector is adequately serviced by the financial sector. With

Republic of Mozambique
Rural Enterprise Financing Project (REFP)
Detailed design report
Appendix 1: Country and rural context background

more than 87% of the MSMEs located in rural areas and both agriculture and MSMEs dominating the rural spectrum, lack of credit to these sectors has impaired their sustainable development.

- 1.1.3 The agriculture sector has great potential to host the micro and small enterprises in the rural areas. However, the agriculture sector is beset with problems. 3/4th of all agri holdings are less than 2 ha. A broad categorisation of farms reveals that 34% are less than 1 ha; 37% 1-2 ha; 25% - 2-5 ha and 3% 5 ha or more. (National survey of small holder households in Mozambique, CGAP, 2016). At the bottom end of the spectrum of small farmers (0-10 ha) are subsistence farmers who grow staple crops -cereals, tubers and roots; are net buyers of food and heavily rely on informal financial mechanisms (local savings and loan groups) for financial services. These farmers require basic agriculture inputs to graduate to the next stage. The next type of farmers are farmers with 1-2 hectares, who are already organised in loose (weak) value chains; generate some level of surplus to sell in the market, grow staples and some higher value cash crops (such as tea, coffee, oilseeds, etc.); but have limited access to inputs, storage and information about weather, market and prices. They have some access to financial services. The third category of farmers have, at least, 2 ha of land and sell in local/regional or highly structured value chains; have access to improved seeds and inputs, grow staples and high value crops and have access to a wider range of financial services providers (both formal and informal). The report on financing value chains of perineal fruit crops in Mozambique (KfW- April 2016) classifies the last two categories of small farmers as "emerging farmers". These have the potential to expand and intensify their production and participate in structured value chains.
- 1.1.4 Thus, 71% of the small farmers have limited or no access to markets. As they are not commercial farmers, their demand for market related extension services is limited, which, in turn, has impacted the development of agribusinesses and rural enterprises in formal value chains. In order to develop the agri business sector, a two- pronged approach of transitioning small holder farmers into commercial agriculture (thereby creating demand for agribusiness) and simultaneously upgrading the agriculture extension services (augmenting supply channels through agri business based rural enterprises) required for linking them to formal markets will need to be taken. Small and micro enterprises, with their rural orientation, are best set to step into this void and provide the necessary extension services. Given the vast potential for agricultural growth in Mozambique, agribusiness related rural enterprises also have potential to grow. The role of the financial sector in channelling this growth cannot be ignored. The exposure of the financial sector to agriculture and agribusiness micro and small enterprises is limited.

2. Rural Finance Environment

- 2.1 Financial services in Mozambique are delivered by 19 commercial banks, 11 micro-banks, 9 credit cooperatives, 12 savings and loan organizations, and 380 microcredit operators, mostly microfinance institutions. These formal financial institutions are located mainly in the 11 provincial capitals and in about 60% of the country's districts, leaving 73 districts deprived of formal financial services. The weak penetration of financial services in rural areas is partly due to the liquidity problems experienced by micro finance institutions and the high cost of operations of serving a dispersed population. Mobile financial services are at an emergent phase, there are still problems in interoperability of services offered (M-Pesa and M-Kesh) by it with that of the formal banking system. Since a large proportion of the population lives in rural areas and undertake agriculture related activities, they are largely underserved.
- 2.1.2 There is reluctance on the part of banks to serve the rural sector. Only 10 % of the rural sector is banked, with close to 12% being served by the informal sector. Agribusiness is seen as risky due to the predominance of small scale farming, use of rudimentary production systems, and lack of knowledge and management of commercial agriculture. The main obstacles that prevent the banks from serving the rural population include limited financial access points; lack of basic infrastructure; low economic potential; highly disbursed transaction costs; limited products and services to meet the specific needs of agriculture and small business segments; poor financial literacy; under developed agriculture insurance market; limited compliance with KYC requirements; and lack of adequate collateral (the assets owned by the unbanked do not meet bank requirements). There are 4.9 million MSMEs, of which only 6% are fully registered and another 14% are licensed by districts and/or municipalities, implying that a large majority are in the informal sector. The informality of most MSMEs, their lack of business license, small size, dependency on one person to run the enterprise,

mixing of personal and business finance, unprofessional management, low level of capitalization of business, lack of adequate and accurate financial data and no business address compound to the problem of adverse risk perception by banks. Demand and

3. Factors helping or hindering Rural Finance

Factors that helped and hindered the growth of rural finance at the macro, meso and the micro levels are listed below:

3.1 Macro Level:

3.1.1 Enabling factors include:

- Government of Mozambique's initiatives in Financial Inclusion: (a) National Inclusion Strategy(2016-22), which is organized essentially around 3 basic pillars, viz., Pillar I. Access to and use of financial services; Pillar 2. Strengthening of financial infrastructure; and Pillar 3. Financial consumer protection and financial literacy. (b) Plan for Agriculture Sector, PEDSA, included specific sub strategies relevant to rural and agriculture finance. Under pillar 1 (agriculture productivity), there is a provision for improving access to agriculture inputs and services, especially to credit. Under pillar 2 (access to markets), it is stated that viable harvest credit may be ensured to farmers from commercial banks with backing from the Government and investment in agriculture should be promoted through the development of appropriate financial products and platforms for loans to agriculture.(c) The 'Mozambican Financial Sector Development Strategy (FSDS) - 2013-2022' with the main objective of overcoming identified challenges in financial inclusion and allowing faster development of the financial sector to make it sound, diverse, expansive and a provider of adequate products and services to a majority of households and businesses at competitive prices.(d) Implementation of International Financial Reporting Standards (IFRS) (e) Introduction of the National Payment System (f) Establishment of Financial Information Center of Mozambique (g) Improvement of insurance and social security legal framework, and establishment of the Institute of Insurance Supervision of Mozambique (ISSM). (h) Constitution of the District Development Fund (FDD) annually to fund food production and income- generating projects as well as to create jobs in all the districts. (i) Launching of the "One District, One Bank" Programme that is open to commercial banks and provides incentives for rapid deployment of branches in the country's rural districts.(j) Legislation for creation of a system of Warehouse Receipt (Decree no100/2014) that can be issued by BM or licensed authorities. This certificate specifies the type, quantity and quality of stored goods, identifies location of warehouse and name of the depositor. This will enable small and medium scale farmers or traders to access finance as it will serve as a bank loan guarantee. A Commodity Exchange has been established to give impetus to the agricultural marketing process. For nonperishable crops such as maize, beans, peanuts and sesame seeds, they can serve as a credit quarantee and allow producers to take advantage of high prices that may arise at the time of marketing and increase their working capital through seasonal loans.
- Measures implemented by BM: (a) Regulations for opening branches in rural and unbanked areas such as (i) Notice No. 4/GBM/ 2012, which establishes a special regime applicable to credit institutions and financial companies wishing to expand their activities into the rural areas by setting up branches or other forms of representation and; (ii) Notice No. 1/GBM/2015, which gives the rules and criteria for opening and closing down bank branches, including geographic proportionality for opening bank branches and eligible locations for the same. (b) Setting out the terms and conditions under which banks and micro-banks can expand the activities by contracting bank agents (Notice no 3/GBM/2015). (c) Legislation permitting mobile operators to partner with financial institutions to provide mobile money services. (2010) (d) Setting out measures for protection of funds resulting from issuance of electronic money and guaranteeing the security of depositors and users (Notice 06/GBM/2015). (e) Law No. 6/2015, which allows for establishment of privately owned credit bureau and defines the requirements in terms of legal statute and ownership. It allows for more types of institutions including MFIs, Micro credit operators and others institutions that serve the lower end market, to subscribe to a credit registry.

Appendix 1: Country and rural context background

• Donor driven projects in agriculture and rural finance: Large scale projects being implemented by the World Bank, IFAD, USAID, GIZ, DfID, DANIDA have contributed to the development of financial and rural sector.

3.1.2 Hindrances:

- High Interest Rate: BM raised the reference rate for credit to 23.25 percent. High interest rates make credit to agriculture and MSME sector unviable.
- Banking crisis: The banking sector is in the midst of a crisis, with banks like Moza being taken under BM control and another, Nosso Banco having its license withdrawn.
- Inadequate infrastructure leading to high operating costs: The lack of basic infrastructure (road, electricity, telecom coverage) in rural areas result in high transaction cost for serving the rule poor.
- Inappropriate reporting demands: Micro banks are subject to full fledged reporting requirements that apply to commercial banks. Similarly mobile money operators classified as financial institutions, also have inappropriate reporting requirements. This policy of "one size fits all" can be tailored to the needs for prudential supervision of each type of institution.
- Restrictive regulations on data processing: The current regulations require financial service
 provides to maintain their data processing within the country. Use of cloud- based systems
 would be of great benefit for small MFIs that do not have financial capability to maintain
 costly local IT infrastructure.
- Lack of credit bureau for micro credit operators: Despite new legislation permitting the creation of private credit information bureaus, there are currently no private credit bureaus to provide information on micro credit operators. Small, non- regulated financial institutions have found it difficult to give data electronically.
- Mobile operators are currently not allowed to offer savings services, which can be an attractive service for low income population.
- Banks encounter challenges in implementation of eligibility criteria of agents and the nonexclusivity of agents; few agents can meet the formality and documentation clause set under this notice.
- Land Law 19/97 does not allow private ownership of land. People (including foreign nationals) can apply for a license to use land through DUAT. The license is or a period of 50 years. Under this framework, land cannot be used as collateral and this limits access to financial services of the unnerved population.

3.2Meso and Micro level

3.2.1 Enabling factors:

- Banks are embracing digital services and investing in new technology. While the current focus is on urban clients, this will lay the foundation for reaching out to rural clients as well.
- Growth and outreach of mobile money operators is a positive development with more collaboration between financial institutions and mobile money operators, entry of new players
 Movitel and Zoona and the willingness of some rural players such as ASCAs to embrace these services.
- Stronger farmer associations: While a vast majority of farmers are yet to be organised into farmers' organisations, some of the stronger farmers organisations are playing an important role in intermediating between small holders and other players in accessing credit, facilitating financial education, improving agriculture techniques and bulking produce for marketing; thereby becoming important value chain actors.
- Warehouse receipts: With the emphasis on value chain development, the promotion of warehouse receipts by the Bolse de Mercadorias de Mozambique and USAID's Trade hub offer secure storage of agriculture produce, access to finance, increased linkage to markets and increasing confidence of bankers in agriculture finance.

3.2.2 Hindrances:

- Limited outreach of formal banking services has come in the way of financial inclusion of rural population. This is attributed to high operating costs and the slow pace in embracing alternate outreach strategies.
- The weak penetration of financial services in rural areas is also partly due to the liquidity problems experienced by micro finance institutions. Most of the MFIs do not accept deposits although there has been a growth of rural- based MFIs, only a few of these MFIs offer agriculture loans. Their scale of operations has been very limited due to resource constraints, notwithstanding their thrust on rural poor and small farmers/microenterprises.
- There is limited access to long term finance resulting in maturity mismatch for providing long term loans to small businesses.
- While there is a renewed interest in banks to finance agriculture through profitable value chains, the specialization to assess and analyze loans focused on agriculture is still low.
- The lack of capacity of banks and MFIs to serve the rural areas is manifest in the limited products and services required to meet the specific needs of social and business segments.
 The systems, procedures and processes adopted by these institutions are standardized across different client segments and are not adapted to meet the specific requirements of small farmers and rural entrepreneurs.
- There is lack of interoperability between mobile money operators and between mobile money and other payment systems.

3.3 Client level:

3.3.1 Enabling factors:

- The advent and growth of out grower companies has introduced farmers to better agriculture practices, access to inputs without the hassles of soliciting credit from financial institutions and a market for their produce
- Vast expansion of ASCAs: the lack of access to formal finance and the need for avenues for savings and credit in rural areas has translated in the vast expansion of ASCAs in the rural areas.

3.3.2 Hindrances:

- All banks and MFIs in general insist on collateral for the loan provided which the farmers and rural entrepreneurs find difficult to arrange, particularly when land belonging to the State cannot be given as collateral.
- Documentation requirements for accessing financial services, be it compliance with KYC requirement, particularly obtaining National Identity Card, or documents like DUAT Permission to use Government land, company registration or financial records are cumbersome.
- Besides most of the micro and small units do not have business enterprise plans, repayment capacity or market accessibility, making them too risky to lend.
- Less than 1 % of the poor households (earning less than USD 2 per day) are serviced by micro credit. The poor have meagre income, no savings and hence very little appetite for financial services.
- Rural people, in general, are averse to approaching banks due to lack of financial literacy and, thereby, lack of familiarity with banking products, procedures and system.
- Rural people do not have an avenue to save, as most of the MFIs do not accept deposits.
 They have thus to turn to ASCAs/Commercial banks for the same.
- Rural entrepreneurs/ small farmers have difficulties in marketing their products due to the
 absence of assured marketing avenues. Most of the farmers are subsistence farmers or sell
 sporadically in the market. This limits their demand for agriculture inputs and services and
 cuts them off from formal value chains. Thus, the lack of commercial agriculture and the
 resultant stunting of agribusinesses work as a dampener for growth of rural credit.
- A World Bank Report, published in 2017, presents an analytical framework that shows that there is a positive correlation in Mozambique between access to credit and the adoption of

Republic of Mozambique
Rural Enterprise Financing Project (REFP)
Detailed design report
Appendix 1: Country and rural context background

improved agricultural technologies, since farmers with access to credit are more likely to acquire inputs and use technologies. Therefore, rural areas are faced with problems of limited demand for and supply of credit.

 Agribusiness is unable to shake off its high risk profile contributed by informality of business, lack of capital, predominance of small scale farming, lack of service providers, limited access to physical assets, lack of knowledge of commercial agriculture, little or no financial literacy and lack of poor quality of collateral.

Appendix 2: Poverty, targeting and gender

A. Introduction

According to the National Statistics Institute (INE), in 2015 Mozambique had a population of approximately 26,500 million inhabitants. Population density is 35.6⁶⁷ people per square kilometre, with 70 % of the population residing in rural areas. In 2011, the population growth rate was estimated at 2.8%, with the average household size of 5 members and women constituting around 52.8% of the population. In 2015, life expectancy was 55 years. In the same year, the infant mortality rate was estimated at 84.5 deaths per 1,000 live births⁶⁸. The youth make up 87.4% of the population. In 2016, the Mozambique ranked 181/188 on Human Development Index⁶⁹. The literacy rates among adults are 58.8% (2015) with a higher rate among men (73.4%) in comparison to 45.5%⁷⁰ for women. The real GDP growth rate was 6.6% in 2015⁷¹) and inflation rate was at 12.2% (2016)⁷². According to the National Statistics Institute Survey (IOF) 2014/15, unemployment in Mozambique was 38.4 % nationwide of which 39.8% were women compared to 36.8% men.

B. Poverty and vulnerability in Mozambique

Mozambique remains rooted in deep, rural poverty and still ranks as one of the countries with the highest poverty levels (69% at the USD1.9PPP)⁷³. Poverty is still predominantly a rural phenomenon in Mozambique, where 67% (2016)⁷⁴ of the poor households are located. According to the 2016 Human Development Report of United Nations, 55 % of the population in Mozambique live below the poverty line and 44 % in severe poverty. Poverty levels vary across ten provinces, with poverty prevalence rates ranging from 31.9 % to 70.5 %⁷⁵ for Niassa and Zambezia Provinces respectively. Table 1 in Annex 1 gives key development parameters in the 10 provinces envisaged for REFP coverage.

The challenges posed by poverty in Mozambique are reflected in the Poverty Reduction Acton Plan (PARP 2011-14). The PARP concentrates on increasing agricultural production, promoting the development of small and medium enterprises (SMEs) and an investment in human and social development.

The country continues to face challenges in food and nutrition insecurity and $80\%^{76}$ of the population cannot afford the minimum cost for an adequate diet. The country's stunting prevalence for children under the age of five is high at 43%, with higher prevalence in rural areas ⁷⁷. These problems are further aggravated by the HIV prevalence ($10.5\%^{78}$ and ranked 8^{th} globally), and chronic exposure to weather related hazards. Two out of three people live in the coastal areas and are vulnerable to disasters such as storms, cyclones, and flash floods. The El-Niño, induced drought in 2016, resulted in an estimated 2 million⁷⁹ people in the Central and Northern parts of the country with acute food insecurity.

http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=MOZ

68 Unless further specified, overview sources: National Agriculture Investment Plan 2014–2018 (Comprehensive Africa

http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report_Name=CountryProfile&Id=b450fd57&tba

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⁶⁷ World bank statistics (2016)

⁶⁸ Unless further specified, overview sources: National Agriculture Investment Plan 2014–2018 (Comprehensive Africa Agriculture Development Programme) of the Ministry of Agriculture and Food Security)

⁶⁹ UNDP Human Development Report 2015

⁷⁰ UNESCO (2016); Education Profile of Mozambique United Nations Educational, Scientific and Cultural organisation

World bank statistics (2016)

⁷²World Bank Statistics (2016)

r=y&dd=y&inf=n&zm=n&country=MOZ

T3 World Bank (2016) Accelerating Poverty Reduction in Mozambique: Challenges and Opportunities

⁷⁴ World Bank data (2016) http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?view=map

⁷⁵ International Monetary Fund Country Report June 2011 IMF Country Report No 132

⁷⁶ WFP http://www1.wfp.org/countries/mozambique

⁷⁷ UNICEF Mozambique (2015) http://www.unicef.org.mz/en/our-work/what-we-do/nutrition/

⁷⁸UNAIDS http://www.unaids.org/en/regionscountries/countries/mozambique

⁷⁹ WFP http://www1.wfp.org/countries/mozambique

C. Rural livelihoods

Agriculture is the foundation of the economy in Mozambique. It contributes 25% ⁸⁰ of the Gross Domestic Product and 60% of export revenues; 80% ⁸¹ of the population is involved in agricultural activities. Agricultural production is largely organized in small, hand-cultivated units of land. Ninety-seven percent of production comes from 3.2 million subsistence farms, with an average size of 1.2 hectares ⁸². Smallholder farmers in Mozambique largely practice rain-fed agriculture, use traditional low varieties of crops, low-intensity fertilizer, minimal pesticides and minimal cultivation techniques. The country's low productivity results from lack of appropriate technology and support. In addition, produce markets are generally distant, unreliable and uncompetitive. The findings of the CGAP study (2016) shows that the smallholder farmers engage in agriculture, relying mostly on their own resources, with limited outside assistance from financial institutions and other entities that often form part of an agricultural value chain.

Rural entrepreneurs have a number of income sources from both agriculture and other rural MSMEs. According the CGAP (2016) study, a rural household/entrepreneur in Mozambique had 8 income sources, of which 2 income sources were agricultural related. The study in rural Nampula showed that non-agricultural income represents a much higher proportion of the household income (93%). Besides agriculture⁸³, the rural entrepreneurs engage in a number of non - agricultural MSMEs⁸⁴. Rural entrepreneurs with smaller land holdings tended to diversify their enterprises much more than those with larger holdings. The rural MSEs not only provide income to the rural entrepreneur but also create employment.

D. Rural Women

Rural women, in particular Women Headed Households remain vulnerable and constitute the poorest segment of the population. The Gender Equality Index in Mozambique indicates big discrepancies between male and female. With 61.9 per cent on the Africa Gender Equality Index that measures gender differences across three dimensions: economic opportunities, human development, and law and institutions⁸⁵, Mozambique ranks 16th out 52 African countries. The vast majority of rural women rely on agriculture (90%), where they are engaged in food production. Women have limited access to income generating activities, financial services, technical and business skills, technology and extension services. The challenges faced by women are further aggravated by low education and literacy levels. According to a 2014/15 family budget survey (IOF), there are 74.3 % male-headed and 25.7% female-headed households with the provinces of Gaza, Inhambane and Manica featuring higher percentages of female headed households: 59.5, 67.7 and 55.2 % respectively (INE, 2014)⁸⁶, due to migration of males to neighbouring countries. There are wide gender disparities with respect to access, control and ownership of economic resources and involvement in community decision making.

According to the Demographic and Health Survey (2011), Mozambique has high rates of child marriages. In 2011, 14% of adolescent girls got married before the age of 15 and 48% before the age of 18, with the highest child marriages in Northern provinces (Niassa (24.4%), Nampula and Zambezia)⁸⁷. They are not only deprived of continuing their education, but are often exposed to violence and health risks for both the mother and infant.

82 CGAP (March 2016); National Survey & Segmentation of Smallholder Households in Mozambique

⁸⁰ World Bank (2016) Accelerating Poverty Reduction in Mozambique: Challenges and Opportunities

⁸¹ With more women working in agriculture (90%) than men (70%)

⁸³ The crops grown include maize and cassava, beans, groundnuts, sweet potatoes, and cowpeas. A few households in the central region grow cash crops, which tend to be sugar cane and sesame. Small livestock (chickens, ducks, goats, and pigs) are mainly reared for consumption while cattle are reared for sale.

⁸⁴ Include: vending, selling of charcoal, firewood, traditional alcoholic beverages, handicrafts, and dried fish. At the same time there are self-employed rural artisans/entrepreneurs including: tailors, hairdressers, carpenters, basket makers, reed mat makers, fisheries, stone masons, tinsmiths, barbers and builders. Other non-farm MSEs include: petty trading, fishing, soap making, grain milling, furniture making, cake and bread production, and construction. In addition, remittances are invested in agricultural production (agricultural inputs, poultry, piggery, equipment, agribusiness etc.), transport, bicycle and watch repairs, tailoring and shop-keeping.

⁸⁵ African Development Bank Group 2015; Empowering African Women: An Agenda for Action. African Gender Equality Index; African Development Bank, Abidjan

⁸⁶ Mozambique INE 2014 Reports about head of households

⁸⁷ UNICEF (2015) Child Marriages & Adolescent Pregnancy in Mozambique: Causes and Impact

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 2: Poverty, targeting and gender

Women in agriculture have a workload that if not heavier in physical terms is still more timeconsuming than for men (ADF 2005⁸⁸; INE 2010⁸⁹). Studies also show that women are much less likely than men to grow tradable crops because they concentrate on basic foods to feed their family (Tarp 2000⁹⁰; ADF 2005). An important aspect of the "feminisation" of agricultural production has been that men move out of agriculture and into the private sector and self-employment in non-agricultural sectors to a higher degree than women. Women's limited options to leave agriculture altogether relate to issues such as gender penalties in the labour market, socio-cultural pressure to stay in the village and take care of children, and the importance of agriculture for feeding children, which is often the ultimate responsibility of women.

Women's access to financial services: Women in Mozambique mainly use informal financial services such as Xitique, family and ASCAS. Although banks are the least used, 40% of the rural women compared to 20% in urban areas use MFIs. Banks are mostly used by business women (45%) compared to domestic women (6%). Women engage in low income activities that hinder their ability to save and thereby resort to credit to cater for their unmet needs. 91 Challenges faced by women and their MSMEs include the limited access to financial services, limited market access, shortage of raw material, lack of collateral, savings and insurance, lack of financial literacy, limited knowledge of business development and management skills (no records for administration, lack of planning). Women and youth are particularly disadvantaged and therefore constitute the poorest segment of the rural communities. A CGAP (2015) study showed that 77% individual entrepreneurs and 56% microenterprises are financially excluded. For women in particular, social norms often dictate SMEs and economic sectors in which women engage. For instance, women are involved in production and are less present in business outside the home in Nampula. In certain households, women have less decision making power than men. Despite these constraints and as confirmed by the field visits⁹² during the design mission, there is interest among rural entrepreneurs: poor men, women and youth to save, and insure their MSEs, and they desire to have more options for mitigating risk and to sustain their livelihoods.

The main opportunities that can improve women's access to financial services are: product design, diversification, financial literacy and improvement in convenience of transactions. Women engaged in MSMEs will benefit from expanded financial services to improve their businesses. The low income women use informal mechanisms to meet their financial needs, require financial education while higher income women would benefit from product design to enhance their enterprises.

E. Youth

The present youth policy (1996) defines youth as citizens between 15 and 3593 years. Rural youth consists of 69 %⁹⁴ of the rural population. Youth labour force is increasing by approximately 37%⁹⁵ per annum but the rate of new jobs created is static, hence three quarters of the youth are employed in the informal sector. According to the National Statistics Institute survey, IOF 2014/15 youth unemployment in the country was high at 44.6 % nationwide of which 46.4 % was in young women compared to 42.2 % in young men. Major youth specific challenges when entering the agricultural and non-agricultural MSEs are: insufficient access to knowledge and education; limited access to land; inadequate access to financial services; limited access to markets; lack of brick and mortar financial institutions in rural areas and limited involvement in policy dialogue. In addition, financial exclusion among the rural youth entrepreneurs is higher as they are considered a risky demographic.

⁸⁸ ADF (2005). Republic of Mozambique. Women's Entrepreneurship and Skills Development for Food Security Tunisia: African Development Fund.

PINE (2010) Inquérito sobre Orçamento Familiar 2008/09. Quadros Básicos. Maputo: Instituto Nacional de Estatística

Tarp, Finn (2000); Gender and Agricultural Technology"; In: World Development.Vol.28, No. 7 pp. 1307-1326.

⁹¹ http://www.nfnv.org/wp-content/uploads/2014/08/Women%C2%B4s-Access-to-Financial-Services-in-Mozambique-Report.pdf

⁹² Design team field visit to Angonia district in Tete Province

⁹³ Mozambique National Youth Policy (1996)
94 UNCDF (2015) Youth Start Global: Youth Economic Opportunity Ecosystem Analysis 95 UNCDF (2015) Youth Start Global: Youth Economic Opportunity Ecosystem Analysis

B. Socio - economic characterization of Rural Smallholder households

In Mozambique, rural smallholder households that engage in agriculture fisheries and non agricultural MSMEs are categorised into four broad categories: ⁹⁶ (i) Smallholder subsistence and semi-subsistence producers, (ii) Rural household (self-employed) entrepreneurs (iii) Emergent Farmers (market oriented producers) and iv) Medium Entrepreneurs (transit and stable). The criteria for defining the smallholder farmers is based on (i) landholding size; (ii) market orientation; (iii) labour input; (iv)income; (v) farming system; (vi) farm management responsibilities; (vi) capacity; (vii) legal aspect and (viii) level of organization. The primary target group of the Project consists of poor and disadvantaged rural households involved in agriculture, fisheries and MSMEs. These will include men, women, women head of household, youth including the vulnerable people. In line with the rural livelihood assessments of the country, and the ongoing IFAD portfolio, the main characteristics of the target group include i) smallholder farmers (subsistence and semi-subsistence), ii) smallholder fisher men and women, iii) rural household and micro-entrepreneurs.

- 129. The following section describes characteristics of four broad categories of rural smallholder households and MSMEs categories ⁹⁷ based on resource endowments and livelihood strategies.
- 130. The direct target group will consist of poor and disadvantaged rural households involved in agriculture, fisheries and household enterprises. These will include men, women, women head of household, youth including the vulnerable. In line with the rural livelihood assessments of the country, and the ongoing portfolio, the main characteristics of the target group include i) smallholder farmers (subsistence and semi-subsistence), ii) smallholder fisher men and women, iii) rural household and micro-entrepreneurs.
- 131. **Smallholder subsistence and semi-subsistence producers**: This category will consist of poor rural households engaged in both agriculture production and fisheries. They have limited access to land, inputs, credit, markets and market information, representing about 99 per cent of the agriculture sector producers in the country. These producers are net producers of staple crops, food insecure with no proper water and soil fertility management practices. They are under-covered by extension, and have a longer learning curve in the uptake of new technologies and approaches. They largely operate as individuals and are highly vulnerable and dependent on their farm produce. They have weak bargaining power, poor market linkages and no access to market information.
- 132. **Rural household (self-employed) entrepreneurs**: This category includes subsistence producers, engaged in various entrepreneurial incomes generating activities off-farm. They have limited access to finance, land, and live below the poverty line. In addition, they have insufficient production, depletion of food stocks, and have high risk exposure to rising food prices, thereby are food insecure, and exposed to acute malnutrition due to inadequate diet. They also have limited resilience to climatic shocks; therefore households are highly vulnerable, live off of farm produce, either by consuming, selling, or trading their agricultural labour. This is an important target group deserving promotion because of their potential for income and employment generation. The entrepreneurs are interested to expand their activities but have limited access to financial resources. They have limited business and technical skills, however a fully integrated approach providing credit, raw materials, technical and business training as well as marketing assistance would be beneficial for this group. They also may need small equipment to further support their business enterprises.
- 133. *Emergent farmers (market-oriented producers)* are considered as economically active, commercially viable (to an extent) and in a position to benefit from opportunities along the agricultural value chain. They will be targeted in so far as they bring experience, dynamism, innovation, and services to the poorer subsistence-oriented farmers. These emergent smallholder farmers are already involved in value chain production (existing cassava, horticulture, livestock producers and fishermen). This group is composed of both poor and non-poor, who have already graduated to market-oriented agriculture. This group has successfully increased production, applies fertilizers and some agronomic practices, and is interested in further expanding their business, increasing value-added and developing new activities that support the production and marketing of target crops.

Small and medium entrepreneurs (transit and stable): This category has multiple income sources and includes wages from occasional labour, salary from employees, retail, agriculture and other non-

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⁹⁶ US2,50 PPP/day form CGAP (2016) National Survey & Segmentation of Smallholder in Mozambique.

⁹⁷ Draft COSOP for Mozambique 2017

farm income generating activities. The business employs 5 to 20 workers and monthly income is between USD100 – USD1000. The group earn higher income, has resources for addressing emergencies. The household income is split equally between agriculture and non-agricultural MSEs. The group has been set up by policy makers, development agencies and financial institutions. The business is usually obtained through family inheritance usually originating from an agricultural base. The group can access credit for the formal financial institutions for funding MSEs operations as well as buying new equipment to replace obsolete machinery. The group is wealthy, more educated and more prepared to tackle emergency situations.

- 134. **Women** will be directly targeted as they constitute the main constituent engaged in agriculture, and the majority of the rural population. Female-headed households are amongst the poorest and their economic progression is hindered by a combination of social and structural constraints. Their access to land, knowledge, inputs, finance, high value agriculture chains and capacity to generate income is heavily curtailed by traditional gender roles that will undermine their participation unless gender is mainstreamed into all project's components. their participation will be prioritized and in addition to mobilisation strategy, the project will apply affirmative actions (i.e. quotas) to ensure their equitable participation and benefit from the intervention. Project implementation and management arrangements will be gender sensitive. Interventions will be aligned to the Strategy for Gender Inclusion in Agriculture (2016-2025) developed by PROSUL for the Ministry of Agriculture and Food Security.
- 135. **Youth** will constitute a direct target group because they are more likely to be resource poor, lack control over assets and have limited livelihood options, and their integration into rural economies has long-term positive social and economic consequences. Selection criteria will prioritize their participation whenever possible and a number of activities have been identified that will address their needs and priorities. Youth will be mobilised and consultation to capture their view, aspirations and expectation will be conducted. Interventions will be guided by the Gender, Youth and Social inclusion manual. In this regard, the project will consider the heterogeneity of the youth cohort i.e. Gender, level of education, interest & aspirations in determining investments.
- 136. Highly vulnerable and marginalized households i.e. HIV/AIDS affected, elderly: This group comprise child and/or female headed households and the elderly women who assume the role of carer for orphans and the sick. They are highly vulnerable due to the impact of HIV/AIDS, which retards agricultural production, and threatens food security, due to the lack manpower at crucial moments of agricultural productivity. They may also be impacted by traditional land tenure systems, where women can lose access to land All factors (HIV/AIDS, Disabilities, Elderly) influence the availability of other household members for productive activities, while they are tending to their needs. IFAD will consider cross-cutting initiatives to ensure that project interventions are sensitive to their unique circumstances, in particular through training and capacity building on production, business skills to facilitate household /group enterprise development, diversification of production, access to markets. This will also include the inclusion of HIV/AIDS Nutrition, dietary diversity & food management in extension modules.

Table 2 in Annex 1 gives the categories and characteristics of smallholder households

F. REFP Targeting Strategy and Measures

REFP will implement an inclusive targeting strategy to ensure that project benefits are distributed to a large number of poor rural entrepreneurs and poorer members of the communities. The targeting measures will include geographic targeting, direct targeting, and targeting quotas for youths (20 per cent) and women (50 per cent) rural entrepreneurs. A total of 63,370 MSMEs will be supported and this will benefit 209,400 poor rural entrepreneurs. In addition, 78,300 beneficiaries will benefit directly from access to non-financial products to give the total beneficiary poor rural entrepreneurs of 287,700 as shown in table 3 in Annex 1.

a) Geographic targeting

The project shall on the one hand seek to provide a consolidated response to the demand for financial services within existing IFAD projects being implemented in the central, northern and southern regions of the country ⁹⁸ and at the same time invest a greater proportion of its resources in the central

⁹⁸ Ongoing IFAD - funded programmes of PROSUL, PROPESCA, PROMER, PSP and PROAQUA.

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 2: Poverty, targeting and gender

provinces of Sofala, Manica and Tete. The central region has the highest concentration of the poor (49%), is under-served by rural financial services and yet has in recent years been demonstrating increased agribusiness increased demand for rural financial services. REFP will initially start in the districts already covered by IFAD projects and programmes and will be gradually rolled out to other new areas⁹⁹. The Project will target micro and small enterprises in agriculture and non-agricultural related sectors. Table 5, Annex 4 shows the targeted areas with ongoing IFAD-funded programmes.

b) Self-Targeting Measures

The approach to self-targeting will be based on interventions and support that respond to the priorities, financial and labour capacities and pre-existing livelihood strategies of the target groups. Deliberate efforts will be made to ensure that the selected MSMEs value chains will be suitable for women, youth, poor people and people living with HIV/AIDS considering their potential for food security, local sales, small volumes, low input, low risk, low risk and proximity to homestead, availability of local processing equipment and value-adding opportunities. There will also be purposive selection of technologies that address women's labour constraints, and are also suitable for use by the youth and vulnerable groups. The project will promote the use of self-help labour input, as a precondition for accessing certain types of project and individuals in contexts where the upper class consider manual labour as socially degrading.

c) Direct Targeting

Overall, an inclusive approach will be pursued to enable the extremely poor and food insecure, vulnerable (HIV/AIDS affected and elderly) to participate and benefit from the relevant project interventions. The project will target directly the poor and disadvantaged smallholder farming households, guided by the characteristics of smallholder farmers outlined in table 2, Annex 1 and application of the eligibility criteria will be conducted in a participatory manner in conjunction with the communities involved. Approaches such as participatory wealth ranking could be used in order to rank the communities into different wealth groups. In approving application forms from a group, the intermediary institution or fund manager will take into consideration the number of female-headed households to benefit.

Due consideration will be given to i) participating households characteristics i.e. must be living below the national poverty line, ii) farmer groups or associations must be at least 70 percent made up of small farming households; iii) priority for districts, localities and communities that have a high incidence of poverty; iv) social affiliation, v) labour, income source, vi) specification of quotas for the participation of women (50 per cent) and young women and men (20 per cent). Projects will be expected to work with partners to ensure that the disadvantaged individuals – HIV/AIDs affected elderly – have access to the full range of assistance self-targeted to the poorest. Participatory measures will also be employed to involve communities in the selection of beneficiaries.

Women and Female headed households: are a highly vulnerable group engaged in agriculture and non-agriculture MSEs but lack control on productive assets, income and decision making. They are vulnerable because of deeply embedded socio-cultural attitudes and practices. These factors result in their impoverishment. 50% of the targeted beneficiaries will be women.

Youth: These include (i) young men and women (age 15 to 35 years)¹⁰⁰ who are engaged in rural MSEs at subsistence level working as wage labourer and /or as unpaid family workers with an interest to engage in MSEs as business and increase their income and (ii) unemployed young men and women who are not directly engaged in rural activities who are interested to explore the sector, identify and engage in better employment and self-employment opportunities offered by the

⁹⁹ The criteria for the selection of the districts is based on the following considerations: a) they are under-served by rural finance services, yet with considerable demand for those financial products and services that have been piloted with successful results with a high potential for rural development; b) availability of an enabling business environment for investments in MSEs in the rural sector; c) absence of significant investments (both private and public), that address the need for value addition for smallholders; d) high poverty and food insecurity; e) high rural population density; and f) relatively developed infrastructure and road network linking the districts to market outlets; g) agricultural potential/ surplus, production, h) trade activity, i) complementarity /avoiding duplication with other projects and j) rural districts

rural districts.

100 Mozambique National Youth Policy (1996).

agriculture, fisheries and non-agriculture MSEs. At least 20% of the targeted beneficiaries will be youth.

Table 3, Annex 1, gives a Summary of REFP Beneficiaries Targeting Quota and the Distribution of beneficiary rural entrepreneurs per province is given in Table 4.

d) Empowerment and capacity building measures

137. The main focus will be to support the poor, women, youth and vulnerable individuals to have a stake in the decision making process at the household and community levels. ¹⁰¹ The main entry point is through exposure, training and capacity building in both soft and hard skills. The soft skills relate to the sensitisation efforts that are focused on addressing cultural and traditional norms, gender and age stereotypes that inhibit equal participation and benefit. In line with the new IFAD focus on promoting transformation of gender relations, REFP will implement a range of capacity building interventions for rural entrepreneurs and MSMEs as well as support institutions working with rural entrepreneurs. The Project will contribute to three main outcomes for Gender Equality and Women's Empowerment (GE/WE):

- Expand women's economic empowerment through access to and control over productive and household assets. Women heading households and women in male-headed households will be empowered. Their financial, business and entrepreneurial skills will be strengthened to build small businesses and effectively engage in income generating activities (IGAs). Women will be assisted in accessing key technologies, equipment, financial and non-financial services to increase fish/ agricultural production and productivity.
- Strengthen women's decision-making role in the household and community and their representation in membership and leadership of local institutions. The use of capacity building, including household methodologies, will ensure that women are fully part of decision-making in the household and regarding economic related activities. Their participation in ASCAs (where women account over 50% of participants) will be used to encourage their membership and leadership in those groups and organisations and key committees created by the project and existing ones that will be strengthen by the intervention. In particular, the project will focus on strengthening women's leadership skills in ASCAs and in decision making positions, by providing training to women-led ASCAs. Achieve a reduced workload and an equitable workload balance between women and men, girls and boys. Time and labour saving technologies as well as other type of technologies will be promoted by the project. Another main contributor for an equitable workload balance will be the application of HHs methodology at household level.

e) Enabling Measures

REFP will provide training to rural entrepreneurs and support to institutions working with rural entrepreneurs. REFP will also provide relevant capacity needs for financial services intermediaries. Various activities are proposed under sub-component 2.1 and 2.2 and these include among others (i) Institutional and technical capacity building of financial service intermediaries; (ii) bbuild a database of MFI performance and promote social performance management through Mozambican Association of MFIs, (iii) transformation of FARE to a sustainable and permanent rural and microfinance support organization; (iv) Establishing and strengthening the "Development Finance Coordination" secretariat under the Ministry of Economy and Finance; (v) Supporting the Bank of Mozambique to assist the transformation of MFIs and promote financial literacy and consumer protection.

f) Operational measures

A Gender and Youth Expert will be recruited as part of the PMU (refer to TOR in Appendix 5). The expert will be responsible to supervise the implementation of the poverty, gender and targeting strategy, and to develop capacity building tools for the implementation of activities under the two

51

¹⁰¹ Draft COSOP for Mozambique, 2017

components and to provide leadership, supervision and support capacity building and mentoring activities for gender mainstreaming.

G. REFP Gender Strategy

REFP recognizes that financial services in rural areas have important gender dimensions affecting women and men differently, and different categories of women. Access to financial services and opportunities are frequently unequal. Although women are more active than men in agricultural and non-agricultural MSMEs, their prospects of generating larger productivity gains and income are limited by a range of factors - a lack of business skills, limited of labour, lack of finances, limited access to markets, and time constraints. Women also have weak representation in decision-making bodies dealing with productive and economic issues due to their traditional and social role. Due to their domestic and reproductive roles and gender relations, women spend more than 14 hrs doing agriculture and domestic work. Rural women face difficulties in accessing financial services - loans and credit - due to the conditions imposed by lending institutions, the need for collateral as well as the need to obtain the permission from the husband.

Despite these constraints, poor women and men are able to adapt and innovate and can benefit from the increased availability, access and use of appropriate and sustainable financial services in rural areas. The gender and social inclusion strategy will consider lessons from existing IFAD experiences in the country, and will support women farmers/fishers to take advantage of financial services and economic opportunities provided by REFP. REFP will implement a number of pathways for empowering women and promoting gender equality. The Project gender strategy aims at equal involvement and benefits of women and men in the development of the intervention. Women and men of different ages and socioeconomic categories, including youth, will be given equal chances to participate in REFP activities and obtain equal returns.

Increasing social capital among the poor is a guiding principle of the proposed Project, which emphasizes the importance of enhancing economic and social inclusion of vulnerable and marginalized groups in targeted rural communities. This will comprise unemployed youth, elderly women and men, widows/orphans, the disabled and people living with HIV/AIDS. In addition, women will be supported in becoming active and vocal members of relevant organizations. It will also support (i) women smallholders' farmers access to services, inputs and assets; (ii) women and youth inclusion in capacity building; and (iii) nutrition education. In consideration of women's (i) low levels of literacy and numeracy, (ii) lack of business development and management skills and (iii) limited voice, leadership and decision making capacity in organizations and business management, the Gender strategy will include the following:

- Gender Analysis: A gender analysis study will be conducted in order to understand the different roles, interests and priorities of women and men in accessing financial services.
- Development of a REFP Gender Strategy: The PMU Gender and Youth Expert shall develop
 and implement a gender strategy for the Project to ensure that gender concerns are
 mainstreamed in all Project activities throughout the implementation period, in order to offer
 equal opportunities under the Project to men, women, women-headed households, youth and
 other disadvantaged groups. The strategy will take into account the difference that exists
 among women in terms of age, ethnicity and socio-economic category and the dynamic in
 gender roles and relations. Technical Assistance will be hired for 1 month to assist with the
 development of the strategy
- The development of REFP Gender Training Manual will be done jointly in the first year of the project by the PMU Gender and Youth Expert (see TOR in Appendix 5) in collaboration with gender focal persons in relevant government institutions for instance the Ministry of Agriculture and gender focal points from the current IFAD funded projects as well as within the financial intermediary institutions and service providers. Technical assistance will be provided by a Gender Specialist who will be hired to assist with the development of the training manual.
- Development of a framework on collecting sex disaggregated and youth disaggregated data; The PMU gender and Youth Expert will be required to set up a framework on collecting sex disaggregated data that is relevant to the project components.

- Gender Sensitization course for key staff of intermediary institutions: Selected staff and gender focal points persons from the institutions will undergo a Training of Trainers Course that will enable them to conduct a gender sensitisation course for their own key staff of intermediary organisations (commercial banks, ASCAs, MFIs, Non-Banking Financial Institutions¹⁰² (NBFIs)/Financial Non-Government Organisations (FNGOs), etc.). This Gender Sensitization course will be mainstreamed in the overall capacity building activities of Component 2.
- Women specific projects: REFP will provide specific financial products that are aligned to the
 needs and profile of women in different levels on income. For instance while ASCAs are
 suitable for low income women, higher income women would require sophisticated products
 to grow their businesses. Women will benefit from business/ entrepreneurship development
 skill training, alleviating constraints on start-up capital to establish MSMEs, and increasing the
 provision of business support coaching and mentorship for the MSMEs.
- Strengthening women's social capital: The project will support service providers to provision of low cost savings that allow small deposits and withdrawals and that pay interest on balance as well as credit products taking into account the type of activities women engage in and that are adequate to women's needs.
- Training of Banks: Under component 2, banks risk assessment analysis will improve their understanding of business operations and will help them to change their perception of risk and reduce the risk level attributed to clients, thereby reduce the banks demands on collateral requirements. Bank staff will be trained on products and services they offer and on financial services to serve their clients.
- Training in financial literacy: and leadership training for women: REFP will deliver financial literacy to raise the awareness of financial products and services to men and women, expand mobile banking, etc. The training will work on their capacity to engage in business activities and become leaders. This activity will support women participation in groups, cooperatives and enterprises, enabling them to engage in profitable income generating activities and benefit from them. Training will target women who are already member of producers' organizations, cooperatives or private enterprises or those who have the potential to be active members of one of those. The intervention will pay particular attention to encourage women in key leadership position.
- Training of REFP staff and staff of intermediary organisations and service providers in each
 district on social analysis, youth and gender sensitive programming. The Project will pay
 careful attention to ensure trainings respond to women's needs. To ensure their inclusion
 (50% participants) the extension agents will consider appropriate time, location and childcare
 facilities will be provided.
- Stakeholder review meetings to share lessons learnt and best practices in relation to mainstreaming youth and gender in MSMEs. REFP will apply continuous learning and analysis based on field experiences to develop more effective approaches and to generate information for evidence based advocacy and policy dialogue.
- Support the implementation of the Rural Finance Sector Gender Strategy in MSMEs

Gender Mainstreaming in Project implementation

REFP will ensure gender mainstreaming through targeting and participation of women in all the activities. The strategy for gender mainstreaming will be described in detail in the Gender Strategy that will be developed for REFP. The project will adopt a gender sensitive approach ensuring that women equally benefit as men. The project will create an enabling environment for women entrepreneurs through the provision of business development services, access to credit to allow the women to engage in viable MSMEs. In addition, gender sensitisation training is planned for all the project stakeholders. The project will encourage active involvement of women and men in planning and sensitisation activities and will ensure the promotion of gender equality in ASCAs and other activities. In particular, the project will focus on strengthening women's leadership skills in ASCAs and in decision making positions, by providing training to women-led ASCAs. Rural women and men will be informed about REFP and how they can benefit from what is being offered by the project, also

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¹⁰²A non-bank financial institution (NBFI) is a financial institution that does not have a full banking license or is not supervised by a national or international banking regulatory agency.

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 2: Poverty, targeting and gender

taking into account their specific needs and constraints. The project will ensure gender parity for all the capacity building, training, and meetings as well as in the recruitment of staff for the PMU. In addition, the lessons learnt will be shared with a wider audience with a view to scale-up best practices.

The project will also address issues relevant to household affected by HIV/AIDS, through reducing stigma by increasing awareness about HIV/AIDs, its prevention and consequences. The project will also stimulate ASCAs initiatives aimed at mutual help for members who are faced with problems such as labour shortages, medical bills by promoting local savings schemes that can form safety nets for affected households and by specifically selection members of smallholders who will be trained as peer educators. All the above will be mainstreamed in project activities through integration in the terms of reference of contracted services providers, the curriculum for capacity building and associations.

Whereas cultural and social constraints may limit women's participation, the Project will put in place separate consultation modality for mobilization and creation of women's groups and leadership.

I. Youth Engagement and Strategy

Youth Engagement: REFP will seek to address the problems facing the youth in Mozambique as highlighted in Section E. REFP will ensure that young people have access to relevant and affordable financial services, and will facilitate their access to entrepreneurship training, mentoring, apprenticeships, and other relevant nonfinancial services that can provide incentives and opportunities for young men and women to engage in sustainable rural MSEs in order to increase employment and income. Such opportunities will include Youth Fund for scouting, training, mentoring and networking enterprising young men and women, providing them with all rounded business and entrepreneurship training and linking them to service providers. By supporting the creation of incubators (professional training centres) and the development of innovative activities for the curriculum, the National Youth Incubation in MSEs aims at providing not only theoretical and practical knowledge for young men and women, but also enhancing the opportunities to create direct linkages with the reality of business and its key actors. The training will cover a wide range of agriculture, fishing and non-agricultural enterprises 103.

Youth Strategy: The interventions will create rural labour opportunities, in particular for rural youth, in the formal and in-formal MSMEs sectors. The Project will: (i) prioritise young people for vocational training related to capacity building activities in business skills and vocational skills development; (ii) provide seed capital as loans to the trained youth to engage in small enterprise development and (iii) support the creation and mentorship of youth led enterprises. Equality between young men and young women will be respected in their selection and participation and implementers will be trained in specific approaches for reaching out and involving youth, especially young women who may face additional constraints compared to their young male counterparts. In each province, the project will identify and facilitate low skilled rural youth already engaged or potentially interested in engaging in agriculture and non-agricultural MSMEs in the various areas highlighted above. REFP's will implement a youth incubation programme that is aimed at creating jobs for youth in the agricultural and allied sectors. The youth will receive vocational skills training and on graduation the youth will be provided with an equipment kit or access small loans to start their business. In addition, there will be opportunities to target and involve the young men and women to become aggregators, agro-dealers, traders or agents between market-oriented producers and off takers or large agro-industries and/or wholesalers. Through the provision of Technical Assistance, the youth will be identified, trained and supported to lead profitable enterprises and develop youth-led MSEs in various sectors.

J. Monitoring and Evaluation

Monitoring of components during implementation, especially with respect to adoption rates, outputs and outcomes will be disaggregated by gender and age. Where relevant, project management will be encouraged to respond positively to any clear learning opportunities or any issues that need to be addressed.

¹⁰³ Including fishing, soap making, grain milling, furniture making, baking, agribusiness, building, tailoring, tinsmith, extractive sectors, retail and agriculture (crop and livestock enterprises and other enterprises along the value chain)

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 2: Poverty, targeting and gender

Gender and age disaggregated data (youth versus non-youth) will be collected at all stages of the project and used to fine tune operational strategies. In addition to the progress and impact measurement of all project activities, REFP will monitor targeting effectiveness and progress in the advancement of gender equality and engagement of youth in target communities through participatory processes at community level.

As part of the training to be provided to REFP staff, it is expected that field staff in particular, are attentive to critical monitoring of intended beneficiaries to ensure they are effectively reached and understand the effects of interventions within each target group. Field staff will also monitor, through participatory processes, the occurrence of any unintended effects of project on men, women and youth, together with gender relations in target communities. The project's mid-term review will also assess targeting effectiveness, and the quality of participatory processes used by the project, including processes used to monitor targeting performance.

It is expected that through the implementation of the Gender Strategy, the following positive changes will be observed in beneficiary households (depending on their level): (i) increase in women owned MSMEs and greater participation in community spaces and decision-making; (ii) increased / more equal access and control of productive assets by women; (iii) improved decision-making of women at household and community level; (iv) more equitable workloads between men and women at household level.

K. Capacity building and household methodology

Household methodologies will be used in capacity building activities related to nutrition as well as production outcomes. Inequalities in gender relations at the household level have a direct impact on agricultural production and productivity, and on other desirable development outcomes, such as education, food security and nutrition. Household methodologies involve working with all household members towards achieving a common household vision. Household methodologies have been successfully used in IFAD supported projects in Uganda, Chad, Malawi, and Zambia and are appropriate for livelihoods approaches as well as value chain development. In REFP, the methodology will be implemented at the group level. In entrepreneur empowerment, the methodologies will be used to ensure that organizational goals are inclusive, address issues of power and gender, and strengthen mechanisms for dialogue.

Households' methodology has been adopted in Mozambique as part of the following projects and programmes: PROSUL, PROPESCA, PSP, PROAQUA, PROMER and therefore lessons will be drawn from existing experiences in country.

Annex 1: Targeting checklist

Annex 1: Targeting Checklist				
Targeting checklist	Design			
1. Does the main target group – those expected to benefit most – correspond to IFAD's target group as defined by the Targeting Policy (poorer households and foodinsecure)?	Yes, REFP will target the rural poor in the rural areas where over 70 per cent of people live below the poverty line. It is estimated that 2 million ¹⁰⁴ people face hunger in 2017 (due to poor harvest, HIV infection and El nino induced drought).			
2. Have target sub-groups been identified and described according to their different socio-economic characteristics, assets and livelihoods – with attention to gender and youth differences (matrix on target group characteristics completed)?	Yes, target group has been identified based on review of literature and interviews with farmers, rural entrepreneurs and key implementing agencies in Mozambique, and include women and the youth, and vulnerable households excluded from financial services.			
3. Is evidence provided of interest in and likely uptake of the proposed activities by the identified target sub-groups? What is the evidence (matrix on analysis of project components and activities by principal beneficiary groups completed)?	Yes, with 60% of the population who are financially excluded, REFP presence an opportunity for the improvement of rural livelihoods and a strategic priority for both the Government and rural entrepreneurs. Field visits and consultations during the mission confirmed high interest from men and women and communities visited.			
4. Does the design document describe a feasible and operational targeting strategy in line with the Targeting Policy, involving some or all of the following measures and methods:	Yes, the design describes a multi-pronged and inclusive targeting strategy.			
4.1 Geographic targeting – based on poverty data or proxy indicators to identify, for area-based projects or projects, geographic areas (and within these, communities) with high concentration of poor people;	Yes, REFP targets 10 rural provinces of Mozambique where there is a high concentration of the rural poor, and where rural households are financially excluded in particular women and youths. The project will start in the districts where there is already IFAD-funded project with a financial services component and gradually expand to other districts.			
4.2 Direct targeting – when services or resources are to be channelled to specific individuals or households;	At least 5 per cent of total beneficiaries should be female-headed households and another 20% unemployed underemployed youth (50 % young men and 50% young women). Poor and food insecure rural households will be identified through transparent participatory process with the communities.			
4.3 Self-targeting – when good and services respond to the priority needs, resource endowments and livelihood strategies of target groups;	REFP gives opportunity for the participation of poor farmers, in particular women, youths and HIV/AIDS affected households through support from the Graduation Promotion and Outreach Project. The poor households are given loans and technical support to implement micro enterprises that will pull them out of poverty. The benefits arising from the intervention will be enjoyed by a wider populace.			
4.4 Empowering measures – including information and communication, focused capacity- and confidence-building measures, organizational support, in order to empower and encourage the more active	A number of empowering measures are proposed for building rural entrepreneurs and local communities' capacity to self-organize, plan, make decisions and to improve their livelihoods through increased availability, access and use of sustainable financial services			

104 https://www.usaid.gov/mozambique/food-assistance

56

participation and inclusion in planning and decision-making of people who traditionally have less voice and power;	(Component 2)
4.5 Enabling measures – to strengthen stakeholders' and partners' attitude and commitment to poverty targeting, gender equality and women's empowerment, including policy dialogue, awareness-raising and capacity-building;	Component 2 comprises of capacity building and support for local institutions and rural entrepreneurs. E.g. (i) Institutional and technical capacity building of financial service intermediaries; (ii) build a database of MFI performance and promote social performance management through Mozambican Association of MFIs, (iii) transformation of FARE to a sustainable and permanent rural and microfinance support organization; (iv) Establishing and strengthening the "Development Finance Coordination" secretariat under the Ministry of Economy and Finance; (v) Supporting the Bank of Mozambique to assist the transformation of MFIs and promote financial literacy and consumer protection.
4.6 Attention to procedural measures – that could militate against participation by the intended target groups;	REFP includes participatory approaches for inclusive governance institutions, gender equality and empowerment of women.
4.7 Operational measures – appropriate project/project management arrangements, staffing, selection of implementation partners and service providers.	The design includes recruitment of a Gender and Youth Expert as PMU staff. Technical Assistance to design a gender strategy and gender training manual and appropriate budgets for involving intermediary organizations and service providers with expertise on community development, for the implementation of the targeting strategy
5. Monitoring targeting performance. Does the design document specify that targeting performance will be monitored using participatory M&E, and also be assessed at mid-term review? Does the M&E framework allow for the collection/analysis of sex-disaggregated data and are there gender-sensitive indicators against which to monitor/evaluate outputs, outcomes and impacts?	Yes, the design document specifies that targeting performance will be monitored using participatory M&E and will be assessed at mid-term review. Baseline data and M&E systems will be disaggregated by gender and target groups. Participatory monitoring and evaluation systems will be established and gender sensitive monitoring indicators would be used to evaluate outputs, outcomes and impacts.

Annex 2: Gender checklist

Conder checklist	
Gender checklist	Design
1. The project design report contains – and project implementation is based on – gender-disaggregated poverty data and an analysis of gender differences in the activities or sectors concerned, as well as an analysis of each project activity from the gender perspective to address any unintentional barriers to women's participation.	Yes, the gender strategy outlines the strategic gender equality and women's empowerment activities as well as pragmatic interventions to mainstream gender in all project components.
The project design articulates — or the project implements — actions with aim to: Expand women's economic empowerment through access to and control over productive and household assets;	Yes, activities in component 1 are designed to provide livelihood diversification opportunities to women. Women will benefit equally from the Funds and capacity building initiatives that would result in improved and sustainable MSMEs. In addition to their access and control of assets, access to technologies, improved business acumen, and income from market access, women will gain more self- confidence to participate in financial services, business plans development and implementation, negotiate confidently in market transactions and with service providers, and have greater voice and influence in management committees.
Strengthen women's decision-making role in the household and community and their representation in membership and leadership of local institutions;	Yes, activities in component 2 are designed to build women's social capital and strengthen their participation and voice in community institutions, particularly the ASCAs and .other associations.
Achieve a reduced workload and an equitable workload balance between women and men.	The MSMEs are likely to increase the burden to women and increase their workload. There will be need to expose women and raise their awareness to identify efficient labour saving technologies to reduce women's workload. Knowledge about the benefits at the different types of technologies could be disseminated during association meetings or by the intermediary institutions.
3. The project design report includes one paragraph in the targeting section that explains what the project will deliver from a gender perspective.	Yes, an explicit gender targeting strategy is described.
4. The project design report describes the key elements for operationalizing the gender strategy, with respect to the relevant project components.	Yes, the gender strategy outlines strategic activities for gender equality and women's empowerment, and more pragmatic activities for integrating gender in all project components.
5. The design document – and the project implements – operational measures to ensure gender-equitable participation in, and benefit from, project activities. These will generally include:	
5.1 Allocating adequate human and financial resources to implement the gender strategy.	The PMU will include a staff member on Gender and Youth who will be responsible for gender mainstreaming in all project components as well as monitoring the implementation of the gender

	specific empowerment activities.
5.2 Ensuring and supporting women's active participation in project-related activities, decision-making bodies and committees, including setting specific targets for participation.	At least 50% of the project beneficiaries will be women and will receive direct targeted interventions. Women would be represented equally in management committees in ASCAs. The various components will focus on promoting gender equality and women's empowerment. Gender-sensitive activities are proposed for all the components.
5.3 Ensuring that project/project management arrangements (composition of the project management unit), project terms of reference for staff and implementing partners, etc. reflect attention to gender equality and women's empowerment concerns.	The PMU will have technical assistance and will recruit a gender and youth expert as part of the PMU staff. TA will be hired to design gender strategy and action plan. REFP will ensure gender balance in recruitment of overall project management and staff.
5.4 Ensuring direct project/programme outreach to women (for example through appropriate numbers and qualification of field staff), especially where women's mobility is limited.	Women will be active participants in all local institutions, ASCAs, MFI etc. Training will take place using field extension staff and community facilitators at local level. Women and men will participate in various training such as financial literacy, enterprise skills training, BDS and entrepreneurship training.
5.5 Identifying opportunities to support strategic opportunities with government and other development organizations for networking and policy dialogue.	See 5.3 above. In addition, REFP will support the implementation of the Rural Finance Sector Gender Strategy in micro and small enterprises. The national gender focal point on gender in the Ministry of Women Affairs, Gender and Community Development would be involved project management committees. Gender Focal Points and Gender Units in intermediary institutions and gender based NGOs would be involved as Service providers and organisation building for women led ASCAs, MFIs etc
6. The project's logical framework, M&E, MIS, and learning systems specify in design – and project M&E unit collects, analyses and interprets sex- and age-disaggregated performance and impact data, including specific indicators on gender equality and women's empowerment.	Monitoring and evaluation of poverty targeting, gender and youth focus will be part of the projects' supervision schedule. This will include; One supervision mission and one follow-up mission annually; and a Mid-term review. Progress on these issues will be reported in the project's bi-annual progress reports. All peoplecentred indicators will be disaggregated by gender and age, and enriched by qualitative information and analysis. Reporting on poverty targeting, gender and youth focus will be part of the reporting requirements.

Annex 3

Table 1: Key Data on REFP Provinces

Province	Area Km²	Total populatio n 2008 ¹⁰⁵ 000'	HIV prevalenc e rate % 2009 ¹⁰⁶	Financial exclusion % 2014 ¹⁰⁷	Chronic malnutritio n ¹⁰⁸ % 2008	Poverty rate % ¹⁰⁹ 2008-9
Niassa	122,827	1,415	3.7	74	45	31.9
Cabo Delgado	78,778	1,764	9.4	54	56	37.4
Nampula	79,010	4,529	4.6	65	51	54.7
Zambezia	103,478	4,327	12.6	61	46	70.5
Tete	98,417	2,137	7.0	75	48	42.0
Manica	62,292	1,672	15.3	74	48	55.1
Sofala	67,755	1,852	15.5	78	41	58.0
Inhambane	68,775	1,402	8.6	38	35	57.9
Gaza	75,334	1,320	25.1	56	34	62.5
Maputo Province	22,693	1,444	19.8	41	25	67.5

Source: several, compiled by the mission

Table 2: Detailed Smallholder household characteristics in Mozambique (CGAP)¹¹⁰

Criteria for defining smallholder households	34 ¹¹¹ % Smallholder subsistence & semisubsistence producers:	37% Rural household (self-employed) entrepreneurs	25 % Emergent Farmers(market oriented producers)	3 % Small and Medium Entrepreneurs (transit and stable)
Landholding Size112	Less than 1 ha	Between 1 and 2 ha	Between 2 and 5 ha	Above 5ha
Market Orientation	Subsistence vs. market-oriented vs. hybrid	Subsistence/Hybri d	Market oriented	Market oriented
Labour input	family labour (between 1-2 employees)	Family labour (between 3-10 employees)	Family labour plus hired labour (between 11-50 employees)	Mostly hired labour Over 50 employees
Income	Monthly expenses exceed income. Shared income from farming, multiple sources (agricultural and non-agricultural	Monthly expenses exceed income	Monthly expenses exceed income for 4 months of the year	Monthly expenses mostly covered & surplus income for saving
Farming system	Rainfed	Rainfed	Rainfed/irrigated	Rainfed/irrigated

60

¹⁰⁵ INE (2010) in UNDP (2010) Report on Millennium Development goal (2010)
106 Government of Mozambique (2010) Report on Millennium Development goal
107 Fin Scope Consumer Survey Mozambique 2014
108 UNDP (2010) Report on the Millennium Development Goals; 2008 Chronic malnutrition levels
109 Parablic of March Line (2011) Poporty Reduction Action Plan (PARP), 2011-14

ONDP (2010) Report on the Millennium Development Goals; 2008 Chronic mainute 109 Republic of Mozambique: (2011) Poverty Reduction Action Plan (PARP) 2011-14
 Extracted from CGAP (2016); draft COSOP for Mozambique 2017
 The classification based on plot size.

Farm Management responsibility	Owner, influence over how to farm	Owner, influence over how to farm	Owner, influence over how to farm	Proper farm manger influence over how to farm
Capacity	Storage, management, administration limited	Storage, management, administration limited	Storage, management, administration limited	Storage, management, administration almost adequately covered
Legal aspects	Informal	informal	Informal/formal	formal
Level of organization	Member of group—producer, supply chain, service provider	Savings group	Belong to a savings group – ASCAs	Belong to ASCAs, producer organization/ service provider and supply chain
Financial inclusion	3 % financially included	9% financially included	26% financially included	68 % financially included

Table 3: Calculation of beneficiary groups

In the context of Mozambique, micro enterprises are classified as those with between 1 and 2 employees; small enterprises are classified as those with between 3 and 10 employees and medium enterprise with employees between 11 and 50. Large enterprises operate with more than 50-employees. 98.6 per cent of Mozambican firms are composed of micro and small enterprises. For the REFP's calculation of the target beneficiaries, the average number of people benefiting from the MSMEs will be used. Therefore the average number beneficiaries for the micro, small and medium enterprises, will be 1, 6 and 20 respectively. The people benefiting from the micro and small enterprises are mostly family members and with medium enterprises, employees will consist of a mixture of family and hired employees. In terms of investment, the micro enterprises range between USD 100 to USD 500, small enterprise investment are between USD 500 to USD 3,000 and the medium enterprises investments are between USD 3,000 to USD 10,000. The average investment will be used for calculation purposes and this will be USD 300, USD 750 and USD 5,000 for the micro, small and medium enterprises respectively.

Calculation of target beneficiaries under the Crowding in Fund

With an average investment of USD 5,000 per enterprise, the CIF will benefit a total of 1,000 rural MSMEs targeting poor smallholder producers associations, cooperatives and other rural non-agricultural MSMES. The CIF will be provide a tripartite matching grant, for which the beneficiary will contribute 20 per cent of the cost, the participating institution and REFP will contribute 40 per cent each. The total number of beneficiaries under the CIF is broken down as follows:

Type of Enterprise	Number of Enterprises	Beneficiaries	per	Total	number	of
		enterprise		beneficia	ries	
Medium	1,000		20		2	20,000

Calculation of target beneficiaries under the Graduation Promotion and Outreach Programme
The total number of beneficiaries under the Graduation Promotion and Outreach Programme 20,000
beneficiaries, consisting of poor smallholder subsistence farmers, fisher folks and other poor rural
people who will be assisted to develop small business skills and entrepreneurship to become
creditworthy and bankable to access mainstream rural financial institutions (under LOC) at the end of
the graduation cycle.

Calculation of target beneficiaries under the Line of Credit

The Line of Credit will benefit a total of 62,370 agricultural and non-agricultural MSMEs for individuals, groups, associations and other collective in rural Mozambique. The size of loan ranges from USD 150 to USD 5,000. The number of beneficiaries for the LOC is broken down as follows:

Type of Enterprise	Number of Enterprises	Beneficiaries per	Total number of
		enterprise	beneficiaries
Micro	47,404	1	47,404
Small	12,666	6	75,996
Medium	2,300	20	46,000
Total	62,370		169,400

Component 2: The total number of supported enterprises is 63,370 (1, 000 under CIF and 62,370 under LOC). In addition, all the beneficiaries under component 2, with the exception of 78,300 ASCA members who are accessing facilitated non-financial services such as training in financial literacy, nutrition, and training on how to manage natural resources and climate-related risks, will be excluded from the total number of REFP beneficiaries to avoid double counting.

The total number of REFP direct beneficiaries will be 287,700 calculated as:

	Direct Beneficiaries
Crowding in Fund	20,000
Graduation Promotion and Outreach	20,000
Programme ¹¹³	
Line of Credit	169,400
Component 2 non financial products beneficiaries	.78,300
with no access to Financial products	
	287,700

In addition, under sub-component 2.1, RELP will strengthen 40 financial institutions.

Core Target Group of REFP

Total number of individual rural entrepreneurs receiving direct support from REFP is 287,700 and this figure includes 209,400 rural entrepreneurs who will be provided with loans for their rural enterprises as well as 78,300 beneficiaries that will be accessing facilitated non-financial services such as training in financial literacy, nutrition, and training on managing natural resources and climate-related risks. Women (heads of households, wives and young women) will account for at least 50% of the target. The youth will also account for at least 20% of the target. A summary of the REFP beneficiaries targeting quotas is given in the table below:

Summary of REFP Beneficiaries Targeting Quota

Sub-component	Target no for rural entreprene urs	Target no of rural men and women entrepreneurs	Target no. for women 50%	Target no for youth 20% total beneficiaries; 50% girls
Component 1				
1.1.1 Crowding – in Fund	20,000	16,000	8,000	4,000 are youth (2,000 male and 2,000 female))
1.1.2 Graduation Promotion and Outreach Programme (GPO) - income generating activities	20,000	16,000	8,000	4,000 youth (2,000 male and 2,000 women),
1.1.3 Line of Credit	169,400	135,520	67,760	33,880 are youth (16,940 male and 16,940 female),
Component 2 ¹¹⁴				, , , , , , , , , , , , , , , , , , , ,

¹¹³ The assumption is that, those Graduation Promotion and Outreach Programme beneficiaries, who access Line of Credit, will be excluded from this financing window and will be accounted for under the Line of Credit. This is necessary in order to avoid double counting.

All the beneficiaries under component 2 with the exception of 78,300 ASCA members, will be excluded in the total target beneficiary of 287,700, in order to avoid double counting. The 78,300 ASCA members, are part of the 100,000

Rural entrepreneurs trained ¹¹⁵ but not accessing financial products	78,300 ASCA members not accessing LOC	40,640	20,320	15,660 (7,830 girls and 7,830 boys)
Total number of beneficiaries	287,700	230,160	115,080	. 57,540 (28,770 boys and 28,770 girls

Table 4: REFP Beneficiaries by Province

Province	Number of beneficiaries
Niassa	28,738
Cabo Delgado	23,017
Nampula	23,017
Zambezia	23,017
Tete	46,060
Manica	46,060
Sofala	28,738
Inhambane	23,017
Gaza	23,017
Maputo Province	23,017
Total beneficiaries	287,700

Annex 4

Table 5: Districts with on-going programmes

Province	Programme	Districts with ongoing programmes	Districts not covered by any programmes
Niassa	PROMER	Cuamba, Mandimba, Marrupa, Maua, Mecanhelas, Metarica	Lago ,Lichinga, Majume, Maragoago,
	PSP	Cuamba, Mandimba, Marrupa, Maua, Mecanhelas, Metarica	Mecanhelas, Mecula, Muembe, Ngauma, Nipepe, Sanga
Cabo Delgado	PROMER	Ancuabe, Balama, Chiure, Montepuez, Namuno	Ibo, Mecúfi, Meluco, Mueda, Muidumbe, Nangade
	PROPESCA	Pemba, Quissanga, Macomia, Mocimboa da Praia, Palma	
	PSP	Ancuabe, Balama, Chiure, Montepuez, Namuno	
Nampula	PROMER	Malema, Ribáuè	Eráti, Lalaua, Mecubúri,
	PROPESCA	Moma (Sede), Moma (Larde), Angoche, Ilha de Mocambique Nacala, Murrupula, Nacarôa, Memba, Mgincual, Nacala Porto	
	PSP	Malema, Ribáuè, Nampula, Meconta, Monapo, Monapo, Mossuril, Nacala Porto	
Zambezia	PROMER	Alto Molocue, Gurue	Gilé, Ile, Inhassunge,
	PROPESCA	Chinde, Quelimane, Nicoadala (Zalala), Maganja da Costa,	

ASCA members who will participate in one or more training on financial literacy, nutrition and manage natural resources and climate-related risks. but only 21,700 ASCA members will access loans and are included under the LOC.

115 In financial literacy, business planning and entrepreneurship, manage natural resources and climate-related risks,

support to improve their nutrition

		Pebane	Mocuba, Mopeia,
	PSP	Namacurra, Milange, Lugela, Gurue, Alto Molocue	Morrumbala, Namarroi Di,
Tete	PSP	Angónia, Tsangano, Moatize,	Cahora-Bassa,
			Changara, Chifunde,
			Chiuta, Macanga,
			Magoé, Marávia,
Maniaa	DDOAOLIA	Candala Curawadanaa Maasuriaa	Mutarara, Zumbo.
Manica	PROAQUA	Gondola, Sussundenga, Mossurize	Guro, Machaze,
	PSP	Báruè, Manica, Sussundenga, Gondola,	Macossa, ,Sofala, Tambara
Sofala	PROPESCA	Beira (Ndjalane/Casa Partida)	Caia, Chemba,
		Beira (Sede), Buzi (Nova Sofala),	Cheringoma, Chibabava,
		Machanga (Chiloane)' Mwanza	Marromeu, Maringué,
		(Sambazo)	
	PROAQUA	Gorongosa,	
	PSP	Gorongosa, Nhamatanda, Buzi, Dondo	
Inhambane	PROPESCA	Maxixi, Vilanculos , Inhassoro	
		Govuro (Nova Mambone)	
	PROSUL	Inharrime, Jangamo, Massinga,	
		Morrumbene, Funhalouro, Homoine,	
		Mabote, Panda, Zavala	
_	PSP	Inharrime, Zavala, Morrumbene	
Gaza	PROPESCA	Xai-Xai	
	PROSUL	Chicualacuala, Mapai, Chibuto, Chokwe,	
		Guijá, Mabalane, Manjakaze, Massingir,	
	DOD	Xai Xai, Bilene Macia, Massangena	
Manuta	PSP	Chokwe, Chibuto, Guijá,	
Maputo	PROPESCA	Matola	,
province	PROSUL	Boane, Manhiça, Magude, Marracuene, Moamba, Namaacha, Matutuíne	
	PSP	Moamba, Namaacha, Marracuene, Manhiça	

Source: IFAD Operations in Mozambique

Appendix 3: Country performance and lessons learned

A. Overview

IFAD began operations in Mozambique in 1983 and has provided more than USD200 million in financing for 12 programmes and projects in the country. A Country Strategic Opportunities Programme (COSOP) approved in 2011 sets out a framework for the partnership between IFAD and the Government of Mozambique from 2011 through 2015¹¹⁶. The COSOP builds on IFAD's experience and lessons learned from past operations in the country, including notable successes in:

- Creating market linkages between small-scale producers and buyers
- Facilitating the introduction of new technologies and services for fishing communities
- Setting up savings and credit groups
- Rehabilitating rural roads for better access to markets and services
- Introducing important policy and legislative changes, such as the protection of artisanal fishing

The country programme continues its strategic focus on supporting smallholder farmers and artisanal fishers. Its main target group comprises poor producers who have the potential to expand and commercialize their activities, with a special emphasis on disadvantaged groups such as women and young people.

IFAD's main goal in Mozambique is to help integrate these small-scale producers into profitable and accessible markets. To achieve this goal, it pursues three strategic objectives:

- Improving smallholder farmers' and artisanal fishers' access to technologies and services that
 increase productivity by ensuring that farmers and fishers have secure rights to use key
 natural resources, supporting a strong natural resource management system and mitigating
 climate risks where possible
- Increasing access to and participation in markets for an equitable share of profits by helping
 to develop economic infrastructure for the conservation, processing and marketing of
 produce, and building solid and equitable partnerships between small-scale producers and
 agribusinesses
- Increasing access to sustainable financial services in rural areas by promoting an enhanced institutional and policy environment for rural finance, and supporting community-based services offering financial products specifically targeted to the needs of rural communities.

Moreover, IFAD engages in policy dialogue where relevant issues emerge from project operations, and it helps build the capacity of local stakeholders to participate in policy processes.

IFAD's country strategy is fully aligned with all the major strategies defining the framework for collaboration between the government and its development partners – including the Poverty Reduction Action Plan, United Nations Development Assistance Framework, and Strategic Plan for Agricultural Development and Comprehensive Africa Agriculture Development Programme.

B. IFAD Operations in the Country

Beyond its regular programme of work in Mozambique that has been outlined in the main report, IFAD also funds projects with small grants, including the following:

 Securing Artisanal Fishers' Resource Rights Project (PRODIRPA), which aims to improve the livelihoods of artisanal fishing communities by strengthening their security over and management of natural resources (Implementation: Institute for Development of Small-scale Fisheries, 2013-2016)

¹¹⁶ A new COSOP is currently being prepared and will be released in the fourth quarter of 2017.

- Coastal HIV/Aids Prevention and Nutrition Improvement Project (CHAPANI), designed to improve food security and livelihoods of artisanal fisher households (Implementation: Associação Moçambicana Ajuda de Povo para Povo, 2012-2015)
- Community Investor Partnership Project (ProParcerias), which promotes the establishment of sustainable community-investor partnerships in rural areas (Implementation: National Directorate for the Promotion of Rural Development, 2011-2013)
- Project for Promotion of Small Scale Aquaculture (PROAQUA), financed by the European Union through IFAD, this project is implemented by the National Institute for the Development of Aquaculture and aims to increase the consumption and sale of fish by small-scale fisher households in four districts of Manica and Sofala Provinces. The project's overall goal is to improve the livelihoods and food security of poor households involved in fish farming. It supports aquaculture development by building fish farmer groups and providing technical support, training and start-up packages.

In total, IFAD has approved 12 loans with 4 of these investments ongoing. The total amount of IFAD lending to the country amounts to USD 239.3 million. The total amount of counterpart funding composed of Government and beneficiary contributions has reached USD 53.4 million ¹¹⁷. IFAD's investments also attracted a significant amount of co- and parallel financing reaching USD 96.7 million.

In terms of parallel and co-financing, the recent IFAD Country Strategy and Programme Evaluation (CSPE) points out that recent trends in this regard are positive. In the period 1982 – 2009, IFAD provided 72 per cent of total costs to projects, with 9 per cent coming from other partners. Since 2010, however, and coinciding with the start-up of PAFIR/RFSP, IFAD's contribution represented 51 of total required resources, with a stronger contribution of other partners: at 39.5 per cent. This figure increases further when linked grants by other partners are added. Further, when all national grants are included, co-financing represents 41.6 per cent of the total

C. Lessons Learned

When conceptualizing REFP internally within IFAD, there was an emphasis on basing new project design on lessons learned from portfolio experience and the IFAD ESA Concept Note recommended to take above all the following lessons into account:

- a) Well-focused, realistically targeted interventions can add value at sector level. The value added in the sector can be seen from the growing demand for the piloted financial services interventions that have performed satisfactorily as evidenced in the 2015 PAFIR PCR Report, the latest 2016 MTR report for PROSUL, the 2016 Supervision Mission Report for PROSPESCA and the 2016 Supervision mission Report for PROMER all of which point towards a growing and unmet demand for financial services in project areas. This needs to be followed with well-defined indicators that measure both quantitative and qualitative achievements:
- b) A set of key financial and technical performance indicators for rural finance institutions are important. In addition, exchange of debtor information between different wholesale lenders would likewise improve the information available that enables good management of loans;
- c) Setting up an effective and sustainable ASCA Union is a protracted process that requires several, well-thought through stages. The initial stages require deployment of considerable resources for management and institutional consolidation. For sustainability, governance issues between the union board and management, and the different Union members and the Union itself need to be carefully considered and worked out;
- d) Sound financial sector management procedures are critical, when managing loans and grants without the strict provisions of Central Bank. In addition, minimum standards are required for Rural Financial Institutions applying for matching grant funds and needed to alleviate the challenge of quality differentials of grant proposals; and
- e) High quality Fund management is key to dispensing successful credit and accompanying grant functions.

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¹¹⁷ All figures in this paragraph as of 02-2017.

Also, a recent Country Strategic and Performance Evaluation (CSPE) of IFAD concluded with the following observations, first regarding lessons learned on rural finance operations in Mozambique:

Although the COSOP note the absence of access to financial suitable services as one of the major obstacles to alleviating rural poverty in Mozambique, the impact and sustainability of IFAD supported interventions remained behind expectations. Against the COSOP strategic framework, the PAFIR/FRSP project tackled a major gap, but was closed without extension without having achieved its objectives. There were no adequate provisions made for follow up and support to the ongoing projects to carry out their own rural finance sub-components, which were important for achieving project results. For this reason, ProPESCA, PROMER and PROSUL had to go through lengthy procedures or amendments to their agreements and identify their own way forward.

Apart from the highly successful informal ASCAs, the CSPE finds that there was little tangible progress made in improving access to credit for small-scale rural producers in agriculture and fisheries. This gap undermined the effects of many of the efforts made by the project in building capacity and supporting non-financial and production and marketing oriented services ,

The CSPE also offered some lessons learned on other aspects of project design and implementation:

- a) The projects did not explicitly include objectives or approaches aimed at tackling over-arching goals for both the Government and IFAD.
- b) COSOP identified the target population for IFAD interventions as those who already had the potential for stronger value addition at local level and commercialize their activities. This led to a focus on producers who already had better access to factors of production.
- c) This meant that many rural producers in IFAD supported districts, who in good years may achieve a limited market surplus but in bad years struggle with food insecurity.
- d) The environmental and natural resource management dimension was found to be weak overall.
- e) Delays in project financial execution and slow implementation was recognized by all stakeholders as the main weakness of the portfolio under evaluation in the CSPE.
- f) The mixed experience in the recruitment of service providers (SP) provides an opportunity for re-thinking the project implementation model.
- g) There is room for improvement in the contribution of non-lending activities to the country programme.

Based on these observations and lessons learned, the CSPE proposes the following recommendations for consideration:

- 1. Focus on rural poor and on more vulnerable groups, including women, youths and people living with AIDS;
- 2. Full attention should be given to sustainable natural resource management, and to strengthening climate-change resilience;
- 3. IFAD support to the rural finance sector should be conceptualized within a long-term commitment horizon and with basis on the lessons learned so far:
- 4. Efficiency of the financial execution should be enhanced;
- 5. Principles for the reliance on service providers should be enhanced.
- 6. Dedicate more attention and resources to Knowledge Management and Policy Dialogue.

Appendix 4: Detailed project description

Component 1: Improved access to adaptive financial services for rural entrepreneurs.

Component overview

Component 1 will be implemented through two interrelated subcomponents. First, sub-component 1.1 the establishment of adapted financial instruments for the development of rural entrepreneurship. Different funds will be operationalized and managed under one umbrella fund structure with improved operational, implementation and sustainability prospects. The second sub-component 1.2 foresees the establishment of adapted innovative refinancing instruments to finance the project target group. This subcomponent will be linked closely with subcomponent 1.1 and will involve the establishment of a Line of Credit (LOC). The LOC will function as a classic debt finance instrument between the financial institutions and the rural entrepreneurs who qualify to address their liquidity challenges. Qualifying rural entrepreneurs and other possible interested rural enterprises will access the LOC funds under market-based pricing conditions, after fulfilling criteria set with the Financial Intermediaries.

The component will stimulate and scale up rural finance innovations that would increase the presence of rural financial service providers in rural areas. The component would provide grants and financial contributions that would be matched by recipients (co-financing). The match contribution will either be in cash or in kind. This fund will target innovative entrepreneurial solutions that have the capacity to either propose new ideas, or contribute more effectively to existing ideas that target rural areas and contribute to the expansion of services in the underserved target area. The solutions can be in the form of business models to reach the last mile, but also consider both operation and production aspects. Alternatively, it can be in the form of new modalities through which products and services can be delivered in rural and agricultural settings.).

Subcomponent 1.1. Graduation Promotion and Outreach Programme (GPO)

The fund is designed to achieve the following outcomes: (i) Increased incomes and assets through establishment of profitable enterprises facilitated by access to financial services (ii) Increased savings by beneficiaries (iii) Improved food security (iv) Improved health and nutrition. .(v) Increased outreach to marginalised groups and areas. The GOF will be implemented through two sub-windows (i) The Graduation Facility (ii) Outreach expansion facility.

(i)The Graduation Facility Window

Description of Delivery model¹¹⁸: The graduation fund will be deployed as a series of interrelated steps aimed at providing a pathway to sustainable livelihoods for poor households. The fund will be built on five core elements: targeting and selection, skills training, savings, enterprise selection and enterprise specific training, provision of start-up loans, regular coaching and mentoring, establishment of VSAs/ASCAs and linkage to mainstream service providers (financial institutions, market linkages, value addition etc.).

Targeting and selection: The primary target group for the fund will be 20,000¹¹⁹ extremely poor households in the REFP project areas. These households live vulnerable lives characterised by irregular and unpredictable incomes, food insecurity, poor health, lack of education, lack of assets, ((i.e. technology, tools, land ownership, etc.)), limited livelihood prospects, and social isolation., The target group will include vulnerable and most disadvantaged households including those affected by HIV/AIDS and disabilities. This target group is consistent with IFAD's target group defined as "rural people living in poverty and experiencing food insecurity in developing countries". Poverty maps or local knowledge will be used to select areas with high incidence of poverty.

Selection: Selection of beneficiaries will be conducted by a specialized service provider (SP) using the participatory wealth ranking methodology and/or simple household surveys to identify the poorest

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¹¹⁸ See annexe 1 for delivery model.

¹¹⁹ Representing 30% of the project target group.

households. Household visits will be conducted by the SP and project staff to verify the identified beneficiaries in order to avoid participation by economically better off people. Since the model is based on engaging poor households in productive income generating economic activities, only people who are physically or mentally able to manage enterprises will be selected for participation in fund activities. This strategy is consistent with IFAD's targeting strategy which strives to reach extremely poor people who have the potential to take advantage of improved access to assets and opportunities for agricultural production and rural income generating activities. Women who are landless, do not own any productive assets and with no working male members will be included in the target group.

Selection will be conducted in a series of steps as follows: (i) initial selection by local community leaders/committee; (ii) verification by project staff through physical visits to the households; and (iii) registration of beneficiaries will be done using biometric or manual system 120.

Selection Criteria

Household characteristics	Female headed households	
	Vulnerable household due to illness of the breadwinner (HIV,	
	other terminal diseases)	
Agricultural	Do not own land	
Production and	Do not cultivate land	
land use	because they cannot	
	afford inputs and /or	
	because the farmland is	
	distant and poor,	
	Practice subsistence farming	
Non-farm income	Afraid or unable to take	
generating activities	risk	
	Low-end employment	
	Lack capital to start any business	
Social affiliation	Do not belong any	
	Association	
Labour	Family labour	
Access to financial services	Financially excluded	
Income sources	Unstable income sources	
	Low end/seasonal employment	

Business and livelihood training¹²¹: After selection, the beneficiaries will be offered various training packages to equip them entrepreneurship, business management and financial literacy skills. A simple training curriculum and training manual will be developed. Training will be offered at three levels: (i) **Training of trainers:** Trainers will be selected from the various project areas and will be trained to equip them with skills to train project beneficiaries. Training of trainers will be classroom based with duration of between 1 to 2 weeks. (ii) **Training of beneficiaries:** This will include basic general training in entrepreneurship, business management and financial literacy.

Savings: Accumulation of savings is a key component of the theory of change of graduation programmes. An increase in savings is an important driver of productive inclusion, resilience and escape from poverty since it enables poor households to smooth consumption, manage risks and reduces negative coping strategies (such as selling off productive assets) that undermine their capacity to move out of poverty in the long term. Beneficiaries will be encouraged to save regularly (e.g. on daily or weekly basis) whatever little surplus they have, either in cash or in kind (eg livestock, grain, chicken, vegetables, fruits etc). Savings maybe deposited in informal facilities (savings boxes,

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¹²⁰ FAO is piloting a biometric registration system in Manica and Sofala provinces for an EU funded input supply project.

Training will be provided through the structures established in component 2 of the project.

Trainers will be selected from the community to enhance ownership of the programme. Selection criteria will be developed.

grain/livestock. fruit/vegetable banks) or in formal institutions (MFIs, ASCAs etc). Regular saving builds not only builds a savings culture and financial discipline but it also shifts the focus from consumption to investment in productive activities. Incentives will be provided to encourage beneficiaries to save regularly (for example the fund may offer to boost the savings on a 1:1 ratio where for every metical saved, the fund will contribute a similar amount).

Mentoring and coaching: Once the beneficiaries start their business enterprises, extension staff will offer regular business mentoring and coaching to stabilize the businesses and enhance business survival beyond the start-up phase¹²³, Finally, through regular monitoring and coaching, staff check if participants are on track to reach their goals by the end of the project and offer guidance on how to do so. They also offer business planning advice, provide social support, promote health and nutrition, and encourage positive attitudinal changes along the way.

Linkage to formal financial institutions: As the business enterprises grow, they will require larger loans and other investment facilities which are beyond the capacity of the funds provided by the Graduation fund. The fund will provide linkage to formal financial institutions to enable graduating entrepreneurs to access larger loans with longer maturity as well as other transaction services. The support may include referrals and limited risk-sharing funds to encourage MFIs/banks to lend to these entrepreneurs.

Implementation framework: The graduation programme will be managed by a service provider specialized in graduation and targeting the ultra-poor (TUP) programmes.

Gender mainstreaming. Gender mainstreaming will be achieved through targeting and participation of women in all activities of the fund. At the start of the implementation of the fund, rural women in the project areas will be informed about the activities of the fund. Poor rural women would be expected to: i) participate in the training courses, (ii) women will be encouraged to save (iii) women will be encouraged and facilitated to take loans.

Monitoring & Evaluation The project will deploy various tools including the movement out of poverty index to measure movement of the beneficiaries out of poverty. The following indicators will be tracked:

ECONOMIC INDICATORS	SOCIAL INDICATORS
Stabilised and diversified income	Improved health
sources	
Increase in assets	Increased self-confidence and social inclusion
Increase in savings	Improved nutrition
Improved housing	Children attending School

14. **Partnerships:** The fund will develop synergies and partnerships with on-going initiatives which provide rural finance services in the Project area. The fund will be supported to utilize the complementary financial sources made available by other IFAD projects in the project area. This is to ensure that the limited resources under the fund are leveraged to attain a higher level of impact on the target beneficiaries.

(ii) Outreach Window (OF)

This outreach facility will support adoption of new products and alternative delivery channels to facilitate the access of the REFP targeted rural population groups to financial services. GOF will support the introduction, fine-tuning or area expansion from other countries or regions of relevant

¹²³ Most micro and small business fail during the first few months of the start-up phase due to lack of proper support systems including lack of markets, lack of capital, weak record keeping etc.

innovative techniques and approaches including utilization of digital finance solutions to further expand access to the unbanked, especially rural women.

In order to enable well-based decisions of what funding requests can be approved under this specific facility, the following definition of initiatives will be considered for funding:

- (a) **New products:** These relate to all types of services that are relevant to the IFAD supported target group in their financial dealings: money transfer services, establishment or maintenance of transit or deposit accounts, cheque and current accounts, leasing and hire-purchase services, as well as insurance services of different types that are relevant to rural on and off farm producers, value chain financing, term-finance for agriculture, technological innovations that help reduce cost of Service delivery such as M-Pesa, use of point of sale devices, biometric data storage, and pilot testing financial graduation approaches. In line with IFAD's Rural Finance Policy (2009), also services related to meso level financial services support institutions will be eligible for funding, if a direct link to the IFAD relevant target group and their service requirements can be established. Examples include a possible support for including smaller and rural based MFIs in a national credit reference database.
- **(b) Definition Outreach**: IFAD uses the term flexibly. In terms of physical outreach, the **quantitative** aspect of reaching out with infrastructure, products, services or digital coverage is key. **Qualitative** outreach aspects emphasize improvements in reaching out to clients that are already captured as clients but not with the same depth of services.

Allocation of OF at Beneficiary Level (with focus on ASCA Support)

The OEF will support interventions directly at the level of the rural on- and off-farm sector and directly to individuals or groups, associations or other forms of collective action. Activities that can be considered include a wide range of activities. The following eligibility list is proposed to be validated and complemented during REFP start-up:

- (a) Organization of farmer of MSE groups as community financial organizations
- (b) Financial management practices
- (c) Business and farm management practices
- (d) Thriftiness and deposit mobilization
- (e) Preparation of a loan application
- (f) Insurance services in rural areas of Mozambique
- (g) Digital finance, basics and intermediate
- (h) Contract farming
- (i) Other forms of value chain financing from producer perspective
- (j) Climate resilience (incl. domestic Local Plans of Adaptation)

In addition, under this heading, support is available for innovative entrepreneurial solutions that have the capacity to either propose new ideas, or contribute more effectively to existing ideas that target rural areas and contribute to the expansion of services in the underserved target area. The solutions can be in the form of business models to reach the last mile, but also consider both operation and production aspects. Alternatively, it can be in the form of new modalities through which products and services can be delivered in rural and agricultural settings.

Recipients of grant allocations are expected to contribute 0 to 30 per cent to the total costs of the innovation initiative to be financed, depending on access and co-financing criteria to be established.

1.1.2.B Allocation of OE at Financial Institutions Level

Support for interventions to enhance outreach will target a broad range of financial institutions with current or potential reach to the rural on- and off farm sector. These include community based financial institutions, rural banks, microfinance institutions with different licenses, commercial and other banks.

Eligible areas comprise a wide list of possible activities. Innovation action will include, but possibly not be restricted to the following:

- (a) Innovations in rural and agricultural products and services
- (b) Back-office management for lean business practices
- (c) Market entry, client organization and business expansion in rural areas
- (d) Modern loan appraisal techniques for agricultural financing
- (e) Modern loan appraisal techniques for small off-farm sector financing
- (f) Insurance services scope for collaboration or service agent approach
- (g) Digital finance
- (h) Contract farming
- (i) Other forms of value chain financing
- (j) Compliance with National Climate Adaptation Provisions and International Best Practice

Recipient financial institutions are expected to contribute between 10 (cash) and up to 30 per cent (balance in-kind) to the total costs of the innovative action to be financed. Criteria will depend on the type, size and financial strength of the institution and co-financing criteria will be established during project start-up.

1.1.2.C Allocation of OF for Government & Leveraging of Private Sector Support

OEF will also consider funding applications (up to a maximum of 20% of the total available resources under this category for Government (up to 10%) and private sector applicants (up to 10% of the total OEF allocation). Different government agencies or Ministries may have bottlenecks in operationalizing their facilitation, legal or compliance and supervision aspects related to innovation areas in rural and agricultural finance. Relevant examples in the country context include challenges in the area of digital finance and domestic money transfers, but also legal and supervisory aspects related to this with the dealing departments of the Central Bank also applicable for funding under REFP OEF.

As far as leveraging private sector support is concerned. OEF will seek to leverage private sector investments that can feed into the agricultural sector (and beyond). The fund will support the provision of specific/targeted financial services aimed at incentivising businesses and investors to work with selected rural entrepreneurs and smallholder farmers.

Public sector recipients may be considered for 100% funding support to meet the costs of the proposed intervention. Criteria will depend on the degree of decentralization of the applicant entity, size and financial strength.

Private sector applicants are expected to contribute 30% in cash to the total costs of the intervention to be financed. Application Process:

The PMU and the Umbrella Fund will launch Call for Proposals through the local media and as appropriate to the intended target recipients. Short listed applicants will then be notified and their proposal and financial strength (co-financing) assessed on site by the Fund Secretariat. The Fund will then apply a final list of technical, social and other evaluation criteria to select the successful applicants out of the short list.

Subcomponent 1.2. Crowding In Fund (CIF)

1. Justification and Rationale

Access to capital has been identified as one of the main constraints to the expansion of SME businesses. As per the recent Finscope Access Study, only 25% of SMEs are banked. Most SMEs prefer to use their own funds and private loans to make investments due to high cost of debt servicing, limited access to credit and venture capital and requirements of guarantee and collateral. With the rural farming areas, demand for credit has been determined to high amount rural traders and union associations that are involved in inputs trading and aggregation of produce. The IFAD financed Rural Markets Support Programme (PROMER) for example is working with some 225 rural traders

that provide marketing services to rural households within the project focal areas. A priority demand of these traders is access to working capital for purchasing produce. During the 2015-16 season only 13% of these traders were able to access credit. The inability of such traders to access finance is partly due to their inability to present collateral security acceptable to financial institutions.

This Crowding in Fund aims at improving access to finance for otherwise un-bankable small and medium sized enterprises. The facility will support investments in productive assets such as on farm production equipment, post-harvest machinery and equipment, rural transportation and processing equipment thereby allowing beneficiaries to increase production and productivity, reduce post-harvest losses and increase their incomes.

The facility will also serve as a mechanism to leverage private sector financing through i) improving the collateral base of target beneficiaries. Strengthening and growing the agribusinesses through fixed asset investments and balance sheet reinforcement is expected to result in more bankable enterprises and broader access to long-term private capital, which promotes SMEs' ability to expand and grow and become more productive and profitable and ii) reducing the risk for financial intermediaries willing to work with target beneficiaries. The main value for financial intermediaries is that this 'blended finance' approach, i.e. the leveraging of grant funding for credit, significantly decreases credit risk and enables financial intermediaries to invest in a customer segment they previously were not able to do business with. For investees, the combination of grants and credit reduces the cost of traditional credit and enables access to collateral previously not available

2. Description

The Crowding in Fund will operate as a cost-sharing mechanism for productive investments by farmer groups and other poor rural entrepreneurs (inputs suppliers, aggregators buying from smallholder farmers/fisherman, transporters, processors) operating mainly within agricultural/fisheries value chains but also including the allied rural non-farm MSMEs. This grant acts as an incentive to crowd-in the beneficiary to co-finance the productive equipment in an agreed ratio with participating financial service providers providing part of the investment cost through an interest-bearing loan. The grant from the project and the matching component from the beneficiary are intended to reduce financial service provider's loan exposure and repayment risks. Therefore, there will be an agreed cost-sharing ratio between project and the beneficiaries that shall contribute through own funds and a loan from a financial service provider.

3. Target Group And Eligibility

The fund's target investees are MSMEs - farmer associations and farmer cooperatives as well as other poor rural entrepreneurs operating in profitable value chains. It is estimated that the fund will be able to benefit about 1,000 enterprises.

The Fund Manager will propose a selection criteria acceptable to participating financial Institutions to ensure that potential beneficiaries are able to get the required co-financing. It is envisaged that the following eligibility criteria will apply:

- Applicant: The applicant needs to be one of the actors identified within any of the value chains
 considered profitable for the target region. Such value chains include grains, oilseeds (sesame,
 soya beans, and beans), horticulture, poultry, beef, cashew, fish, and other rural non-farm
 MSMEs.
- **Legal Status**, The applicant needs to be a legal entity registered under appropriate legislation and has been in operation for at least one year. Investees are required to demonstrate legal and fiscal statutory documents to ensure their compliance with local legislation.
- **Viability:** The proposed investment must be financially viable. Investees will be required to submit a bankable business plan that analyses the strength and viability of their business and how their bankability will increase going forward.
- **Co-financing:** The enterprise owners are capable of mobilising the required co-finance investment capital through a loan or from own capital. Partnerships with local financial institutions will be established to leverage the grant funding for additional capital.

- Location: While REFP is a national project, initial investees' operations will be located in one of the three zones of influence, being the Beira Corridor, Nacala/Lichinga Corridor and the Maputo Corridor. The fund will be expanded beyond the four initial corridors to cover other parts of the country on a demand basis.
- **Impact on Smallholder Farmers**: In the particular case where the investment proposal is coming from a market intermediary, the proposed investment needs to present a marketing opportunity to smallholder farmers operating within that value chain. The facility needs to fund activities that will have a clear and direct benefit to smaller farmers. Applicants will be required to show the financial impact of the proposed investment on participating farmers.

4. Types Of Investments

A key objective of the Fund is to finance investments that would improve the collateral base of farmer groups, farmers' associations/unions, trader and other rural non-farm MSME. It is envisaged that investments will include:

- Tractors and tillage equipment
- Transport equipment small to medium sized trucks necessary for marketing activities
- Processing equipment- small to medium scale agro processing plants
- Value addition investments e.g., cleaning facilities, cold storage facilities, storage facilities, etc.
- energy related equipment (eg solar systems)
- irrigation equipment

5. Fund Parameters

The fund will be established with an initial value of USD 5 million¹²⁴. The Fund will operate on a tripartite contribution of the beneficiary, financial institution and the project. For each eligible investment, the beneficiary will contribute 20%¹²⁵ of the cost, the participating financial institution 40% and the project 40%. It is envisaged that due to the nature of activities of traders, processors, farmer associations and other non-farm rural MSMEs, most of the grants will be small within the range of USD 3,000 – USD 5,000. The actual grant amount will depend on the requirements of the proposed investment.

The grantees will be selected through regular call for proposals. Although this will be the main mechanism, the Fund Manager will also remain open to consider applications sent between calls for proposal windows. The application will involve a two-stage process in which applicants submit a concept note and then a full proposal upon approval of the concept note. During concept note stage, investees are required to submit basic information that can be used to assess the investee fulfilment of the basic eligibility criteria (investment concept, program region, availability of documents to demonstrate legal and fiscal compliance, type of organization, availability of a matching cash, etc.) If a candidate is approved, they are invited to submit a full application complete with a business plan showing the financial projection and a narrative of their proposal. The basic evaluation of this stage involves a review of the management capacity, the viability of the business plan, and the potential project development impact, not only in the individual business but also in the community and in the value chain as a whole. If their project looks promising, the Fund Manager shall then visit the project and make a more detailed assessment including an environmental impact review of their project. Approved business plans will be submitted to a Fund Selection Committee.

6. Financial Institutions

The facility aims at improving the relationships between the financial sector and small sized agribusinesses and other rural off-farm MSMEs and to ensure a sustainable source of growth capital post the project support. Partnerships shall therefore be established with local financial institutions to

¹²⁴ About 1.000 beneficiaries at USD5.000 each all-inclusive grant limit

¹²⁵ A combined contribution of 60% (20% own+40% loan) is high when one takes into account the experience of similar programmes in the country. Common experiences are up to 30% contributions eg FINAGRO, AGRIFUTURO, SUSTENTA, PROIRRI)

support the investee contribution and also to leverage the grant funding for additional capital. Financial institutions that have experience in this type of twinning finance include GAPI, Millennium BIM, BCI, Banco Terra and Opportunity Bank. At the outset, the program will ensure that the basic eligibility criteria mirror the minimum requirements of participating banks, so as to prepare the SMEs for relationships with financial institutions. The financial institutions will be involved at all stages of the project. In order to make the banks more sensitive to the needs of the target group, the project will work with financial institutions to build awareness of the business conditions and opportunities in agriculture. The program aims to support as many investees in their credit application process as possible by creating favourable conditions for MSMEs to leverage the grants for formal finance, by building financial institutions' trust in these MSMEs and by facilitating communication between the parties. For example, ownership of the assets financed will be transferred to the MSMEs at the outset, which will allow them to pledge the assets to the financial institution to meet collateral requirements.

7. Fund Administration

Fund Governance

A <u>Fund Selection Committee</u> shall be set up for each of the three regions to be covered by the project. If a business meets the standard minimal score, it is proposed for approval to the Selection Committee. The selection committee shall meet once per window to review all proposed business plans for approval. Members will include a senior representative of the Fund Manager, a bank representative, and an independent private sector representative. The responsibility for the final selection of grantees will be that of BNI.

Fund Management

Banco Nacional de Investimentos (BNI) has been identified by Government as the preferred channel for funds under this project. Given that BNI operates at a wholesale level, this activity shall therefore be assigned to a competent **Fund Manager (FM)** that would take care of its day to day administration under the overall oversight of BNI. To effectively play this role it is expected that the FM will set up decentralised structures in each of the target regions that would allow it to timely receive and appraise application from potential investees.

The Fund Manager will be responsible for:

- Developing procedures for the application and Funds allocation process.
- Publicise the fund among potential beneficiaries. This includes conducting awareness
 workshop and seminars within the target regions as well as using electronic and other means
 of publicity.
- Securing the participation of Financial Institutions. The Fund Manager shall identify and
 mobilise financial institutions to participate in the project. The Fund Manager shall create
 awareness around the program and its application process to get buy-in from FSPs. FSPs
 need to participate in program promotion workshops, which enable them to communicate
 clearly how bankable MSMEs in the agribusiness and other rural sectors could fulfil
 requirements for access to credit.
- Manage Grant Application Process: The Fund Manager shall manage all stages of the grant application process including
 - o Solicit investments on a competitive basis.
 - o Coordinate with the Selection Committee for investment approvals.
 - Conduct due diligence on project applications.
 - Prepare investment proposals for evaluation and approval by the Selection Committee.
 - Coordinating the contributions from grantees and managing the procurement process. The FM shall also be elaborate contracts with beneficiaries and manage the matching grants.
- Grant Disbursement: It is envisaged that grant proceeds will be channelled directly to suppliers of assets to be acquired under the project. However, for this cost-sharing

mechanism to work effectively, the direct channelling of grant proceeds will be done in tandem with the loan-financed and beneficiary contributions.

- Monitoring: The Fund Manager will be required to maintain information on the beneficiaries
 and their investments in order for the project to track the impact of the facility. The FM shall
 timely submit to the PMU all required reports, including progress reports.
- Other operational matters such as management of its budget, maintain the requisite staff and presence in Mozambique in suitable locations, and operate its organization with the appropriate financial and internal controls.

Fees and Remuneration

The Fund Manager shall be remunerated in accordance with the Fund Management Services Agreement. The total fund management budget (fees and annual operating costs) is expected to be in the range of 6% -10% per annum of the funds under management. Funds under Management shall be the total amount of grant disbursed by the Project to the Fund Manager.

8. Technical Assistance

An emerging lesson from implementing similar initiatives in the country is that availability of technical assistance is indispensable for the successful implementation of such projects.

The Fund Manager would therefore be required to enter into partnership with Technical Assistance Service Providers that would interact with participating beneficiaries' and assist them in making applications to the Fund. Preference should be to identify service providers that are capable of sustaining project initiatives post project support rather than consultancy companies. Public business development service providers include Instituto para Pequenas e Médias Empresas (IPEME), District Directors for Economic Activities (SDAE), CEPAGRI (now FDA) and Beira Agricultural Growth Corridor. Responsibilities of Technical Service providers will include:

- Promoting the program and helping identify suitable candidates.
- Assisting potential investees in the development of business plans and in some cases with formalizing their legal status.
- Support in market research and identifying market opportunities
- Facilitate linkages with financial institutions.
- Facilitate linkages with providers of technical assistance relevant to the activity (agronomy, equipment selection and installation);

The project should also seek to cooperate with service providers implementing the various IFAD projects to identify candidates as well as in the provision of post investment technical support that many of the beneficiaries would require.

9. Crowding In Fund: Risks and Mitigation Strategies

Risk	Risk mitigation	
Ability of FM to timely set up appropriate structures	Making the establishment of such structures a key disbursement milestone during the start up	
Ability to mobilise participating financial institutions	 The market has a number of local financial institutions with experience in this type of product. The Fund Manager will have responsibility for mobilising these financial institutions to participate The LOC provides a financial window for support to micro, small and medium enterprises that will be channelled through selected participating Institutions. This should act as a further incentive to participate 	
Capacity of beneficiaries to raise required contribution	 The beneficiary contribution has been let at 60% (20% own, 40% loan). Experience from ongoing programmes puts this as being on the high side. The uptake levels will need to be closely monitored during implementation to determine if these levels turns out to be a 	

	barrier to participation.
Limited number of potential clients meeting the established criteria eg capacity to prepare bankable business plans, lack of legal documents	 Retaining the services of service provider to provide Technical Assistance in financial literacy, business plan development, legal registration of entities as well as post financing support in agronomy, markets

10. TARGET GROUP AND ELIGIBILITY

The fund's target investees are MSMEs - farmer associations and farmer cooperatives as well as other poor rural entrepreneurs operating in priority bankable value chains. It is envisaged that investments will include small to medium scale agro processing plants, value addition investments e.g., cleaning facilities, cold storage facilities, storage facilities, etc. as required by farmer groups, farmers associations/unions, traders, associations and other rural non-farm MSMEs. It is estimated that the fund will be able to benefit about 1.000 enterprises. The Fund Manager will propose a selection criteria acceptable to participating financial Institutions to ensure that potential beneficiaries are able to get the required co-financing. It is envisaged that the following eligibility criteria will apply:

- Applicant: The applicant needs to be one of the actors identified within any of the value chains considered profitable for the target region. Such value chains include grains, oilseeds (sesame, soya beans, and beans), horticulture, poultry, beef, cashew, fish, and other rural non-farm MSMEs.
- Legal Status, The applicant needs to be a legal entity registered under appropriate legislation and has been in operation for at least one year. Investees are required to demonstrate legal and fiscal statutory documents to ensure their compliance with local legislation.
- Viability: The proposed investment must be financially viable. Investees will be required to submit a bankable business plan that analyses the strength and viability of their business and how their bankability will increase going forward.
- Co-financing: The enterprise owners are capable of mobilising the required co-finance investment capital through a loan or from own capital. Partnerships with local financial institutions will be established to leverage the grant funding for additional capital.
- **Location:** While REFP is a national project, initial investees' operations will be located in one of the three zones of influence, being the Beira Corridor, Nacala/Lichinga Corridor and the Maputo Corridor. The fund will be expanded beyond the four initial corridors to cover other parts of the country on a demand basis.
- Impact on Smallholder Farmers: The facility needs to fund activities that will have a clear and direct benefit to smaller farmers. Applicants will be required to show the financial impact of the proposed investment on participating farmers.

11. FUND PARAMETERS

The fund will be established with an initial value of USD5million 126. The fund will be deployed in the form of in-kind matching grants (procurement of fixed assets for the investees), with a maximum individual grant size of USD 10,000 per investment.

The Fund will operate on a tripartite contribution of the beneficiary, financial institution and the project. For each eligible investment, the beneficiary will contribute 10% of the cost, the participating financial institution 40% and the project 50%. It is envisaged that due to the nature of activities of traders, processors, farmer associations and other non-farm rural MSMEs, most of the grants will be small within the range of USD 5,000 - USD 10,000. The actual grant amount will depend on the requirements of the proposed investment.

¹²⁶ About 1.000 beneficiaries at USD 5,000 each all-inclusive grant limit.

Grantees will be selected through regular grant application windows. The application will involve a two-stage process in which applicants submit a concept note and then a full proposal upon approval of the concept note. During concept note stage, investees are required to submit basic information that can be used to assess the investee fulfilment of the basic eligibility criteria (investment concept, program region, availability of documents to demonstrate legal and fiscal compliance, type of organization, availability of a matching cash, etc.) If a candidate is approved, they are invited to submit a full application complete with a business plan showing the financial projection and a narrative of their proposal. The basic evaluation of this stage involves a review of the management capacity, the viability of the business plan, and the potential project development impact, not only in the individual business but also in the community and in the value chain as a whole. If their project looks promising, the Fund Manager shall then visit the project and make a more detailed assessment including an environmental impact review of their project. Approved business plans will be submitted to a Fund Selection Committee.

12. FINANCIAL INSTITUTIONS

The facility aims at improving the relationships between the financial sector and small sized agribusinesses and other rural off-farm MSMEs and to ensure a sustainable source of growth capital post the project support. Partnerships shall therefore be established with local financial institutions to support the investee contribution and also to leverage the grant funding for additional capital. Financial institutions that have experience in this type of twinning finance include GAPI, Millennium BIM, BCI, Banco Terra and Opportunity Bank. At the outset, the program will ensure that the basic eligibility criteria mirror the minimum requirements of participating banks, so as to prepare the SMEs for relationships with financial institutions. The financial institutions will be involved at all stages of the project. In order to make the banks more sensitive to the needs of the target group, the project will work with financial institutions to build awareness of the business conditions and opportunities in agriculture. The program aims to support as many investees in their credit application process as possible by creating favourable conditions for MSMEs to leverage the grants for formal finance, by building financial institutions' trust in these MSMEs and by facilitating communication between the parties. For example, ownership of the assets financed will be transferred to the MSMEs at the outset, which will allow them to pledge the assets to the financial institution to meet collateral requirements.

13. FUND ADMINISTRATION

Fund Governance

A <u>Fund Selection Committee</u> shall be set up for each of the three regions to be covered by the project. If a business meets the standard minimal score, it is proposed for approval to the Selection Committee. The selection committee shall meet once per window to review all proposed business plans for approval. Members will include a BNI representative, as senior representative of the Fund Manager, a RPMU representative, a bank representative, and an independent private sector representative.

Fund Management

This matching grant facility will be administered by a **BNI** as **Fund Manager**. The requirements of managing a matching grant facility are different from those of other instruments envisaged under this project. This will therefore may require a separate and dedicated team working under the under the BNI Fund Manager.

This CIF Fund Manager will be responsible for:

- Develop procedures for the application and Funds allocation process.
- Publicise the fund among potential beneficiaries. This includes conducting awareness
 workshop and seminars within the target regions as well as using electronic and other means
 of publicity.
- Securing the participation of Financial Institutions. The Fund Manager shall identify and mobilise financial institutions to participate in the project. The Fund Manager shall create awareness around the program and its application process to get buy-in from FSPs. FSPs need to participate in program promotion workshops, which enable them to communicate

clearly how bankable MSMEs in the agribusiness and other rural sectors could fulfil requirements for access to credit.

- **Manage Grant Application Process:** The Fund Manager shall manage all stages of the grant application process including:
 - ✓ Solicit investments on a competitive basis.
 - ✓ Coordinate with the Selection Committee for investment approvals.
 - Conduct due diligence on project concept applications and preparation support for proposals.
 - ✓ Prepare investment proposals for evaluation and approval by the Selection Committee.
- **Grant Disbursement:** It is envisaged that grant proceeds will be channelled directly to suppliers of assets to be acquired under the project. However, for this cost-sharing mechanism to work effectively, the direct channelling of grant proceeds will be done in tandem with the loan-financed and beneficiary contributions. The Fund manager shall be responsible for coordinating the contributions to the suppliers and for managing the procurement process. The FM shall also be elaborate contracts with beneficiaries and manage the matching grants.
- Monitoring: The Fund Manager will be required to maintain information on the beneficiaries
 and their investments in order for the project to track the impact of the facility. The FM shall
 timely submit to the PMU all required reports, including progress reports.
- Other operational matters such as management of its budget, maintain the requisite staff and presence in Mozambique in suitable locations, and operate its organization with the appropriate financial and internal controls.

Fees and Remuneration

The Fund Manager shall be remunerated in accordance with the Fund Management Services Agreement. The total fund management budget (fees and annual operating costs shall) shall not exceed 6% per annum of the funds under management. Funds under Management shall be the total amount of grant disbursed by the Project to the Fund Manager.

14. TECHNICAL ASSISTANCE

An emerging lesson from implementing similar initiatives in the country is that availability of technical assistance is indispensable for the successful implementation of such projects.

The Fund Manager would therefore be required to enter into partnership with Technical Assistance Service Providers that would interact with participating beneficiaries' and assist them in making applications to the Fund. The technical Service Providers will be financed through subcomponent 2.2: Support to business plan validation and market linkages. Preference should be to identify service providers that are capable of sustaining project initiatives post project support rather than consultancy companies. Public business development service providers include Instituto para Pequenas e Médias Empresas (IPEME), District Directors for Economic Activities (SDAE), CEPAGRI (now FDA) and Beira Agricultural Growth Corridor. Responsibilities of Technical Service providers will include

- Promoting the program and helping identify suitable candidates.
- Assisting potential investees in the development of business plans and in some cases with formalizing their legal status.
- Support in market research and identifying market opportunities
- Facilitate linkages with financial institutions.
- Facilitate linkages with providers of technical assistance relevant to the activity (agronomy, equipment selection and installation);

The project should also seek to cooperate with service providers implementing the various IFAD projects to identify candidates as well as in the provision of post investment technical support that many of the beneficiaries would require.

Sub-component 1.3: Line of Credit (LOC)

1. Introduction:

- 1.1 The target group identified for the project rural entrepreneurs in agriculture and allied sectors have little access to credit. Currently, the financial requirements of only 2.3% of the farm holdings in the country and 25% of the MSMEs are met by the formal financial sector. There are several reasons contributing to this. Primary among them is that the clientele from these sectors are not seen as economically viable and bankable, are located in remote areas with poor financial access and are unable to satisfy the lending criteria of financial institutions. The financial institutions, on the other hand, face liquidity problems and do not offer products, services or delivery mechanisms that are especially suited to the requirements of this segment leading to high transaction costs, highly priced financial products and inaccessibility of financial services that serve as deterrents to the expansion of credit.
- 1.2 Credit lines serve as an important routes to channelling credit to the unbanked population. In 2015 there were 16 active credit lines funded by donors and DFIs in Mozambique. Funding from these credit lines amounted to USD 216 million. The Credit line focuses more on SMEs and less on microenterprises. Very few (only 5%) are targeted at agriculture. As per FSD Moc Study, "As of June 2015 .66%(apex) of total credit line facilities has been committed to and 40% has been disbursed to specific financial institutions. Only 23 % of total facilities had been disbursed to MSMEs or agriclients.". Despite moderate performance under the existing credit lines, credit to agriculture has been on the decline which only demonstrates that there is vast scope for improvement in agriculture and agribusiness credit delivery. Earlier credit lines were concentrated in a few banks; but of late the number of banks accessing credit lines has increased. This is because more banks are willing and becoming eligible for accessing credit lines. The positive development is that banks are realigning their priorities and many are recognising the business potential of lending to the agri-business and SME sector. The advent of technological advancements - both digital finance and mobile technologyhas increased their confidence. The banks recognise that credit lines and guarantee facilities would make it easier for them to enter these markets. The challenges before all donors and funding agencies are how to ensure that the credit lines could have a sustainable impact on the target sector and the participating financial institutions, how to reach out to more financial institutions (MFIs for instance) that are not eligible for participation, how to build synergies among different credit lines, and how to deliver agriculture credit lines and link it to value chain development.

2. Objectives:

- 2.1 The LOC is aligned with the project objective of increasing the availability of, access to, and use of appropriate, adapted, inclusive and sustainable financial services in rural areas. The objective of the LOC is to provide financial institutions with liquidity support for augmenting the flow of credit to agripreneurs and agribusinesses in the rural sector. It is expected that this would facilitate (a) subsistence farmers to generate small surpluses and transition from subsistence to a basic level of commercial agriculture; (b) "emerging farmers" to intensify their production and participate in structured value chains; (c) micro enterprises to provide value added services such as aggregation and trading of produce, input supply, basic sorting, grading, processing and milling, providing small storage/warehousing facilities, transporting and marketing of agriculture commodities; and (d) lead firms to reach out to emerging small farmers via out grower schemes.
- 2.2 The LOC in tandem with the innovative financial instruments envisaged in Sub-component 1.1 and 1.2 will provide the necessary impetus to the PFIs to diversify their business portfolio and customerbase as also increase the bankability of the target clients. The measures in Sub Component 1 and 2 are expected to improve the credit flow to agriculture and micro enterprises sectors and improve the proficiency of the financial institutions. The LOC will be also be available to project participants of ongoing IFAD projects and will cover participants who have been benefited from training and productive support under Components 1 and 2. The REFP, thus, adopts a 360 degree approach that enhances the capacity and confidence of the Financial Sector to lend to small, off farm and non-farm businesses in rural areas.

3. Scope of LOC:

3.1 The LOC targets a wide array of activities through it sub- components to harness credit for the agriculture and agri-business sector and also make use of alternative delivery channels that have successfully purveyed credit to smallholder farmers. The LOC should not be read in isolation, but together with the graduation promotion and outreach programe and crowding-in fund in sub-components 1.1 and 1.2, as well as with the capacity building in Component 2 – that provide participants with the complete package of TA, productive and capital support. The LOC component

can be tailored into MOUs entered by the Funds with other institutions. However, LOC will also serve as a standalone component where the participant is already recipients of training and productive support.

- 3.2 The 4 LOC sub- components will augment flow of credit to small agriculture, allied and fisheries producers, as also informal and formal MSMEs connected with agriculture in the rural sector. This covers the economic activities engaged by 80% of the population and includes 77% of the micro enterprises engaged in agriculture. These sectors are least served by formal credit, with only 3.4% of the credit going to agriculture. The Mozambican economy is an agrarian economy, yet it is characterised by high levels of subsistence farming and low production levels per hectare compared to other economies. Only a small proportion of the farms produces for the market or generate marketable surplus. This severely cripples the growth of agribusiness that caters to commercial agriculture. Lack of access to finance has been identified as stumbling block for input and farm technology usage. There is, therefore, a need to provide necessary stimulus for directing credit to this sector.
- 3.3 The Government of Mozambique has recognised scope for private sector investments and engaging of both rural enterprises and small farming households in agriculture value chains. The Strategic Plan for the Development of the Agriculture Sector (PEDSA) identifies six development corridors to attract investments into key value chains along the corridors:

Development corridors and key value chains

Development corridors and key value chains		
Corridor	Value Chains	
Pemba - Lichinga	Potato, wheat, beans, maize soya, cotton tobacco and poultry	
Nacala	Cassava, maize ,cotton, poultry, fruits and groundnuts	
Vale de Zambeze	Rice, maize, goat, potato, cotton, cattle and poultry	
Beira	Maize, Wheat, horticulture, poultry, soya, rice and cattle	
Limpopo	Rice, horticulture, cattle and poultry	
Maputo	Rice, horticulture, cattle and poultry	

Source: Agriculture and Rural Development Non lending Technical Assistance: WB

The Government strategy creates space for a more active private sector in production and service provision. The LOC is designed to support participants and activities along agriculture, fisheries and allied sector value chains in keeping with the GOM's strategy of harnessing private sector investment along value chains. The wide spectrum of possible recipients will include producers, input suppliers local traders, technicians, processors, millers, storage and warehousing,, aggregators, packers, transporters, quality control specialists, and other service providers along value chains along development corridors, established and upcoming value chains.

3.4 The Government of Mozambique in its National Financial Inclusion strategy has given targets for credit to agriculture and MSME sectors as follows:

Targets under National Financial Inclusion Strategy

Indicator	Baseline Year (2015)	Target 2018	Target 2022
Credit to agriculture as a proportion to total bank credit	2.5%	3.5%	5.0%
Credit to MSME in proportion to the total bank credit	3.0%	4.0%	6.0%

These are very aggressive targets, achievement of which requires concerted efforts from all players. The LOC package is focused on augmenting credit flow to these priority areas though institutional strengthening and liquidity support.

4. Sub-Components of LOC:

4.1 The LOC will provide wholesale financing to financial institutions for on-lending to target participants as specified below. The first 2 sub -components of the LOC are aimed at directing the flow of credit to critical agri-preneurial and agribusiness activities and the last 2 sub-components look at ways of increasing credit outreach through alternative delivery channels; the latter assuming significance as REFP target participants are in rural areas, where the formal sector has limited outreach.

Production credit to producers and local traders

The first component augments flow of credit to small producers, especially emerging farmers, fishers, and village level traders and aggregators for financing their production/ working capital (up to 1 year) requirements through PFIs (CBs& MFIs). These loans may be used for purchase of seeds, chemical inputs, fishing net, feed and other low value inputs, hiring or purchasing of agriculture implements, hiring of labour, repairing boats, formalisation of business (DUAT and NUIT) by producers and meeting of working capital requirements such as "stock" required by traders. Loans of different sizes with a cap of USD 1,000 dollars will be refinanced under this component. An allocation of USD 12.5 million has been allocated for this purpose.

The demand for input and working capital credit by small holders and traders is evident from the following:

- Business loans have increased substantially and 44% of business loans are used by wholesale and retail traders, whereas 22% by the agriculture, forestry and fisheries sectors (Finscope MSME 2012). Traders borrow for "stock" and other working capital requirements. Overall credit for business has expanded from 12.5% in 2012 to 33% in 2014. The trend is expected to continue. This component has been designed to address this demand.
- Small producers require funding for seeds, fertilisers and other low value inputs. They also require farm implements, equipment and livestock. Limited use of inputs and farm technology is a major impediment to raising agriculture productivity and embracing commercial agriculture. The percentage of adults using credit for seeds, fertilizers and fishing nets has increased from 3.3% in 2009 to 17% in 2014; farming equipment from 1.3% to 7 % and livestock from 0.5% to 3%. Thus, the component will meet the rising demand for such credit.
- The component will finance the formalisation of their businesses (DUAT and NUIT) required as documentation for accessing credit, thereby increasing the eligibility and demand for credit.
- Loans for agriculture from micro banks range between 83 USD to 1600 USD and for livestock between 250 USD – 1,600 USD. The BOM –DCA Agriculture portfolio showed more demand for producer and trader loans in the USD 400 – 800 bands. The average loan size based on feedback from MFIs ranged from USD 147 -1125. The demand for loan sizes was taken into consideration while determining the loan cap of USD 1,000 and number of beneficiaries under this component.
- Both individual and group loans given to producers will be considered for reimbursement. The
 advantage of group loans is that group guarantee may be accepted as collateral. However,
 not all farmers are part of associations; hence individual loans need to be considered as well.
 Banks prefer to give individual loans to traders, which will be considered for reimbursement
 under this project.

Loans to micro and small enterprises:

This component will channel credit flow through PFIs to small and micro enterprises with business along agriculture, fisheries and allied sector value chains. Existing and emerging micro enterprises that offer various value added services such as supplying of inputs, leasing or repairing of implements, maintenance and repair services, aggregation of produce, sorting, grading, processing, preservation and milling, labelling and packaging, providing small storage/warehousing facilities, market sheds, transport and marketing of agriculture commodities though segregated loan products are envisaged for financing under this component. Upstream small and micro value chain in the fisheries sector comprising activities such as transporters, municipal marketing agents and naval carpentry may also be considered. Loans of different sizes with a cap of USD 4,000 will be refinanced under this component, with emphasis on loans of smaller denominations. Repayment period will vary

from 1-3 years depending upon the purpose. An allocation of USD 8.9 million has been made for this purpose.

The demand factors that were taken into consideration are s follows:

- The Government of Mozambique has identified development along value chains as a means of integrated development of the agriculture sector. Financing of rural enterprises was sought along value chain corridors in consonance with the Government's Strategic Plan for the Development of the Agriculture Sector (PEDSA) that identifies six development corridors to attract investments into key value chains along the corridors. Not only is there scope for private sector investments along value chains but sustainable business opportunities for producers and units in the MSME sector.
- The need for private sector investment in value chains is imperative; given the fact Mozambican farmer's access to public sector extension services has declined from 13.5 percent in 2002 to 8.3 % in 2014.
- Agro-input access points are limited, with one agro dealer for every 20,000-25,000 farmer as compared to one to 2,800 in Tanzania, one to 1500 in Malawi, and one to 1400 in Zambia.
 Donor involvement in this sector has contributed to the increase in agro input points from 150 in 2006 to 1000 in 2015.
- 77% of micro enterprises are engaged in agricultural activities and 45% of them are engaged in the sale of agriculture products. More than 88% are located in rural areas. Thus, there will be a demand for this component. The two funds- "crowding in fund"; "innovation and outreach fund" can play a role in building capabilities and attracting funding into this area.
- Banks have, of late shown interest in value chain financing but do not have the capabilities to lend to this sector. The component, along with the "innovation and outreach fund", will serve as a catalyst to develop necessary capabilities to serve this sector.
- Several products have been introduced by banks for extending finance to agribusiness including microfinance input loans, agribusiness input advances to smallholders and outgrowers; and trader loans from banks, which can be scaled up for meeting demand from this sector. The banks could also look at instruments such as warehouse receipt finance, collateral management loans, leasing, asset-based lending and develop new loan products for the same.
- The banks are moving towards larger value loans in this sector and smaller denomination loans are more difficult to come by. Micro banks offer loans ranging between USD 50-5000 to this sector, whereas commercial banks with a micro sector focus give loans ranging from USD 250-12,000. The BTM-DCA portfolio comprised loans to MSME in the agriculture sector ranging from less than USD 17,000 for micro enterprises and ranging between USD 17,000-200,000 for small enterprises.

Financial institution may stipulate borrower's margin, grace period, repayment period, instalments, interest rate, based on the activity and borrowers' loan appraisal.

Lending to ASCAs:

This component is designed to serve the target clientele through ASCAs. ASCAs play an important role in the dispensation of credit in the informal sector. Data from FARE's presentation in ASCA's 7th Forum in 2014, as given in a FSD MoC study report, indicates the following statistics on ASCAs.

Total Number of ASCAs	12,481
Number of Members	227,979
Active members	76,201
Accumulated Savings (000 mt.)	362,980,607
Active Savings	241,186,962
Active Credit	140,296,924
Retained income	73,103,045
Social fund	25,384,222

1. Source: Finscope 2014

The ASCAs are growing very fast with the number of clients increasing from approximately 65,000 in 2012 to 227,979 in 2014 and total savings from MZN 27 million (2012) to MZN 363 million. This indicates that there is a growing appetite for financial services in rural areas. FARE has reported that 18 organisations had been promoting ASCAs in 2014, though a recent research yet to be published by FSD Moc identifies 25 promoter organisations. GAPI and GIZ provide assistance to ASCA promoters. GAPI is assisting a total of 520 ASCA groups, providing them with access to markets, business management skills and linkage to financial institutions. So far GAPI has linked ASCAs to BCI, BTM and Cooperativa de Poupanca do Limpopo. GIZ also in its Pro Econ Project has enabled linkage of 3,000 members of ASCA groups to the formal sector in Sofala, Manica and Inhambane provinces. Pro Econ set up a joint venture with mobile money provider CarteiraMovel . In pilot projects, the groups were not only given access to mobile savings facilities but also other financial services and transactions. One micro bank is offering a special loan product for ASCAs.In addition, Banco Opportunide, through the intermediation of ADEM has developed a partnership with ASCAs in several provinces. Donor agencies like CARE&IFAD and some of the NGOs have made initiatives in ASCA strengthening with varying degrees of success.

This component strives to mainstream ASCAs with the formal sector. Under this component, matured and saving-linked ASCAs may credit liked to formal financial institutions. The credit would be in proportion to ASCA savings. The rationale for the same is as under:

- The large number of ASCAs, by virtue of their significant role in facilitating rural outreach and their perspectives in financial inclusion warrant mainstreaming with formal sector. This is important in the Mozambican contest because ASCAs can provide the formal sector with the rural outreach that it doesn't have. As an intermediary, the ASCA can give confidence to the formal sector to lend to the rural sector and secure for its members collateral- free loans backed by savings. The linking of ASCAS to financial institutions will present an opportunity to channelize ASCA savings into the formal sector by offering savings- cum- loan products or plain vanilla savings products. This will not only help to augment the savings/deposits of financial institutions but also reduce the risk perception of lenders, which could then translate in better priced credit. It can also foster mobile and digital finance innovations that would enable remote ASCAs to be linked and avail of formal financial services. Most of all, it will help in putting together a regulatory framework for linkage banking that will help in mainstreaming this activity with necessary safeguards.
- In a typical linkage model (SHG-Bank-India), the groups start with the collection of thrift of their members, provide small credit to them, based on their wisdom and manage their own kitty. They open group savings accounts with banks, thereby demonstrating their financial discipline, and the banks release loans to the group in proportion to their savings and based on their stability. The ASCAs that have traditionally mobilised group savings and disbursed credit to groups, are well poised for the next stage of the linkage model which entails opening of savings accounts for safe- keeping of group savings and availing of credit facilities. Linkage will also provide ASCAs with other financial services which would otherwise be denied to them.
- While it is argued that credit linking ASCAs could hamper the self- sufficiency character of groups, yet data from the National Survey of smallholder farmers in Mozambique shows that 1.5 million people or nearly 370,000 households were found most likely to access formal financial services. In the publication, 'Linking savings groups to Banks- What works, What doesn't, and What's next' brought out by CARE and Plan in partnership with Barclays on April 21,2015, one of the key learnings about Groups was that "savings groups- especially those that have been saving for two years or more voice an increased need for financial products such as credit; this is especially true during the first three months of the savings groups' saving cycle where savings in the group are particularly low and the demand for loans is high." Perspective members by way of their graduation through internal lending are likely to have enhanced demand for agri-business activities, warranting credit from Banks/MFIs.
- For the purpose of this pilot, credit linkages can be thought of in special cases, in 200 mature and linked ASCAs that are in close proximity to the Commercial Banks/Micro Banks, where members face problems with the short credit cycles of ASCAs (usually 6-8 months) not

aligning with their crop cycles or where a shift to commercialisation and linkages with value chains, will necessitate larger funding and longer duration financial products. The ASCAs could be credit linked in phases and gradually- first 1-2 years could be preparatory phase and actual credit support to be provided during subsequent 4 years. Under LOC to ASCA, both individuals and joint liability groups formed of ASCA members would have access to credit from banks, preferably in proportion to their savings with them as well as with the bank. The issues of governance, group solidarity, peer pressure, accounting, etc. Will to be taken care of by the stake holders /promoting institutions to be engaged. Financial Institutions will be encouraged to develop linkage products with mobile operators under the innovations and outreach fund. The M-ASCA product that is being used in Kenya may be considered for replication. An exploratory study initially and impact study after implementation would be undertaken to document the impact.

An allocation of USD 3.6 million has been made for this purpose.

Financing outgrowers:

This component proposes to finance 1-3 small out grower schemes in new areas that are part of established, medium to high potential value chains covering small farm holders wherein lead firms or medium farmers will impact 300 emerging small farmers by providing market access, quality inputs and technical support.

Out-grower financing has been an important source of support for small holders who sell to large buyers. The support is normally in kind, in the form of inputs and technology, and has translated into good agriculture practices, increased productivity and output and enhanced income. It facilitates small farmers' transition into commercial agriculture, with scope for innovations in delivery. It is a popular mode of financing and several Commercial Banks are already supporting. Operations are well organized.

The justification for this component is as follows:

- PEDSA's implementation approach considers all activities linked to development and transfer of technologies and provision of agriculture inputs. Small farmers can benefit from inputs and technology, without taking recourse to bank credit.
- A big barrier to commercial farming in Mozambique is the lack of access to markets for small farmers. Medium scale producers, who normally serve as outgrowers, have better options to sell their produce to local, regional or national traders and are linked to major buyers. They, thus, can provide a market for small producers and augment their income.
- The financial institutions do not need to deal with individual farmers, thereby reducing their transaction costs and making it attractive to them.
- There have been instances of spike in bank credit where lead firm or aggregators have played a role. The Agribusiness Indicators, Mozambique (World Bank 2012) has stated that a large percentage of small farmers seen as accessing credit who in Tete province might be getting credit from MLTC (Mozambique Leaf Tobacco Company).
- The costs strongly depend upon the kind of investment but it could range between USD 5,000-7,000 per ha.

The demand for out-grower financing has been more prevalent in dominant value chains such as cotton, tobacco and sugar involving large companies such as MLTC, Olam and JFS. However, smaller entrepreneur business models promoted by Ag Dev Co, such as the ECA, Panda Farm, So Soja, FDO, Mozambique Honey Company are examples of successful ventures with smaller investments. Out-grower financing is an important segment of value chain financing, and with the strengthening of value chains as part of Government policy and private sector initiatives, this route of directing finance to smallholder farmers cannot be ignored.

The allocation for this sub-component is USD 2.0 million. The share of IFAD will not exceed 70% of the investment and the loan will be made on commercial terms.

The Line of Credit will total USD 27.1 million and encompass the four channels stated above.

5. Selection of Participants

5.1 The following criteria have been identified for selection of beneficiaries:

- ASCA: While selecting ASCAs, the following aspects may be taken into account: (1) Mature and linked ASCAs that have been in existence for3 years and have a satisfactory track record in saving and lending to members; (2) The norms envisaged for gender and youth targeting should be complied with; (3) The ASCA members meet regularly and maintain ledgers and passbooks that are audited from time to time; (4) They have been developed by IFAD or other Multi-lateral agencies under various schemes &(5) ASCAs in close proximity to the MFIs/banks may be given preference.
- Farmers: (1) Small farmers having 0-10 hectares landholdings or 10 livestock are eligible for participation. (2) Among small farmers, preference may be given to subsistence farmers with less than 1 hectare and emerging farmers 1-2 ha. 60% of the loans disbursed to small farmers may be earmarked for subsistence and emerging famers. (3)Small farmers may be individuals or those organised in informal groups or formal associations or agricultural cooperatives. (4) Farmers/ farmer groups which have been covered under the "graduation" and "crowding in" funds and those who have benefited from technical assistance to make them more bankable may be given preference. (5) Farmers who have been mobilized or are proposed to be mobilized into value chains or those with sporadic surpluses that can be channelled into organised markets may be funded. And (6) the norms envisaged for gender and youth targeting should be complied with.
- Micro enterprises including traders: (1) Micro enterprises not having more than 4 employees with a maximum annual turnover of USD 20,000 (2) They are engaged in off -farm and nonfarm activities in agriculture and allied sectors for a minimum of 2 years (3) Traders are engaged in the sale of agriculture products. (4) They are registered or licensed operators (4) Micro enterprises in the informal sector may be eligible with group guarantee (5) Micro enterprises are mobilized and arranged/ or identified to be arranged along identified value chains. (6) They have been benefited from technical assistance / business development / incubation services/assistance under "graduation" and "crowding in" fund arranged under this project or other projects, (7) Micro enterprises assisted under the "crowding in" fund and "incubation fund" will be prioritized and (8) The norms envisaged for gender and youth targeting should be complied with.
- Out-growers: (1) Commercial farmers (medium holders) producing commercial crops with established linkages to markets or agro processing companies which are linked / propose to link with small farmers in an out-grower arrangement (2) Value chain participants such as seed companies that already play the role of aggregators and are willing to support small farmers in an out-grower agreement by providing other necessary inputs and technical services. (3) Out-grower schemes in new areas but linked to strong value chains may be given preference

6. Selection of participating financial institutions (PFIs)

- 6.1 The selection of PFIs will be made from among commercial banks with good rural outreach and those with a microfinance focus, micro banks and other MFIs through an objective selection criteria and process. The participating FFIs need to be registered under the respective laws and regulations of the Bank of Mozambique.
- 6.2 In general, the Financial Institutions will be screened ,based on the following criteria: the availability of a strategic plan to reach out to new markets in rural areas that includes products, delivery channels and risk mitigation measures; the institution is financially sound and has a strong management and governance as well as a well-performing loan portfolio that includes agriculture and micro finance lending; has a presence in all or most of the provinces; is adequately capitalized and has good operating systems, has the ability to absorb the LOC and is amenable to use it to expand to new markets and develop new products, can abide by CGAP's Client Protection Principles for Microfinance (CGAP 2010), will have reporting programme while reporting regularly to PMU, has an established track record and is not a Greenfield financial institution and has invested some of its own equity or shareholders' funds in financing a loan portfolio before funding of the LOC facility. In addition, PFIs would have to comply with suitable norms relating to recovery rate, OSS, PAR, CRAR, minimum years of operation, audited book of accounts and relevant financial statements.

7. Intermediary Institution:

- 7.1 The selection of an union wholesale financial intermediary/fund managing institutional architecture is critical for efficient and timely implementation of the LOC. REFP will also offer a structure to tie the multiplicity of different existing funds under IFAD projects under one consolidated Umbrella Fund. This **umbrella fund** will manage the main technical assistance and support funds including LOC under REFP. The LOC will be in the form of Rural Refinance Fund under Umbrella Fund which will be used for augmenting financial resources of the PFIs for on- lending to target clients and repayments from the PFI will be returned for recycling. The Fund will be managed by a professional fund manager. Intermediary institution should bear the refinance risk and PFIs the credit risk for the refinance/loan provided and, as such, monitor it scrupulously.
- 7.2 The intermediary body will have to be in charge of oversight and guidance of LOC. It will strategically guide and control the operations of the Fund Manager/ LOC Manager. It will be in constant contact with the PMU and report the progress through an MIS. In addition to Fund Manager, it will also have an Investment/Credit Committee which will take all investment decisions, based on LOC Guidelines and decide and approve the loaning operations. The LOC Manager will implement all the required steps for channelling the whole sale loan operation to eligible PFIs engaged in the lending windows in the project areas. The requirements of the LOC Manager are as follows:
 - the capacity (license, systems and staff) in place to financially manage a credit line and to oversee the whole sale loan operations based on key performance indicators of participating FPIs
 - Having a track record in managing credit lines
 - Complying with the documents as per the requirements of the Tribunal Administrative.
- 7.3 The LOC Manager will be responsible for the day –to- day management of the LOC. This includes advertising, preparing the selection, disbursement and monitoring of the LOC according to predefined eligibility criteria and respective guidelines. The LOC Manager also ensures alignment of the LOC operations with other components of the financial accommodation. The LOC Manager will be in charge of the preparatory activities.

8. Preparatory activities

- 8.1 At the onset, an in-depth review of micro finance sector and MFIs- their institutional profile. products, processes and plans- and their preparedness for lending to the target sector will need to be undertaken. The study will identify potential of PFIs for possible partnerships in the project and the measures required to strengthen their capacity to utilise the LOC. Based on this study and the criteria set for selection of PFI, partner institutions will be identified. The PFIs will enter into MOUs with the intermediary institution specifying the rights and obligations of PFIs and the intermediary institution. They will prepare 5 years Business Plan and Annual Work Plans and commit to accomplish the targets with respect to outreach, credit disbursement and other related development services. A training need assessment followed by training, sensitization and orientation of staff for rural delivery; guidelines for credit assessment, familiarization with preparation of proposals, sanction, disbursement and repayment procedures; and development of loan products, services and processes to meet the needs of various categories of target clients will be carried out. Model schemes/project profiles and process manuals can be prepared by banks independently or in collaboration with Association of Mozambican Banks/AMOMIF/ Central Bank/identified suitable training institute.
- 8.2 Provincial level value chain assessments may be carried out with specific reference to the participants and their credit requirements. The study would identify potential activities and beneficiaries and the demand for credit along the value chain. Financial literacy campaigns and sensitization of clients about available financial services, loan application procedures and requirements, will follow. In order to identify bankable clients and ensure smooth flow of credit, service providers may be employed along the value chain, for tasks such as handholding farmers through the loan application process, providing assistance to micro enterprises for making business plans, cash flows, financial management and putting together the documentation required for the loans, out grower management and linkage and technical assistance to ASCAs. The efficiency and impact of the credit line would be enhanced by these initiatives.

9. Institutional arrangements:

- 9.1 PFIs will be independent in selection of clients and the amount of loan, based on well agreed framework/ operation manual/project Implementation Manual. The client will be eligible for fresh loans on repayment of existing loans. The line of credit will be provided to MFIs and Commercial Banks at a pre determined rate. The PFIs should agree to stipulate reasonable interest rate to clients under the project not exceeding the Central Bank's reference rate. The interest rate will be reviewed annually. The selected PFIs should have firm commitment for implementation of the project including gender and youth targeting in dispensation of credit. ASCAs supported may be linked to any CB/ MFI. The loan will be given to the specified banks/MFIs for financing ASCAs after they are linked to the bank/MFI. The MFIs should during the course of the project increase the proportion of agriculture and agri- business lending in their total credit portfolio and strive to promote savings habit among assisted clients
- 9.2 The PFIs would be externally audited within 6 months of the closure of the financial year. The participating MFIs should be subject to statutory inspection /offsite surveillance of the regulator. All PFIs should put in place risk management systems, social performance management Standards (SPM), client protection mechanism, disclosure standards and self-regulatory process. The PFIs should comply with all obligations under the regulatory prescriptions. PFIs will adopt sound governance and internal control system. PFIs should provide all the other documents as prescribed under PIM. If the PFI is permitted by the regulator to accept deposits from the public, it should undertake a system for improving its own resources and also extend greater financial services to the clients. If a PFI is not marginally complying with any criteria, it will be given reasonable period to comply with the same within the given time-frame.
- 9.3 The selection criteria may disqualify some of the institutions. There is therefore a need to provide cushion time & developmental support for facilitating their compliance to eligibility criteria. Most MFIs suffer from liquidity constraints and high cost of borrowing and do not have recourse to deposits. In that context, a look at alternative solutions such as building linkages between commercial banks and Micro Credit Operators (MCO) can be explored. A possible solution can be the adoption of a correspondent banking system (BC) where MCOs serve as correspondent/agents of commercial banks on a fee- based remuneration. This may have policy implications, but may be worthy of pursuing. The LOC can then be channelled into MCOs for onward lending.

10. Implementation Manual

As a first step of implementation, the important steps to be taken by the stake holders in the implementations process and the conditions to be spelt out in various documents to be evolved under the LOC arrangement will be outlined in a Project Implementation Manual. The broad areas to be incorporated in the Manual are stated below:

10.1 Manual Coverage

- Objectives of Line of credit ,Scope of the package- The broad range of activities and beneficiaries
- Broad terms and conditions of LOC
- Selection of PFIs- eligibility criteria-Due diligence process-selection Procedure
- Institutional and Business Development Plan of PFIs- Aspects to be covered
- Annual Work Plan and Budget of PFIs- Areas and preparation Process
- Agreement between Intermediary Institution and the PMU-contents
- Agreement between PFIs and Intermediary Institution –coverage
- Scrutiny Process at Intermediary Institution-Role of LOC Manager- Checklist
- Accounts Maintenance- separate Registers and folio
- Sanction of Loans to beneficiaries- Procedure, focus and safeguards
- Documentation at Intermediary Institution and PFIs
- Withdrawal Procedure- Scrutiny of Application
- Monitoring the end use of credit- Recovery of loans
- Prudential norms Asset classification, provisioning norms, Income recognition
- Risk Management System

10.2 Role Expectations from PFIs:

- The PFIs will prepare 5 years' Business Plan and Annual Work Plan and Budget, reflecting
 progress under outreach, credit disbursement, recovery, savings and other related
 development services in the prescribed format and submit to Intermediary agency as per the
 time-lines.
- The PFIs should be subject to statutory inspection /offsite surveillance of the regulator. The PFIs should comply with all obligations under the regulatory prescriptions including prudential norms
- The PFIs would be externally audited within 6 months of the closure of the financial year.
- The PFIs should have put in place risk management systems, social performance management Standards (SPM), client protection mechanism, disclosure standards and selfregulatory process. It will adopt sound governance and internal control system.
- PFIs should maintain separate books of accounts and registers/ledger folio for the REFP as prescribed and generate data for the purpose of reporting periodically.
- PFIs should strive to promote savings habit among assisted clients. If the PFI is permitted by the regulator to accept deposits from the public, it should mobilize savings for long term sustainability and also extend greater % of loan to the client from its internal resources.
- The PFI should during the course of the project increase the proportion of agriculture lending in their total credit portfolio.
- The PFIs should have firm commitment for implementation of the project including gender and youth targeting in dispensation of credit.
- The loan may be given to the specified banks/MFIs for financing ASCAs after they are linked to the bank/MFI. The norms for sanction of group loans, micro lending process, appraisal of group loans, instalments, etc., should be evolved. The Micro finance best practices should be kept in view.
- PFI will be independent in selection of clients and fixing up of the amount of loan, grace period, instalment ,due date of repayment , borrower's margin, etc based on appraisal of the borrower(credit history checking with Credit Reference) and his business plan/loan proposal and activity, cash flow, seasonality, etc.
- The PFIs should agree to stipulate reasonable interest rate to clients under the project not exceeding the Central Bank's reference rate. There should be transparency in calculation of interest rate at PFI level.
- PFIs should bear the credit risk for the loan provided and, as such, monitor it scrupulously. It should put in place sound loan tracking and NPA management system.
- PFIs will support proposals, which are viable, credit-worthy and bankable.

10.3 Terms and Conditions

- PFIs will be selected from among commercial banks and MFIs by PMU through an objective selection criteria and process. The conditions should be evolved after thorough study of CBs/MFIs. The project should aim at selecting strong, effective and efficient institutions.
- The eligibility for selecting PFIs would include, inter-alia, the following stipulations: annual recovery rate, OSR, at least 3 years' operation, PAR, CRAR (as stipulated by Bank of Mozambique from time to time), projected business/outreach, maintaining audited book of accounts, relevant financial statements and reliable MIS- Financial Management Accounting Package.
- If a PFI is not marginally complying with any criteria, it will give be given reasonable period to comply with the same within the given time-frame. Developmental support should be extended under the project for its graduation, transformation and upgradation during the project period. (It is assumed that in the first year the PFIs complying with eligibility criteria will be less. The same would increase progressively after institutional building measures envisaged under the project).

- Rate of interest to PFIs should pre-determine. It will depend on domestic interest rate and inter-bank lending rate. It should not be less than the cost of mobilising savings (to provide incentive for the financial institution to mobilise savings), including interest on savings/deposits. It should also take into consideration the margin of the intermediary agency. The interest rate will be reviewed annually and aligned with the prevailing interest rate structure. Payment of instalments of interest-half yearly/annually may have to be mentioned.
- The period of loan disbursement to Financial Institutions may be evolved after a consultation process with GoM. It could be adjusted, based on the liquidity requirements of the bank and tapered towards the concluding year of the project.
- Loan maturity period will be clearly specified, including the proposed grace period in the sanction.
- The grace period for payment of principal instalments will be stipulated. Interest instalments would normally commence from the first year of loan.
- Advance repayments and their treatment will be specified
- In case of non-compliance with agreed terms and conditions, a penalty clause would be added which may include disqualification of the financial Institution until terms are met or remedial measures taken by the institution.
- Documentation requirements such as loan agreement, financial statements, Board Resolution, Demand Promissory Note for the loan amount, etc., will be specified.
- The minimum eligibility standards for drawing instalments, progress in implementation of the LOC schemes, loan utilisation certificate for previous instalments, progress reports, etc. to be produced by the Financial Institution.

10.4 Role expectations from Intermediary Institution

- The Intermediary Institution will be entrusted with managing the Refinance Revolving Fund by putting in place an efficient fund management system that would enable judicious deployment of funds for the project.
- It would be entrusted with the responsibility for selecting the participating financial institutions through objective selection criteria.
- It will execute an agreement with PFIs for spelling out mutual rights and obligations.
- It will evolve all formalities for sanctioning and disbursement of loans.
- It will develop checklists /formats for scrutiny of the PFI's Plan and Budget, appraisal of loan proposals and reporting requirements.
- It should evolve strong monitoring and evaluation and risk management systems and put in place onsite and offsite monitoring of the PFIs and assisted clients to ensure quality of feedback and mid- term corrections.
- It will maintain a database on financial institutions, particularly microfinance and MFIs and other participating institutions, through a robust MIS system and enhanced IT capabilities.
- It should develop its HR capabilities by placement of suitable professional person(s) specialised in fund management, client management, financial and technical appraisal of PFIs' proposals for credit/grant, Monitoring and evaluation, database management, etc.
- It should bear refinance risk.

Footnote

It is understood from the PDR that non- farm MSMEs not related to agriculture value chains are also being covered. In case, the same are required to be added, the following may be considered for inclusion:

"It is estimated that 2.1 million (Finscope 14) or 15% of adult Mozambicans are engaged in Microenterprises. As per Finscope 2012, more than 87% of them are unregistered. A large proportion of those engaged in micro enterprises (49%) have more than one source of income, largely because of households taking up additional activities to make their ends meet. Individual entrepreneurs form 92.7% of the micro enterprises. As 87 % of the MSMEs are located in rural areas, it is possible that farmer households are engaged in NFS micro enterprises as a means of earning additional income. This income could well be used for investments in agriculture as well. Therefore, it may be synergistic to include rural micro enterprises engaged in non- farm activities for financing under LOC. Individual and micro enterprises- these enterprises could include producers of charcoal, firewood, alcoholic beverages, handicrafts, tailors, builders, tinsmiths, carpenters etc. that flourish in the rural areas alongside agriculture.

Funding for the NFS individual and micro enterprises can be routed through any of the three sub-components: Sub Component 1 can provide working capital loans; Sub-Component 2 can provide both investment and working capital loans; or these enterprises can take the ASCA route."

Component 2: Capacity building and support for institutions and rural entrepreneurs

Component overview

Component 2 will make available all necessary support for capacity development at the level of financial institutions active in rural areas, and of end users of rural financial services, micro and small entrepreneurs, especially women and youth, and also small farmers and agricultural producers, Subcomponent 2.1. Offers a comprehensive capacity development menu AD.

Sub-component 2.1. Establishment of adapted financial instruments for rural entrepreneurship

The subcomponent will consist of the following set of activities:

A. Institutional and technical capacity building of financial service intermediaries (commercial banks, ASCAs, MFIs, credit-only MFIs, credit cooperatives, etc.). On top of the support required to enhance the mobility of the finance providers in reach remote villages, the program would support soft interventions such as skill upgrading, product development and innovations which will equip the finance providers to deliver financial services that match the needs of the rural poor entrepreneurs and MSEs. The specific activities supported by the project include: (i) conduct training need assessment; (ii) produce the training material and deliver 20 training to finance providers (iii) develop client-cantered financial products for banks, MFIs, credit-only institutions, etc.; (iv) organize international 2 exposure visits to policymakers and CEOs of finance providers; and (v) enhance the mobility of formal finance providers by providing 100 motorcycles to reach out remote districts and villages. The project proposes outsourcing a twinning partner to facilitate the implementation of the capacity building support to financial institutions.

The dispersed settlement pattern of rural communities and the underdeveloped infrastructure and public transport system in Mozambique constrains the movement of the staff of formal finance providers from opening branches in remote district or remote villages within a district. This will also push the transportation cost of the financial institutions and hinder their mobility. Although innovative approaches such as agency banking or digital finance are expected to address the problem related with serving the remote areas and clients in the long-run, the project proposes to provide 100 motorcycles to encourage the formal finance providers to move into remote districts. The motorcycles will be provided in PY2, PY3 and PY4 to selected formal financial institutions opening branches to serve rural entrepreneurs and MSEs in remote areas.

Strengthening ASCAs. ASCAs, managed and owned by members themselves, have proved in the preceding IFAD and AfDB projects that they are one of the sustainable financial delivery models in rural Mozambique. However, they have very limited capacity to meet the growing needs of their members. The existing ASCAs in Mozambique require a capacity building support to improve their accounting and bookkeeping practices, credit analysis, loan collection performance, governance and management, and saving mobilization. The project would strengthen 5,000 ASCAs by providing the following support: (ii) linking 5,000 ASCAs to the formal financial institutions to access large loan and other innovative financial products: (ii) developing financial products that meet the needs of ASCAs: (iii) develop a simplified (easy-to-use, cost-effective) IT supported MIS system to improve their performance and develop a transparent reporting system; and (iv) organize 20 exposure visit among the ASCAs. Capacity building of ASCAS will be provided through a technical assistance package provided by the project. Capacity building interventions will be delivered using a tiered approach to ensure that the interventions are relevant and appropriate to ASCAs at the different levels of development. The PMU will decide on the modalities of delivery of the capacity building services (e.g. through outsourced technical service providers or through use of internal resources). However, the service provider must have experience and requisite skills to undertake capacity building support. Procurement of the services should comply with IFAD procurement guidelines.

C. Establishing and strengthening the Union of ASCAs. In the absence of a permanent government institution to establish new and strengthen existing ASCAs in Mozambique, the formation of ASCAs Unions is a key intervention to ensure the sustainability of ASCA activities after the closure of the project. The project will support the establishment of district unions of ASCAs which will be

umbrella bodies for ASCAs operating in the various districts. Promotion and establishment of ASCA Unions will be undertaken by FARE. The support of the project include: (i) hiring 4 competent technical staff; (ii) allocating limited recurrent budget; (iii) develop various manuals and strategic plan; (iv) train the staff; (v) avail logistical support such as office equipment, desktops and laptops, printers, fax machine, photocopy machine, etc. (vi) cover administrative costs such as office rent, utilities, etc. (vii) provide one vehicle (4WD) to enhance mobility; (viii) provide resources to conduct 3 workshops or conferences; and (ix) follow up, monitoring and supervision of ASCAs. A twinning partner would facilitate the formation of the Union during the first 12 months. However, assuming that the Union will be self-sustaining in the future, the project will only provide technical assistance only for the first three years.

- D. Build a database of MFI performance and promote social performance management through Mozambican Association of MFIs (AMOMIF): The Mozambican Association of MFIs (AMOMIF) was established in 2007 to support the development of microfinance in the country. In spite of its limited resource base, the association has been active in policy advocacy and provided limited training to its 44 members. If properly supported by members, donors and development partners, until it reaches the matured phase, it has significant potential to serve as the voice of microfinance sector and as a centre of excellence to train other Mozambique microfinance stakeholders. The project will support the association by: (i) providing a budget for three training sessions in social performance management of MFIs starting in PY2; and (ii) covering a five-year salary of the performance monitoring program officer starting PY2. The performance monitoring program officer of the association is expected to report the outreach and performance of members and non-member MFIs to FARE, the national PMU, and other stakeholders on regular basis.
- E. Supporting the transformation of FARE. The Government intends to transform FARE into a sound and sustainable financial institution in order to effectively deliver its mandate of providing financial services to private sector banks, micro-banks and Microfinance Institutions (MFIs). The support will enable FARE to expand their services to rural areas of Mozambique and pilot and mainstream new innovative approaches in rural finance and local/regional development. The project will provide technical and institutional support to make FARE a self-sustained and autonomous financial entity without financial support from external sources. The additional support of the project include: (i) conducting a detailed study to transform FARE and collect the loans disbursed by the preceding projects: (ii) provide institutional and technical assistance to develop an IT system to track and follow up the loans disbursement of FARE and the skill development in use of ICT in its entire work processes; (iii) conduct annual workshops where all service providers and stakeholders could exchange views and chart the way forward; (iv) training the staff; and (v) knowledge management and documentation. The project has huge potential in providing learning and exchange of learning and internalization. Various studies will be undertaken which will contribute to the FARE's knowledge management function.
- F. Establishing and strengthening the "Development Finance Coordination" secretariat under the Ministry of Economy and Finance the Ministry of Economy and Finance is one of the key players in implementing Mozambique's National Financial Inclusion Strategy. The project will seek to strengthen the capacity of the ministry to develop and monitor the implementation of rural finance policies. The project will support the following activities (i) Policy studies to identify policy gaps and emerging issues which require policy interventions (ii) Training of staff to improve their knowledge and skills in formulation and implementation of rural finance policies (iii) Knowledge Management system on rural finance (iv)organizing workshops and conferences on rural finance. The project will also support institutional strengthening activities to enable the ministry to discharge its mandate of, promoting rural and development finance. The project proposes supporting the formation and strengthening of the secretariat by (i) hiring 4 competent technical staff; (ii) providing the recurrent budget; (iii) developing various manuals and strategic plan; (iv) training the staff; (v) providing logistical support such as office equipment, desktops and laptops, printers, fax machine, photocopy machine, etc. (vi) cover administrative costs such as office rent, utilities, etc. (vii) provide one vehicle (4WD) to enhance mobility.
- G. Supporting the Bank of Mozambique to assist the transformation of MFIs and promote financial literacy and consumer protection The microfinance sector in Mozambique is at its infancy

stage, where the growth of outreach is directly related with donor and government support. Although the current regulatory framework is not a stumbling block to expand microfinance activities, there is a need for regulators to proactively support and guide the MFIs to transform themselves from credit-led institutions to saving-led institutions. Continued expansion and growth with sound operational and financial disciplines would require changing the current policy framework, mind-set of policymakers and finance providers, and a paradigm on how to promote rural finance in Mozambique. This requires interventions, particularly the Ministry of Economy and Finance and the Bank of Mozambique. On the other hand, the third pillar of Mozambique's National Financial Inclusion Strategy focuses on ensuring that financial consumers are informed, knowledgeable and protected. To this end, there is a need to improve the levels of financial literacy, information for the general public and protection of existing and incoming financial consumers. The improvement of supervision and regulation of banks, MFIs and others is directly related with consumer protection.

The project proposes to support Bank of Mozambique in building the capacity of microfinance regulation and supervision department and promoting financial literacy and consumer protection in the country. The specific interventions include: (i) provide 5 training courses to the staff of the regulation and supervision department for microfinance; (ii) organize two international exposure visits in Africa and Asia to the policymakers and senior staff of the central bank and Ministry of Economy and Finance to understand and appreciate the triple bottom line of the microfinance sector (financial, social and environmental); (iii) undertake a study to identify the challenges of MFI growth (why MFIs are shying away from mobilizing savings) and how to address the financial needs of rural entrepreneurs and MSEs in Mozambique; and (iv) promoting the financial literacy and consumer protection. The project will finance a study in PY1 to identify the challenges and propose specific activities to be undertaken by different stakeholders to promote financial literacy and consumer protection. Since the financial literacy and consumer protection interventions are championed by the Bank of Mozambique, the bank is expected to disseminate the financial capability information for the target groups through printed and non-printed media such as pamphlets, brochures, films, with the help of suitable intermediaries and its own staff and website in various languages through the support of this project. Moreover, the innovative financial literacy and consumer protection project proposals can be submitted, that will be reviewed and approved committee formed by the Bank of Mozambique and Ministry of Economy and Finance to access the resources earmarked for this activity.

Detailed implementation provisions for the establishment of an ASCA Union.

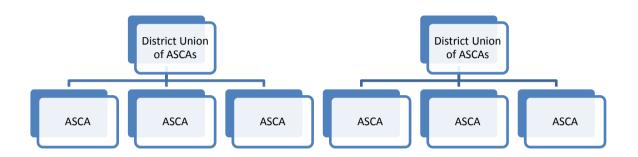
Establishing and strengthening the Union of ASCAs. Although the rural finance support program IFAD in Mozambique was successful in establishing 1,937 ASCAs (33,952 members and women representing women representing 58%), the major weaknesses of the approach, according to PCR (2014), was the sustainability issue, particularly the challenges to monitor groups of this kind when no service provider follows up. To this end, the project will support the consolidation of ASCAs into ASCAs Unions. The ASCA Unions are n umbrella bodies for ASCAs which will represent the interests of members. Experience from Kenya, Malawi, Ghana and Cameroun has shown that SACCO Unions play an important role in strengthening the performance of credit cooperatives.

Rationale for Consolidation of ASCAs

When ASCAs operate in an isolated and fragmented manner, they often face challenges in delivering services to members including: (i) excess liquidity for the larger and better performing ASCAs (ii) Liquidity gaps for the smaller ASCAs (iii) Lack of a common platform to represent the interests of the subsector (iv) High costs of adoption of infrastructure /technology (v) Lack of a platform for peer learning and knowledge management and weak mainstreaming of the ASCAs into the financial system.

To overcome these challenges and strengthen the performance of the ASCA subsector in Mozambique, the project will support the consolidation of ASCAs into district Unions Consolidation will enhance efficiency by promoting shared infrastructure/technology, enhancing discipline in the ASCAs through promoting standard policies, procedures manuals, and risk management policies and practices, providing harmonized training and capacity building to promote long-term sustainability and financial independence of ASCAs. Unions will also increasing the capacity of ASCAs to increase their loan capital because of increased access to loans from the Union as well as improved access to payment system and interbank services.

Diagram 1: Consolidation of ASCAs



As an umbrella body representing the interests of members, the Union will deliver the following services to its members:

- Advocacy: Representing member ASCAs on vital decision making institutions and serves as the voice of ASCAs in the country and ensuring that the ASCA subsector is mainstreamed into the financial sector
- Expand ASCA's access to a greater volume of financial resources on better terms
- Financial Intermediation where member ASCAs which have excess liquidity can save with the Union which intermediates the savings to lend to ASCA members with liquidity constraints
- · Lender of last resort for members in financial distress
- Provide a wide range of capacity building services to ASCAs
- · Standardization of financial aspects and accounting system of ASCAs
- Establish performance standards and indicators for ASCAs
- Provision of shared infrastructure (e.g. ATMS, clearing house services, audit services etc.)
- Provision of a self –regulatory framework for the industry
- Collect and disseminate information, including best practices
- Promotion and marketing of ASCA services through printed and non-printed media
- · Any other support systems that would lead to a vibrant and sustainable MFI sector

SUSTAINABILITY OF FOR PROFIT ASCA UNIONS

ASCA unions are member owned and member governed financial institutions and therefore member investments create long term stability and is key to financing future development/expansion, Sustainability of the ASCAs will be influenced by (i) Having a strong membership base (ii) Increased savings from member ASCAs (iii) Increased share capital from members (iii) Income from loans disbursed to members (iv) Income from non-financial services (iv) Transaction fees from shared infrastructure (v) Investment income ((vi) achieving and maintain operational efficiency (viii) Strong Governance systems

The technical assistance package provided for establishment and strengthening of the for-profit ASCA Unions will focus on promoting sustainability of the ASCA unions through (i) Product development: ASCA Unions will be supported to develop more savings and loan products which meet the needs of the members. ASCA Unions will strive to become one stop shop for the financial needs (ii) encourage members to invest in the Union by buying shares. This will provide the Unions with additional capital which can be used for on-lending to members. The Unions can also invest surplus capital in order to earn returns (iii) Invest in providing shared infrastructure (e.g. ATMS) and shared services (e.g. audit, legal, training etc.) to members in order to earn additional income from transaction fees charged for those services (iv) Operational efficiency will be achieved through tracking and controlling costs as well as establishment of strong operating systems. Union staff and Board of management will be trained on use of tools to monitor the performance of the Unions (e.g. PEARLS tool which tracks various performance ratios). (v) Strong Governance will be achieved through sensitization and training of members and Board of management.

FARE will provide technical support to establish and strengthen the Union for 12 months. However, the capacity building support of the project to the Union would be for three years, where it is expected to be sustainable thereafter. Once the Union is setup, the project will provide technical services, training and other logistic to strengthen and make it sustainable. Operational, administrative and financial manuals will be prepared through the support of the project to define governance and management issues among members, board of directors, management, staff and other stakeholders itself need will be developed through the twinning arrangement. Table: 12 months roadmap to establish and strengthen the Union of ASCAs Unions.

No.	Activities	Responsible institution			
1	Formation of a taskforce to establish the Union	FARE, selected ASCAS,			
		Ministry of agriculture,			
2	Defining the by-law of the Union	taskforce members			
3	Developing operational, financial and administrative	FARE			
	manual				
4	Recruitment of the staff	Members of the of the taskforce			
		and FARE			
5	Logistics: renting office, office furniture, equipment,				
	desktops, laptops, photocopy and fax machines, etc	FARE			
6	A vehicle to enhance the mobility of the staff	FARE			
7	Develop the five year strategic plan and an annual plan	FARE			
8	Conduct the general assembly to appoint the 11 board	FARE and ASCA members			
	members, approve the strategic plan and the by-laws of				
	the Union (one ASCA per district represented)				
9	Official celebration of the establishment of the Union	Union staff, members, board of			
		directors, taskforce			
10	Developing various manuals and the financial	Union staff and FARE			
	sustainability strategy of the Union				
11	Training the staff of the union	FARE			
12	Exposure visits for the staff and board members of the	FARE			
	Union				

<u>Provision of Technical assistance: The project will provide a technical assistance package in order to expeditiously close the institutional capacity gap of finance providers, ASCA Union, and FARE,.</u>

Objective: The main task of the technical assistance package is to make available continuing expertise to implement the diverse activities of the project by contracting technical providers or from its in-house resources. This is expected to improve quality of technical service providers and ensure timely implementation.

Process: The entity to be selected as a technical service provider for the project would be a suitable resource organization that has the knowledge base and operational experience of solving problems related with financing rural entrepreneurs and MSEs and delivery of inclusive finance through various channels, including ASCAs. The technical service provider would place expert/experts on long term and short term basis within FARE in accordance with its requirements. The compensation to the TSP would be on annual basis for providing a pre-determined number of man days of expertise. However, the expertise required from the TSP could be varied according to the needs of the project. This could be adjusted as per the approved annual work plans by the key stakeholders.

Selection norms: The TSP should have knowledge and experience of working in field of research, training and consulting for a period of at least five years in a developing country. It should have the experience of working on microfinance projects relating to product design, social performance management, governance, business models in microfinance (including community-based organizations such as ASCAs), training to finance providers at various levels and building the capacity of an Union organization. Although the key role of the TSP is to coordinate the delivery of the TA providers in the project, it is also expected to have adequate number of core-professionals (in-house) in the areas related with inclusive finance delivery, who would be placed at National PMU, FARE or the Union on long-term or short-term basis. The TSP is also expected to train local staff (preferably through TOT) to develop competence in different core microfinance modules. The TSP, a reputable international technical service provider in microfinance, would be selected by PMU through a competitive process. The selection of the partner for the twinning arrangement would be implemented through a transparent competitive bidding process.

Terms of reference for the TSP: The partner is would conduct training needs assessment of financial service providers, including ASCAs, develop the curriculum, produce the training material and deliver training courses to finance service providers; provide capacity building support during and after the formation of the Union of ASCAs, coordinate the high-level international exposure visits to policymakers and CEOs of formal finance providers; carrying out the studies such as baseline and impact studies, product development to diversify the demand-driven financial product, linking ASCAs to formal finance providers; support the knowledge management events such as conferences, workshops, and seminars.

Payment modality for the Technical Service Provider: The technical service provider not expected to have one single contract to undertake all technical assistance required in the project during the seven years. However, for coordinating the activities of the technical service providers in various areas, the project will pay 10% of the outsourced activities facilitated by the TSP which is about 330,700 USD over three years. The TSP is expected to place a 12 man months TA at FARE, during the first year of the project and short-term TAs. Other technical providers outsourced for specific activities should have contracts with the national PMU, not with the TSP. However, the technical partner is expected to ensure the quality of the technical service providers and recommends the final payments for other outsourced services.

<u>Training courses for formal finance providers</u>: Training support would focus on building the finance providers' competency and skills. Since training in this project is delivered through technical service providers from the private sector, training of trainer (TOT) approach will have relatively high potential to build the in-house training capacity of the institutions. The training support involves conducting training needs assessment, developing the curriculum and course design, producing the training material, and offering TOT and retail training. Out of the total 20 microfinance training proposed in the project, 10 would be generic training (5 TOTs and 5 retail training courses) and the remaining 10 would be identified and prioritized through the training need assessment. The ten generic training courses supported by the project include:

- Corporate governance and management
- Strategic planning and development
- Risk management, financial and non-financial
- Sound performance review mechanism to ensure currency
- Mainstreaming gender and increasing the participation of women

- Social performance management (SPM) practices in the sector
- Product development, diversification and process refinement
- Skills for saving product development and saving mobilization
- Delivering Islamic finance
- Financial literacy to customers=

Availing long-term TA to implement the capacity building interventions: The task of the long-term TA is to coordinate the training to formal finance providers, including quality assurance in the training needs assessment and developing training modules. The proposed 12 months TA to be available by the TSP is expected to develop training master plan (comprehensive training plan) and coordinate the implementation of the TOT and retail training. The long-term technical assistance provider would take the responsibility of establishing and strengthening the ASCAs Union within 12 months framework. However, depending on the objective conditions on the ground, the 12 months TA could be distributed or provided in different phases.

Exposure visits: The project proposes to support two types of exposure visits with the objective of learning from the good practices in microfinance activities outside or within Mozambique. Two international exposure visits will be organized/facilitated by the TSP for government policymakers and CEOs formal finance providers during the second year of the project. These visits are expected to help policymakers and CEOs learn from international best practices, think outside the box and assist the project in implementing its activities. On the other hand, in addition to the training support of the program, ASCAs will be exposed to good practices within themselves (such as saving mobilization, peer pressure, saving and loan products, economic opportunities, etc.) that can be replicated. The program will support a 3-day exposure visit (within or outside the District or region) for 20 ASCAs within 3 years framework (PY3, PY4 and PY5). Those who participated in the visits will be required to document and share their experiences from the exposure to other ASCAs within their vicinity. The exposure visits among ASCAs are expected to be facilitated by the Union.

A study to link ASCAs with formal finance providers: Informal financial services and easily convertible "traditional" investments are accessed by 28% of the adult population in Mozambique. In terms of financial inclusion and potential expansion, groups and associations play an important role for all elements of the society, including the wealthy even more than the poor (Finmark Trust, FinScope study 2014). Generally, with the oblivious exception of groups with family accounts, these informal groups have no linkage to the formal banking system. According to the project completion report (PCR) of rural finance programs by AfDF and IFAD, ASCAs are found to be the most appropriate financial service providers, particularly for those adult entrepreneurs in remote areas. ASCAs have the potential to improve poverty reduction, food security and social inclusion of the more vulnerable groups in a village community; they can offer a pathway for women socio-economic empowerment (PCR of IFAD 2014). There is a need to link ASCAs to formal finance providers either for safekeeping purpose or for graduating the entrepreneurial members ASCAs to access larger loans from banks of MFIs.

The PCR of IFAD (2014) and AfDB (2013) show that ASCAs in Mozambique are very important financial instrument in promoting loan, savings and other financial services in rural Areas. The number of ASCA members requiring loan services has been showing an increasing trend. The high inflation rate in the country has also contributed to the significant increase in the average loan size and the volume of loan required by poor rural entrepreneurs and MSEs. Although the project has a line of credit as an incentive to increase outreach in the short-run, there is a need to link the ASCAs with formal finance providers, at the same time improve the saving culture of ASCA members. In other words, since the ASCAs have limited capacity to provide loans from their own sources, particularly in the short-term, there is a dire need to link them to commercial banks and MFIs. The objectives of the study are: to review best practices in the rest of the world on how to link ASCAs with commercial banks and MFIs; identify innovation approaches to link ASCAs with commercial banks and MFIs; examine the legal and regulatory challenges to implement the linkage approach; and propose clear recommendation and roadmap on how to implement the linkage model in Mozambique.

TA to develop financial products for inclusive finance providers, including ASCAs: It is generally recognized that one of the principal barriers to economic growth and reasons for persistent poverty is the exclusion of the vast majority of the population to appropriate financial service provision. Emphasis is placed on appropriateness, as financial services needs vary considerably between the poorest and wealthier segments of the population. The formal finance providers and ASCAs lack the institutional capacity and the skills to develop appropriate loan, saving, and other financial products that matches the needs of members/clients. For example, there are very limited studies to examine the shortcomings of the existing saving products and how the saving behaviour of members of ASCAs and clients of formal finance providers is changing. Before developing the saving products, there is a need to study how saving behaviour is linked to financial literacy and educational level, money management skills, household income, culture and tradition, trust on the finance providers, exposure to banks and other finance providers, gender, settlement type, etc. The program proposes supporting ASCAs in developing financial services such as saving, loans and other products that are tailored to the needs of poor rural entrepreneurs and MSEs in rural areas. To this end, the program will provide a technical assistance to help the formal finance providers and ASCAs to develop the right products for the direct beneficiaries of the project in PY1.

Develop a simple, cost effective and easy to understand IT supported MIS for ASCAs: given the limited capacity of ASCAs in Mozambique, in adequate accounting and reporting system and tracking loans are serious challenges of the associations. The project proposes supporting the ASCAS by developing an IT supported MIS that is compatible and capable to be upgraded with growing volume of transactions and introduction of new products of the associations. It is also expected to produce various reports to be used by management and regulators such as the Bank of Mozambique. However, the MIS is expected to be simple, cost effective and easy to understand the loan tracking and accounting for ASCAs. It should generate data on the performance indicators of ASCAs. The project would provide technical assistance or a consultant for six months during PY1 to develop the IT supported MIS for ASCAs.

A study to mainstream the activities of ASCAs to address the needs of women: Women in rural Mozambique play a major role in producing, processing, and marketing food and managing the family budget. Women have a major role in planning cultivation, undertaking a large portion of agriculture operations, livestock and animal care and are often in charge of marketing the products. Despite the success in the previous IFAD rural finance program, where women accounted for 58% of the total members of ASCA, there is a need to develop tailored financial products for women in order to foster accessibility and eligibility of loans to women. There is also a need to mainstream the activities of both formal finance providers and ASCAs to serve women in the rural areas. The project supports a study to identify the challenges in increasing women outreach more than the current available figures and identify innovative interventions to address the financial needs of women through ASCAs and formal finance providers in Mozambique.

Enterprise and business development for rural entrepreneurs and MSEs: The sub-component 2.2 (see below) will build capacity to ensure delivery of basic entrepreneurship training, support in utilizing more productive technology, coaching and mentoring and business information to growth oriented rural entrepreneurs, particularly poor women and youth, eager to develop their entrepreneurial skills, improve the quality of their products and services, and invest in more productive technology or access new markets. Although the support of the program would hire technical service providers on competitive basis to deliver the technical assistance, it would also provide capacity support to the Institute for the Promotion of Small and Medium Enterprises (IPEME) that would extend the services in a sustainable way.

Capacity building for Project Management Unit (PMU) and regional PMUs: The PMU would be able to coordinate the activities of the program. The PMU would have a slim staff to carry out appraisals, monitoring and preparation of periodic reports for consideration at project level and reporting. The program will support the services of a national program coordinator in the BNI for the full program period (PY1 to PY6). Since there will be three regional PMUs, the project would allocate funds to hire regional technical staff. The specific support of the project to the national PMU and regional PMUs include: (i) staffing; (ii) training and exposure visit for the staff; (iii) enhancing mobility; (iv) conducting annual workshops on the performance of the project activities; (v) follow up,

monitoring and supervision of the activities of the project; (vi) annual audit and evaluations; (vii) logistical support to buy office equipment, desktops, laptops, fax machines, photocopy machine, office equipment, etc.; (viii) recurrent budget to cover salaries, overhead costs, stationary, etc.

Baseline study: The objective of this study is to provide a baseline data on income, asset, gender mix, access to finance, reasons for financial exclusion of members, current of status of formal finance providers and ASCAs and potential members of ASCAs before starting the implementation of project activities. The study is based on a sound data collection methodology and survey formats to collect primary information from members of ASCAs, formal finance providers (including banks, micro-banks and NGO microcredit programs or only credit institutions) and clients. Since the baseline study will provide the benchmark data to regularly assess the impact of the project activities (components and subcomponents), there is a need to consider manageable and representative sample size. The baseline survey will be conducted in PY1, before the implementation of the project activities.

Impact studies: Once the baseline data is collected, the project will provide TA support to undertake two impact evaluation studies - one in PY4 and the second in PY7 (final impact evaluation). The main objective of the study is to critically assess the incremental value addition of the project intervention by comparing them with the baseline database. The study is also expected to assess the impact of the capacity building interventions of the project on the target beneficiaries (rural entrepreneurs and MSEs). The method of data collection involves the use of structured individual interviews with the beneficiaries of the project, policymakers, facilitators, CEOs of formal financial institutions, and leaders of ASCA and analysis of secondary data built up by M&E units of PMU, regional PMUs, BNI, finance providers, etc. Eight is required to undertake each of the impact studies.

Sub-component 2.2 Business development support

Objective: Agricultural and non-agricultural SMEs require non-financial and business development services to improve their perspectives of accessing financial and other technical support. In many cases this support is required for assistance in preparing loan applications and business plans. PROMER, PROSUL, and PROPESCA PSP, BAGC and IPEME, are all currently committing significant resources in the implementation of project activities of agricultural, fisheries and non-agricultural enterprises and entrepreneurial capacity development. Alignment of REFP with these ongoing projects and initiatives would likely lead to collective economies of scale through such collaborative actions; and importantly for the REFP provide incremental value addition to these other projects. The target group for REFP, 25,000 direct beneficiaries have the potential to expand their market-related activities, thereby providing improved market opportunities for smallholder farmers. In addition to improved market integration of the REFP targeted economic units, business development support can result in reduced market transaction costs, and alignment of production decisions with businesses and market opportunities along the agribusiness value chain.

Approach and definitions: *Business development* is generally defined as business growth at enterprise level, over a given period of time. A diagnostic of what is the reality on the ground regarding agricultural finance in Mozambique was recently undertaken by the FinMark Trust¹²⁷. The key finding was that there is demand for increased agricultural and/or rural financial services that could potentially support agricultural productivity and consequently increased household incomes. Further, enhancing capacity development in the areas of financial literacy and on-farm productive techniques and extension services would prioritise linkages to markets and productive value chains.

The support by the REFP to agribusiness, fisheries and other business development can be achieved through the implementation of a systematic planning and capacitating process or model, utilising business development models/techniques that open channels for the target group of smallholder farmers, fishermen and non-agricultural members of the target group to gain better access to finance-provided by Components One of the REFP and other IFAD projects such as PROMER, PROSUL, PROPESCA and PROAQUA - and establish sustainable market opportunities.

This sub-component will target commodity-based smallholder farmers, farming and fishery associations, registered farmer cooperatives, informal farmer and fishery organizations, and agri-

101

¹²⁷ FinMark Trust: Status of Agricultural and Rural Finance in Mozambique; July 2012.

businesses, at local, district and provincial levels. In order to ensure that this intervention is informed by the needs of the target group on the ground, prior to any REFP support interventions being implemented, a study for mapping smallholder farming agribusiness, fisheries, agro and aquaprenuerial opportunities, other enterprise opportunities along the value chain in Mozambique will be commissioned. It is made very clear that this mapping study is not designed to be a 're-invention of the wheel'; rather a confirmation of what work in this regard is currently being undertaken in Mozambique and what added value - through collaboration and cooperation – can the BDS process within the REFP provide. It is broadly anticipated that this national mapping study will identify BDS capacity development interventions that will include, but not limited to the following:

- (i) Functional literacy and numeracy,
- (ii) Agribusiness /aqua-business setup/formalisation/registration,
- (iii) Business planning development and preparation,
- (iv) Agribusiness/aqua-business management training (administration/operational/financial/recordkeeping),
- (v) Appropriate local and international agribusiness/aqua-business study tours (e.g. Botswana, Kenya, Malawi, Zambia, South Africa, Ethiopia, etc.),
- (vi) Agribusiness/aqua-business marketing and sales training,
- (vii) Market analysis to identify agribusiness/aqua-business and agro/aqua-prenuerial opportunities along the agricultural value chain,
- (viii) Establishment of a mentoring service (through the identification of national and international experts) providing direct field support to target group smallholder farmers, agribusinesses/aqua-business, and other agricultural business value chain participants, helping them to understand and adopt technologies in accordance with market requirements (e.g. food safety, product handling),
- (ix) A market linkage system that will create a national public market information system for the agricultural sector in Mozambique; this will be managed by the IPEME of the Ministry of Trade and Industry; seeking to improve information quality and services by providing training, supporting sub-sector and agricultural commodity studies, and introducing IT-supported data and information exchange (e.g. web-based data exchange and Short Message Service (SMS), and
- (x) Bolstering market linkages through the organisation of agricultural trade fairs (in partnership with the Ministries of Agriculture, finance and Economics, and Trade and Industry, and as well as IPEME) at district and provincial levels.

Gender and youth mainstreaming: A key element of inclusion and targeting is the focus on women and youth, and the application of mechanisms to facilitate their involvement in the REFP interventions. REFP will strive to be an equal opportunity project, by availing youth and gender mainstreaming opportunities at the project intervention level, and where possible, within project management. Youth and women farmers are an important part of the target group.

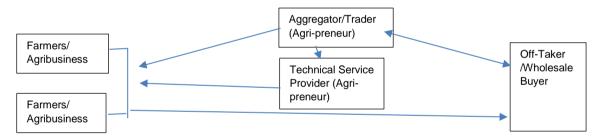
Further, the REFP will be informed by and support the Government of Mozambique (GoM) through the Ministry of Agriculture and Food Security (MASA) in its effort to create decent employment opportunities for young people in rural areas. The government policy, in its first five years, has objectives of creating an enabling environment for young people that will focus on: i) strengthening of their capacity and entrepreneurial skills, ii) the promotion of investment in agriculture, and iii) the promotion of Small and Medium Enterprises (SMEs) along selected agriculture, fisheries and non-agricultural value chains.

Service Delivery Model as a Guide for Implementation: This REFP implementation model for BDS provision to the target group is referred to as a *Service* Delivery Model. A simplified version of this model is under implementation in the IFAD supported Rural Markets Promotion Programme

(PROMER)¹²⁸. In this Mode, agribusiness development support services are deliberately designed to be implemented within a supply chain process to enhance smallholder farmer productivity and value creation through agriculture. The types of services that can make up a service delivery model include:

- I. *Training* quality and productivity training, as well as training on farm management practices, such as recordkeeping and business planning (usually from the Service Provider/Agri-preneur).
- II. *Inputs* planting seed, fertilizer, crop protection products and insecticides (provided by the Aggregator/Trader).
- III. Financial services inputs on credit, cash advances, pre-harvest finance (usually from the Off-taker/Wholesaler).
- IV. *Marketing* bulking of produce and creating access to markets (services to the farmer from the Aggregator/Trader).
- V. Value adding services services that add value to the product of smallholder farmers, such as mechanisation (use of tractors), processing, post-harvest handling and storage services (Off-taker/Wholesaler and Aggregator/Trader).

Training, inputs and farmer credit are interdependent, as extension and training informs and affect the types of inputs used which is in turn shaped by access to credit. These services are often combined during delivery in an effort to maximise the impact of the training provided. Finally, in this Service Delivery Model, the Off-taker(s)/Wholesaler(s) – could be a number of clusters of groups brought together to supply a market niche - are encouraged to invest in value chains (thus giving farmers comfort that they are committed to purchase produce in advance), and also offering services to farmers, as a means to secure the required volume and quality of supply. The simple diagram below simplistically outlines the Service Delivery Model process:



The Aggregator/Trader (Agri-preneur) is central to the effective implementation of this Service Delivery Model for the rollout of Business Development Services to the farmer/Agribusiness. The identification of both the Technical Service Providers (who will have evolved into being Agri-preneurs along the value chain), and how they support the improved productivity of the farmer/agribusiness, and the Off-taker/ Wholesale buyer are also the role of the Aggregator Trader. He/she brings all the parties along the value chain together, and facilitates all the required imputes and outputs for a sustainable business relationship. The model works along the following lines:

- i. Aggregator/trader identifies the farmer and confirms his/her produce and market price,
- ii. Aggregator/trader identifies an Off-taker/Wholesaler for the farm produce, and determines what (technical) inputs maybe required to allow the farmer to:
 - a. Meet the supply quantities required by the Off-taker/Wholesale buyer,
 - b. Meet the quality of produce expected by the Off-taker/Wholesaler,
 - c. Agree on what technical services and/or inputs are required to meet the quantity of produce required by the Off-taker/Wholesaler, and

¹²⁸ The Rural Markets Promotion Programme (PROMER) represents a partnership between the Government of Mozambique and IFAD aimed at improving the livelihoods of smallholders in the Northern Region of Mozambique through pro-poor rural markets promotion; (2008-17).

iii. Aggregator negotiates and agrees (with all four parties) on a pricing structure that includes upfront payments for produce, input requirements (seeds, fertilizer, etc.) and fees (for the Aggregator and Technical Service Provider.

It should be noted that, like all efforts to address and stabilise on-farm productivity in terms of yield and quality, the success of this model is dependent on tackling of a number of challenges and managing expectations from all participants in this model. For instance, significant investment in delivery of services to smallholder farmers does not always result in better agricultural product supply. Some of these challenges include:

- i. *Ineffectiveness of service delivery* for instance, due to diversion of inputs to subsistence crops.
- ii. Side-selling by farmers of produce originally destined for the off-taker/wholesaler.
- iii. Poverty service delivery models tend to focus on the contract crop (to the off-taker/wholesaler), but smallholder farmers manage a whole farming system that includes subsistence crops for own consumption and sale. When farmers cannot afford to feed their families adequately, production of contract crops is also affected.
- iv. Inequality out-grower schemes can lock smallholder producers into relationships where they bear an unequal burden of cost and risk with limited returns; unequal bargaining power in particular results in farm-gate prices being forced down and ultimately to under-investment in their farms. Where they fail to meet commitments, farmers are frequently locked out of future engagement with specific off-takers/wholesalers. This particular challenge can be addressed through an effort to better understand and meet the demand for services by smallholders, through building up and establishing more equal relationships during the implementation of this model.

The potential overall results of addressing these above challenges could be to increase the consistency of volume and quality of supply of produce availed to the Off-takers/Wholesalers by the farmers, and ultimately secure the value chain.

Business Development Services (BDS) Capacitation for the Target Group: Due to the limited opportunities for agribusiness and other non-agricultural income generating activities, REFP will directly target 5,000 youths aged 18-35, and 5,000 women from all the provinces. However, through collaborative actions in this regard with ongoing IFAD projects and government entities and initiatives, the target group for BDS training could easily be doubled to 10,000 (dependant on what additional budgets that can be identified through the collaborative process). The REFP will implement an Incubating Start-up Agri/aqua-preneurial and other sectorial entrepreneurial national youth and women programmes that are aimed at creating agribusiness, agri-preneurial and non-agricultural opportunities for youth and women primarily in the rural areas.

These incubating agri/aqua-preneurial and other sectorial entrepreneurial programmes will be informed by the mapping start-up study that will soon be required to be undertaken at REFP stand thus designed to empower the target beneficiaries of the REFP, and in particular, youth and women with vocational skills, seed capital and mentorship to become agri/aqua-preneurs and other sectorial entrepreneurs. Through its defined youth women targeting strategies, REFP will undertake the following for potential young and women agri/aqua-preneurs and other sectorial entrepreneurs in the 10 districts implementing the REFP:

- i. Tailored agri-vocational training for 1,500 of the youth and 1,500 women target groups as agribusiness development and other sectorial business private sector service providers to the targeted beneficiary farmers;
- ii. The identification of 1,500 youth and 1,500 women start-up of agr/aqua-preneurs/agr-businesses and other sectorial entrepreneurial opportunities for the supply, operation and maintenance of various SME assets, lease of small equipment, repair and maintenance of post-harvest equipment and mechanization.
- iii. Upon graduation, which will culminate in the completion of an agribusiness and other sectorial business plans, each youth will be provided with an equipment kit to start their business, and

receive an allocation of seed capital start their own small to medium scale agro-business of their choice along the agriculture value chain.

iv. The Identification of 2,000-targeted youth and 2,000 targeted women trained to become aggregators, agro-dealers, traders or agents between market-oriented producers and off takers or large agro-industries and/or wholesalers.

Implementation arrangements: The implementation will be led collaborative arrangement between the BAGC (taking the lead due to its experience and current capacity levels) and the Ministry of Economy and Finance's Institute for the Promotion of Small and Medium Enterprises (IPEME). There are clearly visible market opportunities in all sectors of the economy, and the REFP will definitely tap into them. World Bank data shows that SMEs account for 98.7% of the private sector in Mozambique; the IPEME has contributed to the improvement of the business environment for SMEs through the provision of relevant information and assistance for business, and thus make an appropriate BDS implementation partner, in collaboration with the BAGC, for the REFP on behalf of the GoM.

- 1. The PMU will include a full time Agro-business Development and Marketing Linkage Officer¹²⁹, who will manage the agribusiness development technical assistance, market linkages and training procurement of service providers and management of contracts. Key deliverables of the Officer will include, but not be limited to:
 - a) Will work closely with the Ministries of Agriculture and Trade and Industry, and the specifically IPEME in building agribusiness development services for the REFP target group;
 - b) The relevant officials in the designated Ministries as well as the IPEME will be the main counterparts, and they will facilitate interaction with the District Ministry and IPEME officials;
 - c) The Officer will prepare training plans and TORs for the mentoring experts and identify suitable service providers and experts to implement all sub-component activities;
 - d) He/she will organize the district trade fairs, and other meetings that foster market linkages, in close cooperation with the Ministries of Agriculture and Trade and Industry and the IPEME;
 - e) He/she will be required to travel extensively to the districts and sub-centres and proactively interact with stakeholders, Ministry officials, and other partners.
- 2. **Risk and Mitigation Measures:** Key risks and associated mitigation measures for the project are detailed in the risks section of the main report. The overall risk rating for project implementation is significant. This is due to the risk associated with the economic and political events since 2015. The two main risks confronting the project are described below.
- 3. Low Implementation Capacity. The project is confronted with weak implementation capacity particularly at provincial level; the challenge will be one of attracting suitably qualified staff to man the provincial offices. The Government of Mozambique's debt crisis, has impacted on its ability to fund existing commitments. Finally, the high market priced interest rates may result in the number of loan repayments default rates. The experience of many other projects (past and present) suggests that these capacity constraints could seriously affect the pace and quality of project implementation.
- 4. To mitigate this risk, which is considered substantial, the project design will incorporate the following risk mitigation measures:
 - (a) Provision for training and capacity building for participating private sector service providers and participating government support Ministries and parastatals;
 - (b) Inclusion within the PMU technical staff with responsibility for component implementation;
 - (c) Embedding of the PMU within the Ministry of Finance and Economics, which should strengthen the skills of senior government officers;
 - (d) Inclusion of performance-based elements in contracts (particularly with service providers), agreements, and memoranda of understanding; and

¹²⁹ Agri-business Development and Marketing Linkage Officer Terms of Reference (TOR) are included in Annexure.... Project Management.

Use of project management mechanisms (at national, provincial and district levels) that clearly spell out responsibilities for oversight and coordination.

Appendix 5: Institutional aspects and implementation arrangements

The successful implementation of this project will require the active participation of both government institutions with collaboration and support from carefully identified private sector institutions with strong developmental pedigree. The responsibilities of each are outlined below:

A. Government Institutional Responsibilities

Ministry of Economy and Finance

The Ministry of Economy and Finance will have the overall responsibility of the Rural Enterprise Finance Project (REFP). The Ministry will serve as the Borrower and accountable for the project funding. Oversight and implementation of the project shall be vested in **Banco Nacional de Investimentos (BNI)**, a 100% Government owned development bank. The MOF will enter into a subsidiary loan agreement with BNI assigning it responsibilities as project lead agency. The Ministry of Finance, through its Permanent Secretary will chair the Project Steering Committee.

The project shall also contribute to the strengthening of the Technical Backstopping Unit of the National Directorate of Treasury. This unit will serve as the liaison unit within MEF in support of all the IFAD-funded projects to i) improve coordination and creation of synergy among projects and sectors; (ii) to ensure efficiency and effectiveness in project implementation oversight through improved M&E and efficiency of financial management; iii) to improve the knowledge management and expertise as well as best practices in project management.

The MEF is also host to the Fundo de Apoio ao Rehabilitacao da Economia (FARE). The experience of FARE in managing the Rural Finance Project will be tapped in order to allow for a quick start to the project. If required by BNI and deemed desirable, FARE will enter into an agreement with the lead Agency, BNI, as sister government agencies, to allow it to contribute to the implementation of the project especially in the early years. There are experienced staff in FARE who can add value in implementing many of the activities of the project and adherence to and compliance to IFAD policy and guidelines. FARE also has a potential strategic role to play in coordinating knowledge management activities in rural finance.

Ministry of Trade and Industry

The Ministry of Trade and Industry through the Institute for the Promotion of Small and Medium Enterprises (IPEME) supports the development of small and medium sized enterprises. Availability of Rural Financial services is a central concern of the SMEs involved in agricultural value chains – input suppliers, produce traders, processors, and transporters. REFP will partner with IPEME in capacity building of rural entrepreneurs in various subjects such as book-keeping, accounting, business plans preparations etc. and their links with financial institutions.

Ministry of Fisheries

The extent to which the REFP is able to address the financial needs of actors within fishing value chains, is an area where the Ministry of Fisheries has been making interventions, but requires more support and partners.. As the REFP activities will also target fishermen and aquaculture in general, the Ministry has a strategic interest in being a member of the National Project Steering Committee, as well as the project reference groups at regional levels..

Ministry of Land and Rural Development

The National Directorate of Rural Development (DNPDR) currently hosts the Rural Markets Project (PROMER). The directorate shall therefore have an active in the activities of the REFP and its ability to meet the demands of rural actors involved in PROMER supported value chains. PROMER service

providers are expected to contribute to the implementation of Component 2.1 The Directorate will participate in the project steering Committee.

Ministry of Agriculture and Food Security. This ministry is implementing two IFAD funded projects – PRONEA and PROSUL both with activities relevant to this Project. The Agricultural Development Fund (FDA) and the Beira Agricultural Growth Corridor (BAGC) both institutions of MASA provide agribusiness support activities to SMEs and will therefore partner with REFP and play a strategic role in the implementation of Component 2.1 in the areas of extension services and localised data sharing.

B. Private Sector Institutions

Implementation delivery under REFP will be through contracted service providers drawn from the private sector and other non-state actors. Under such arrangement the role of the PMU is, as it implements the components of the REFP, to provide oversight, facilitation, management and monitoring support. Rural Financial Service Provides will be carefully evaluated and those that fit into the ethos and developmental objectives of the REFP will be expected to play an active part in the implementation of the project serving as intermediaries for delivering project services to beneficiaries.

C. Project Oversight and Coordination

Project management units at national and three decentralised in key regions of the country, shall be set up to ensure effective implementation and oversight across the central, northern and southern regions of the country. The project shall on the one hand seek to provide a consolidated response to the demand for financial services and technical business development support within existing IFAD on-going projects in the central, northern and southern regions of the country; and at the same time invest a greater proportion of its resources in the central provinces of Sofala, Manica and Tete. The central region is under-served by rural finance services and yet has in recent years been demonstrating increased agribusiness and fisheries activity and thus increased demand for rural financial services. The region also has high agricultural potential presenting opportunities for investing in value chain development that benefit the rural poor.

C1. Project Lead Agency

The Ministry of Economy and Finance will be responsible for overseeing overall implementation of the Project. The day to day oversight will be assigned to the Banco Nacional de Investimentos (BNI), at the national PMU housed at BNI offices in Maputo City, which will serve as the lead project agency implementing the project on behalf of the MEF, the borrower. BNI is a 100% owned investment bank whose developmental mandate requires that it participates in the financing of projects contributing to the sustainable development of Mozambique. BNI operates as a wholesale investment and development bank, mobilising and channelling resources to projects that have been determined to have potential to contribute to national economic development. Given the nature of its current activities, its structures are currently centrally based in Maputo (although there medium to long term strategy is to have strategic outlets in key centres nationally).

BNI shall serve as the lead agent for the PMU; through this institutional arrangement the BNI executing role is one of overall oversight and fiduciary accountability for the implementation of the REFP and not just merely housing a PMU that would implement REFP. It is acknowledged that BNI has wholesale banking and financial administrative skills and capacity, it has limited exposure to the type of development funding activities that will be required in the execution of the REFP. To negate this challenge, BNI and FARE (bother entities having the GoM as the shareholder) shall enter into an MOU, whereby FARE will provide project start up support and technical assistance in the establishment of developmental project management systems, as well as the physical establishment of regional PMUs and the mobilisation of project implementation units.

Based on its current experience and activities, BNI will also be able to serve as the Umbrella Fund Manager, providing a framework for the management of the fund windows envisaged under this project. It is important to note that there will not be a conflict of interest in respect to the dual roles of Lead Agency/host of the PMU and being the Umbrella Fund Manager.. The BNI will not be implementing any of the planned fund activities, only wholesaling the various funds to financial intermediaries.

C2. Project Governance

The project shall establish a **National Project Steering Committee** to serve as the governing body of the project. The Steering Committee shall be chaired by the Permanent Secretary of the Ministry of Economy and Finance and made up of representatives of the Ministries of Agriculture, Fisheries, Industry and Trade and Labour; Confederation of Business Associations of Mozambique – (CTA), civil society organizations, National Union of Farmers, Bankers Association, Central Bank, MFI and the CEO of BNI (or his designate) Director of FARE. This will provide strategic guidance towards the achievement of project objectives and contribute to the higher-level sector policy and strategic goals.

The NPSC will meet two times a year and on an ad hoc basis as and when necessary. Its role will be to:

- Review and approve project annual work plans and budgets (AWPB);
- Approval of the REFP Procurement Plan for the first 18 months, then annually;
- Monitor the implementation, review physical and financial progress the project
- Debate and recommend solutions on constraints affecting the project,
- Reviewing project approaches and recommend strategies to improve effectiveness; and
- Facilitate coordination with participating government departments, beneficiaries and other rural finance actors;
- Make recommendations to government policy initiatives that will help create a positive environment for improved smallholder market linkages;
- Decisions of the NPSC pertaining to the REFP should be unanimous.

Regional Project Consultative Groups (RPCGs) would be set up in each of the three regions of the project. They will be resource bodies for the project to allow the PMU and BNI to address implementation issues, debate constraints affecting the project, reviewing project approaches and progress, strategies and AWPBs, and act as a forum for coordinating financial service institutions, government bodies, and other parties and organizations operating in the project area. Each RPCG would be chaired by chaired by representatives.

C3. Project Management

A Project Management Unit (PMU) set up at BNI, will be responsible for overall project implementation. The main responsibilities of the National PMU will include: (i) annual work planning and budgeting (ii) financial management; (iii) procurement, including contracting of service providers; project facilitation in the three regions – through the three regional PMUs - and (vi) Reporting, monitoring, evaluation and knowledge management. The PMU will be composed of a team of individual consultants contracted through competitive bidding and managed by a Project Coordinator. The PMU will be organised into three units covering the planned target geographical regions. The core project management unit will be based in Maputo City. Three regional project management units will be established as follows: one unit will be based in Beira and will oversee project implementation within the central region covering Manica, Sofala, Zambézia and Tete; another unit will be based in Nampula and will be responsible for coordinating project activities in three (3) Northern provinces of Nampula, Cabo Delgado and Niassa; a third unit will be based in Xai Xai, Gaza and will be responsible for overseeing project activities in the Southern Region. It is considered not effective to

assign responsibilities for coordinating the Southern Region to the National Project Management Unit as the unit may not have adequate time to engage stakeholders spread across three provinces in addition to discharging its national responsibilities.

National Project Management Unit (NPMU): Members NPMU will be recruited as individuals by BNI through an open bidding/tender process that complies with national general accepted public sector recruitment processes or those of IFAD (whichever is the more appropriate). Physically, the NPMU will be housed at BNI offices in Maputo City. The main responsibilities of the NPMU will include: (i) annual work planning and budgeting (ii) financial management; (iii) procurement, including contracting of service providers; project facilitation in the three regions and (vi) Reporting, monitoring, evaluation and knowledge management. Staffing of the unit will include:

- **Project Coordinator**: Serves as the operational head of the PMU with responsibility for guaranteeing delivery of planned outputs, planning, monitoring and reporting;
- Finance Manager with overall responsibility for financial management and financial reporting
- Procurement Officer: Responsible for developing the annual project procurement plan and facilitating all procurement activities
- **Accountant** to support financial manager in maintaining accounting records and day to day management of accounts;
- **M&E/Knowledge Management Specialist**: designing M&E system, overseeing baseline and impact studies and surveys, preparation of progress reports;
- Rural Finance Specialist to oversee implementation of project financial instruments, ; capacity building and support for institutions and rural entrepreneurs
- **Innovation and Outreach Officer** to oversee implementation of innovation and outreach activities; capacity building and support for institutions and rural entrepreneurs
- Support Staff (Administrative Assistant and driver);

The project will also have part time experts that will be recruited and mobilised as required. This will include a senior **Environmental and Social (E&S** consultant hired on a retainer basis within the PMU who will be responsible for the i) implementation of capacity building on climate and environmental aspects of REFP, and ii) the monitoring of social and environmental compliance., a **Women/Youth Officer** to ensure that REFP activities adequately mainstream women and youth priorities/targets; and a **Human Resources Specialist** who will liaise with the BNI Human Resource Management and Procurement on all contracting matters. Provision has been made in the budgets to mobilise other unspecified experts that may be required during implementation of the project.

Regional Management Units (RMUs). These units will be responsible for identifying project investment opportunities as well as monitoring activities under implementation. The regional units will also have responsibility for developing mechanisms for ensuring complementarity of donor- and NGO-supported rural finance activities in the region. The RMU will be hosted by the Provincial Directorate of Finance in the respective Provincial Governments where they will be operating. Each Unit will be made up of:

- Regional Coordinator: identification of project investment opportunities, providing implementation support to service providers, coordinating REFP activities with other rural finance initiatives
- M&E Officer: Collection of regular data and information on the project, preparation of regional progress reports, coordinating regional knowledge management activities
- finance/administrative officer: office management, financial management of financial resources assigned to the regional office
- Support Staff (driver, secretary)

D. Subcomponent Implementation Arrangements

- a) BNI will offer an umbrella structure for the management of the IO elements of the Graduation Promtion and Outreach Programme, the CIF and the LOC. In the implementation of IOF and the LOC, BNI will serve as a wholesale Agent providing funds to competent institutions that will be selected through competitive bidding.
- b) The management of the CIF will be subcontracted by BNI to a competent service provider with both grant management as well as agricultural technical experience. This could be a consultancy company with experience in offering such services. Some of the larger firms with local experience with similar programmes include KPMG, Price Waterhouse, COWI and Technoserve. Such service providers will be recruited through competitive bidding.
- c) The Graduation Fund will be contracted out to competent service providers. To minimise implementation risk for the project at least three such providers will be recruited one for each region. A number of such providers are active including Aga Khan, Fundação Capital, OIKOS

E. Technical Assistance for Line of Credit and Crowding In Fund

The project will set aside funds to support technical Assistance to support the CIF and the LOC. Technical Assistance is required to provide support to beneficiaries in preparing and submitting proposals for funding. Such technical assistance will include promoting the program, ensuring that applicants meet established project criteria, help potential beneficiaries prepare business plans and proposals for financing as well as providing ongoing support and mentoring beyond the initial business plan and financing proposals. The TA resouces will be managed by the PMU and will be delivered through public and semi-public sector strategic. To spread delivery risk for the project and minimise costs. service providers will be identified based on their regional competence and will be supervised by the respective Regional PMUs. Available public business development service providers include Instituto para Pequenas e Médias Empresas (IPEME), CEPAGRI (now FDA) and Beira Agricultural Growth Corridor. The project will enter into MOUs with the respective governments organisations. Prior to such partnerships it will be necessary to conduct a thorough institutional assessment and to provide for capacity building of the partner institution to guarantee effective delivery of required services. In order to minimise risk for the project, different implementation partners will be identified for each of the three regions.

The TA requirements for implementing the graduation fund will be imbedded in the service provider selected to implement the activity. The service provider will be responsible for all the core elements envisaged: targeting and selection, skills training, savings, enterprise selection and enterprise specific training, provision of start-up loans, regular coaching and mentoring, establishment of VSAs/ASCAs and linkage to mainstream service providers (financial institutions, market linkages, value addition etc).

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

The integrated participatory planning, monitoring and evaluation (M&E), Learning and knowledge management (KM) system will be developed in accordance with the government frameworks and within IFAD guidelines. It will have three main objectives: steer project implementation; support economic decisions and policymaking; and share knowledge and scale up good practices in line with the economic, social, technological environment that the Project will operate.

Planning and Budgeting

The planning is a necessary condition for good management and the Annual Work Plan and Budget (AWPB) is the outcome of the annual project planning process. Through annual work planning, the project decides what activities will be carried out over the next 12 months, by whom, the resources and the time needed to complete them. The AWPB is therefore a planning and management tool that specifies what is expected to be done during the year, how and at what cost are involved. Overall, the Project Planning Cycle will be led by the PMU hosted in the Ministry of Economy and Finance (MEF) in collaboration with the Economy Rehabilitation Support Fund (FARE) as the Lead Implementing Agency in coordination with the Provincial Directorate of Economy and Finance (DPEF) at provincial level and will follow the Government Planning and budgeting cycle.

- 1. The process for preparation of the AWPB will be inclusive and ensure the active participation of the relevant key stakeholders and other implementing agencies under the two main components. These components-based AWPBs will then be collated by the PMU, M&E Officer under the supervision of the Project Coordinator into a global AWPB. The consolidated AWPB will be submitted to the Project Technical Committee¹³⁰ for final approval. The M&E Officer will work in close liaison with the Finance Officer to ensure adequate budgeting. The PMU through the M&E Officer under the supervision of the Project Coordinator should have some flexibility to review the AWPB in mid-year if necessary upon prior approval by the Project Technical Committee and IFAD.
- 2. Since the Project will be nationwide with initial emphasis on selected pilot provinces, it could be advisable to have the main PMU¹³¹ of PEFP located at the Head Quarter (HQ) of the Lead Implementing Agency. The main PMU could be supported by two decentralised PMUs (regional PMUs) which will primarily be regional based i) in **Beira** and ii) **Nampula**. The M&E Officers assigned to these two regional offices will play a key role in process for preparation and consolidation of the AWPB in collaboration with the P,M&E Officer from main PMU.
- 3. Thus, detailed planning and budgeting of REFP activities would be through the AWPB involving the PMU, FARE and other implementing agencies/ stakeholders in participatory process where the Provincial Directorate of Economy and Finance (DPEF) through the focal point or FARE's provincial Outreach Officer has a key role to play. The PMU would be responsible for preparing the annual budget and work programme for the two main components including its subcomponents. In addition, the PMU of REFP in coordination with FARE will make the overall consolidation of the AWPB. The PMU after approval of all stakeholders will send the AWPB to IFAD 30 days prior to the end of each Programme Year for no objection.

¹³⁰ The PTC is expected to be a functional consultative and oversight board which will comprise of designate Senior Government Officials (Directors) and focal points of key implementing agencies including relevant private sector actors, farmer organization and Non-Governmental Organizations. The PTC will meet quarterly and would provide technical and operational guidance, discuss and resolve operational problems, provide technical review of AWPB, Reports including its approval and reinforce knowledge sharing across ministries.

¹³¹ The main PMU will also be responsible for coordinating the elaboration of AWPB in the southern region in liaison with the Provincial Directorates of Economy and Finance.

The PMU will consolidate the Project's quantitative financial and physical output data in the planner tool template, which could be excel based on Management Information System.

4. During the participatory process with different stakeholders and other implementing agencies the use of the AWPB format template as illustrated in figure 1 will be further fine-tuned and adopted for the compilation of AWPBs in subsequent years. The essential linkage of the AWPB to the quarterly reporting and subsequently, the semi-annual and annual reporting are the reference codes, the planned activities and the budgets or cost estimates. All forms of transactional controls such as the quarterly activity scheduling and disbursements must make reference and be based on the three parameters quoted directly from the approved AWPB.

WORKPLAN SCHEDULE BUDGET COST ANNUAL WORK PLAN & BUDGET : 2018 INDICATORS Target Activities/Outputs Impleme Ref. TOTAL & Planned Activity COST Code Outcome/Impact COST US\$ Туре Agency Indicators 1 Component 1 1.1 Subcomponent 1.1 1.1.1 Expected Outcome 1.1.1 Al.1.1.1 Annual Activities A1.1.1.2 Annual Activities Al.1.1.3 Annual Activities 1.2 Subcomponent 1.2 Al.1.1.1 Annual Activities A1.1.1.2 Annual Activities A1.1.1.3 Annual Activities 2 Component 2 2.1 Subcomponent 2.1 2.2.1 Expected Outcome 2.2.1 A2.2.1.1 Annual Activities A2.2.1.2 Annual Activities A2.2.1.3 Annual Activities

Table 4: Format Template for the elaboration of AWPB

Monitoring and Evaluation

The M&E system will have a three-level structure, consisting of output monitoring, outcome monitoring and impact evaluation. Output monitoring will comprise the monitoring of physical and financial inputs, activities and outputs, both planned and actual. Outcome monitoring will assess the use of outputs and measure their benefits at beneficiary level. Impact evaluation will assess and measure the change in selected variables between the beginning and the end of the Project or a later selected date. The main instruments for the impact evaluation are the Project's Baseline Survey and Project Completion Report. A list of the final indicators will be defined in the start-up workshop using the log frame as a starting point. This will include relevant first, second and third level indicators of IFAD's Results and Impact Management System (RIMS) and will be sex disaggregated as appropriate. AWPBs will provide the annual targets for first level monitoring. The PMU M&E, under the supervision of the Project Coordinator will have lead responsibility for the coordination of all M&E activities of the Project and consolidating relevant information.

The PMU/REFP in collaboration with FARE as Lead Implementing Agency would be responsible for collecting and storing key M&E data on their activities. These data would be analyzed and consolidated by the PMU at HQ in collaboration with the regional PMUs for purposes of the AWPB and Progress Reports. Monitoring of outcomes and impact could be outsourced to consultants whose activities would be coordinated by the PMU's M&E staff. The indicators would be defined in compliance with IFAD's Results and Impact Management System (RIMS) as it can be depicted in figure 3.

Reporting

Progress reports will have two main objectives: (a) to record the progress of implementation, for the period under review, compared against the targets and objectives including key selected indicators from IFAD's Results and Impact Management System (RIMS) set out in the Design Project Document and the AWPB; and (b) to confirm the degree to which the Borrower is in compliance with the conditions of the financing agreement. The key quantitative tables of the Progress Reports will be generated using a simple excel template to follow the same structure as the standardised AWPB as it is illustrated in figure 2.

Table 5: An Illustration of Physical Implementation Progress Reporting Template

FARE-REFP: Implementation Progress Reporting		Target		period:					
Ref code	Planned Activity	Qty	Туре	Achievements (A)	A/P (%)	Follow up action required	Deadline for action & comments	Budget (USD)	Expenditure (MTn)
1	Component 1								
1.1	Subcomponent 1.1								
1.1.1	Expected Outcome 1.1.1								
A1.1.1.1	Annual Activities								
A1.1.1.2	Annual Activities								
A1.1.1.3	Annual Activities								
1.2	Subcomponent								
A1.1.1.1	Annual Activities								
A1.1.1.2	Annual Activities								
A1.1.1.3	Annual Activities								
2	Component 2								
2.1	Subcomponent 2.1								
2.2.1	Expected Outcome 2.2.1								
A2.2.1.1	Annual Activities								
A2.2.1.2	Annual Activities								·
A2.2.1.3	Annual Activities								

In order to comply with the government of Mozambique reporting systems are important. There would be three reports namely i) quarterly ii) semi-annual and iii) annual report. This reporting of physical progress will be the responsibility of the Project Focal Persons or Provincial Outreach officers at Provincial and District level132 in coordination with PMU and FARE HQ. In addition other partnering stakeholder and institutions will also be involved in physical monitoring.

It is clear therefore, that monitoring progress of this project will be done through the established government system mechanisms, and will be led by the Monitoring and Evaluation Officer at PMU level in collaboration with the entire PMU team and implementing partners to ensure a backward linkage to the outputs in the physical progress reports. The overall the responsibility for project M&E activities would rest with the PMU Project Coordinator, the M&E Officer, implementing partners, M&E focal point or assigned staff to the project. They would be overseen by the PMU M&E Officer while reporting to the PMU Project Coordinator. In addition, M&E responsibilities will be assigned to everybody involved in the implementation of project activities. The implementing partners M&E Officers would also be responsible for collecting and analysing data gathered from service providers and implementing partners in each district or province on the basis of an agreed reporting format and timeframe. Against a baseline the reporting system to track physical/financial performance and emerging impact would be implemented in each implementing partner and for the Project (PMU) as a whole.

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¹³² At provincial level the programme focal persons based at DPEF will play a key role in gathering the information and compiling it. In order to perform well, some training will be provided for by the P,M&E from PMU

Republic of Mozambique
Rural Enterprise Financing Project (REFP)
Detailed design report
Appendix 6: Planning, M&E and learning and knowledge management

Special emphasis will be placed on the need to integrate planning and monitoring as standard responsibilities in the work of project implementers, and ensuring that recording progress information is done regularly and consistently. In principle, the designated focal persons from each of the implementation units/partner institutions will be the responsible person at the respective levels and will among other things, collect and enter in spreadsheets annual planning data and monitoring data. Files with data will then be submitted to the PMU for final analysis and proper consolidation

The progress information will be carefully analysed by the M & E Officer at the PMU. The analysis will seek to identify any implementation constraints to be addressed by the project management. The same information will be used to prepare quarterly, half yearly and annual reports, which will contain the full tables with detailed, activity by activity progress information. These reports will be produced by the respective implementing units with formal reporting responsibilities to the PMU. Reports will provide information such as (i) overview of intervention activities undertaken in the last quarter and cumulatively over the fiscal year; and: (ii) progress and outputs in terms of the agreed M&E indicators, provide lessons learnt, and knowledge gaps identified.

It should be noted that progress information will be from the beginning of the year to date to reflect cumulative progress. In addition, information will be provided on the cumulative progress since the beginning of the project. This is meant to assess the progress towards achieving project targets in line with the IFAD's Results and Impact Management System (RIMS).

Evaluation of Outcomes and Impact (Impact Assessment)

Project evaluation of outcomes and impact will assess the activities impact on the target group, with a particular focus on household assets ownership improvement, increase in income and food security/ nutrition improvement among others. It would be the PMU's responsibility to undertake periodic and activity-specific assessments and case studies to guide the implementation process.

Evaluations would follow a participatory approach through active involvement of the target group and covering mainly the components. Specifically, the PMU team would assess the extent to which project outcomes and impact have been achieved using both quantitative and qualitative methods. This is a key process that will involve a combination of impact assessment, planning and monitoring and is linked closely to indicators for the overall project goal, objective and outcomes will include but not limited to the following;

- a) Percentage of female and male headed households that experience an increase in income and household assets ownership
- b) Percentage increase in household income from viable models
- c) Proportion of households for which food security has improved
- d) Number of persons receiving services promoted or supported by the project
- e) Proportion of rural entrepreneurs satisfied with the types and quality of services available

A comprehensive baseline will be carried out in the first year of project implementation to provide benchmarks that will guide the eventual impact monitoring. Data collection on the different impact indicators will be the responsibility of the PMUs (both regional and at the HQ) and the focal persons from the respective implementation partner units/institutions with occasional use of external consultants. Secondary sources of data will be used particularly to provide information on the overall sector goal indicators. Such sources will include annual statistics reports, annual household surveys as well as poverty and gender studies.

The case studies would aim at ensuring that the analysis and information generated allow the PMU and other stakeholders to fine-tune the Project, particularly in its responsiveness and effectiveness

¹³³ It considers the extent to which activities and outputs have resulted in reaching outcomes – assessment of effectiveness – and the extent to which the benefits are likely to be sustainable after the end of the programme – assessment of sustainability.

in dealing with gender, including youth employment, HIV/AIDS and poverty issues in the provision of financial services. In particular, the system would cover the impact on economic and social conditions of the rural households. The results of the evaluation activities would be entered in the MIS and presented to the stakeholders in participatory evaluation workshops, during which lessons learned, would be extracted and agreed.

Table 6: An illustration IFAD's Results and Impact Management System (RIMS)

S	1st and 2nd level monitoring indicators	3rd level Evaluation Indicator
ATIVE INDIC	Why: To track project outputs (nr. people trained in financial service; nr. people trained in business and entrepreneurship etc.) and monitor processes (Likelihood of sustainability of enterprises – nr. of enterprises operating after three years, etc.). How: Counting / aggregating. When: Continuous, with annual reporting.	Why: To track any changes in anchor indicators of impact (poverty & hunger). How: Representative HH surveys. When: At benchmark, mid-term and project completion evaluation (PCR).
QUALITATIVE	Why: To identify factors in rate of progress (rapid / slow) and attitudes of project participants. How: Flexible mix of qualitative methodologies	Why: To explain context and perceptions of any changes in anchor indicators of impact. How: Flexible mix of qualitative methodologies, (refer IFAD Guide for Project M&E). When: At mid-term and completion evaluations, and as needed.

Learning and Knowledge Management

Learning and Knowledge management will be implemented as an integral part of the REFP, in recognition of the fact that the Project will be identifying, testing, demonstrating and disseminating approaches with innovative technologies. The Project will therefore support a major learning process to overcome some of the conceptual barriers and raise awareness about the piloted models. The REFP M&E system will form the foundation of the Knowledge management and learning system and be a primary instrument of information capture and storage, based on the indicators detailed in the results framework. Tools such as case studies, stakeholder interviews and surveys will be used to deepen understanding of factors contributing to success and failures, and to enable full documentation of impacts from the field and beneficiaries.

The learning and knowledge management activities will include (i) impact studies comprising a Baseline Survey and Completion Report; (ii) Thematic and Technical Studies on the Innovation and Outreach Fund as well as Project Graduation Fund; (iii) information dissemination campaigns about the Programme; (iv) preparation of publications and visibility/video materials; (v) in-country knowledge networking through periodic seminars and workshops; (vi) Progress Reports; and (vii) capacity building activities of PMU/REFP and FARE staff. In turn, all these are expected to ensure that knowledge being captured by the PMU and implementing partners are utilised to generate lessons and best practices to be widely shared with all key players including public institutions, the IFAD country team and others.

Republic of Mozambique
Rural Enterprise Financing Project (REFP)
Detailed design report
Appendix 6: Planning, M&E and learning and knowledge management

REFP's sequential approach to scaling up will also follow an in-built learning loop, with M&E and knowledge management playing key roles. The project M&E would collect regularly the results and lessons learned in order to fine tune its approaches, especially the innovative models. As such, once these critical elements have been effectively operationalised, the project can be scaled up to all 10 provinces of the country.

During the final year of Project implementation, as part of the preparation of the IFAD- required Project Completion Report/Impact Assessment (PCR), the M&E data collected over the Project implementation period will be used as part of a thorough assessment of Project achievements. In particular, this will compare changes in the livelihoods of beneficiaries that relate to the implemented Project activities against the situation documented in the Baseline Study. The Project Completion Report shall share lessons learned and development experience.

The Project will carry out some feasibility studies of possible developments of geographical areas for which local communities have requested Project interventions. The studies would investigate the viability of business enterprises or entrepreneurship interventions and identify the types of activities that can be supported through component 2 (Capacity building and support for institutions and rural entrepreneurs)

In summary the purpose of knowledge management is to ensure that knowledge generated within the REFP's activities are systematically identified, analysed, documented and shared. Therefore, particular attention will be given to documenting; innovative models; information to be shared with and discussed by all key stakeholders with a view to assessing progress and discussing measures to improve performance; and Learning Routes, which will be organized to support the exchange of knowledge and good practices among key stakeholders.

Appendix 7: Financial management and disbursement arrangements

A. Summary of Financial Management arrangements

A Financial Management Assessment (FMA) has been undertaken at REFP design in accordance with IFAD requirements and Financial Management Division (FMD) guidelines on financial management assessment at design. The assessment is based on a review of operations of Banco Nacional de Investimento (BNI), S.A./National Investment Bank and the Fundo de Apoio a Reabilitção da Economia/The Economic Rehabilitation Support Fund (FARE). BNI, GoM's investment and development bank has been designated by the Ministry of Economy and Finance, as a Lead Project Agency, and as an Umbrella Fund Management Agency. It will establish a separate NPMU for implementation of the REFP, and establish an independent (from the NPSC) Umbrella Fund Management Agency within its banking infrastructure.

Whereas BNI is a relatively new institution, government has invested in it and put up management and governance systems to operate in the financial services sector. BNI being a young institution has limited experience in project management but has been slowly taking on government/development partners financed projects like the Zambezia Valley project, an agribusiness and entrepreneurship investment. FARE was the LPA for the Rural Finance Support Project (RFSP/PAFIR) that was cofinanced by IFAD and AfDB and is also implementing an African Development Fund supported Women Empowerment and Skills Development Project Consolidated Phase 2 (WESDPII).

The strengths and weaknesses of these institutions inform the financial management arrangements that are being proposed. Lessons have also been drawn from the operations of Pro-poor Value Chain Development Project in the Maputo and Limpopo Corridors (PROSUL) to put the assessment in the country portfolio context. The assessment, prior to application of mitigating measures has returned a high risk. The fiduciary risk on the basis of FARE operations with application of mitigation measures returns a medium risk.

The major fiduciary lessons learned from operations of FARE and PROSUL has been applications of parallel accounting systems. FARE has been using the GoM e-SISTAFE a Government integrated financial management information system, TOMPRO and PREMAVERA depending on the reporting needs. PROSUL is also using the GoM e-SISTAFE system in parallel with TOMPRO accounting software. This mix up does not only cause differences in the accounting data produced but is also cumbersome to the users. GoM is encouraging the use of the e-SISTAFE system, which development partners have been progressively adopting; unfortunately this has not been configured to produce reports in the required format by IFAD and is also characterised by operational down time that has negative implications to project disbursements. Discussions on the configuration have been on-going but no conclusions have been made so far on the possibility of this configuration. In order not to bring these complications in a complex project, stand-alone financial accounting software has been proposed.

B. Summary of strengths and weaknesses of the proposed FM arrangements

Summarised below are the key strengths and weaknesses on the basis of which financial management arrangements have been designed.

Strengths:

- a) Under statute, BNI is a financial institution with a mandate to manage public investments and development. In the course of its activities, it is involved in advisory, capital markets, fund management, and other banking operations.
- b) FARE, on the other hand, is mandated to wholesale financial products to financial intermediaries such as micro finance institutions, strengthen their capacity and offer innovative financial products and services, among others which this project is a focus of:
 - i. FARE has experience with IFAD financial management requirements having implemented PAFIR that was co-financed by IFAD and AfDB;

- ii. FARE has implemented use of TOMPRO accounting software that, when well coded has been rated as satisfactory for meeting IFAD reporting requirements;
- c) Project specific staff will be recruited, thus they will be dedicated to the project operations which should facilitate timely implementation and reporting; and
- d) A private audit firm has been conducting the statutory audit of REFP. This arrangement will continue and should mitigate against delays that may arise out of GoM requirement to submit draft financial statements to Tribunal Administrativo (TA) is on 31/May. A review will be made during implementation to determine whether the audits can be done by TA, and
- e) BNI will bring on board its fund management experience that will be complemented by FARE's rural financial services experience.

Weaknesses:

f)

- a) BNI does has limited experience with project management and does not have experience working with IFAD systems;
- b) The project has many products and is to be implemented through many partners and multiple locations which pose a challenge in financial management:
- c) FARE currently has a lean structure that is responsible for both corporate and project. There is limited financial management staff capacity at to handle accounting and reporting requirements of the project:
- d) Low disbursement of IFAD loan resources arising from slow procurement as has been the case with PROSUL;
- e) The current coding and configuration of the e-SISTAFE software will not adequately address the accounting needs of the project; and
- f) Based on the experience of ongoing IFAD operations in Mozambique, and request from the Government, GoM will not be able to cover taxes and duties during project implementation.
- 1. Capacity constraints to be addressed and operating changes to be made.
- a) The major capacity gaps to address will be capacity of the finance staff. At NPMU and implementing agencies. BNI staff who will be overseeing the day to day operations of the project do not have experience with IFAD systems. A qualified and experienced Project Financial Management Specialist, assisted by an Accountant at NPMU fully dedicated to the project will be competitively recruited;
- b) A choice of accounting software will have to be made to mitigate against the challenges arising out of use of multiple software. The use of accounting software that has been used by other projects is recommended. This should facilitate knowledge transfer and reduce cost of shared services such as software licence and training;
- c) To mitigate delays in start-up with possible failure by the project to fully disburse the allocated funds and a risk to fail the project objective, a start-up fund facility is proposed. This should facilitate the project to prepare and meet disbursement conditions well in good time; and
- d) There will need to implement robust internal audit arrangements. Internal audit arrangements within BNI appear to be adequate. However, there will be need for internal assurance where internal audit will cover the project at least once in a year with results of the audit or at least implementation action plan and status of implementation of results shared with IFAD as part of reporting requirements.

Mozambique's inherent risk is high as measured by Transparency International's (TI) Corruption Perceptions Index (CPI) for 2016 that returned a score of 27 with a rank of 142 out of 176 Countries assessed. This ranking puts Mozambique in the high risk category. The last PEFA assessment of 2015 identified deficiencies in procurement practices which continue to lag behind international best practices.

At project level, the residual risk taking into account mitigation measures based on BNI and FARE has been assessed as medium. Project design has taken into consideration this risk profile while designing financial management aspects of the project. The main considerations made include the following.

- a) Implement a stand-alone mainstreamed NPMU under the supervision and oversight BNI with project staff who are competitively recruited and fully dedicated to the project;
- b) Open a designated account and a project specific operating account. There will be authorised allocation, advanced from the loan. Disbursement will be on a replenishment basis operated under SMART SOEs; To mitigate risks associated with funds flow and justifications by implementing partners, the Umbrella Fund and the ASCAs agency will open accounts to receive funds from the NPMU for their activities;
- c) Internal audit of the project will be at least once a year and IFAD will request GoM to share the audit reports or as shall be agreed at negotiations; and
- d) The Project statutory audit will be carried out by a private audit firm, who will audit the project in accordance with IFAD audit guidelines.

The following Financial Management conditions or covenants for Board presentation and conditions for withdrawal.

- a) There shall be a designated account denominated in USD to receive the loan and grant funds to the benefit of BNI and the account shall be held in the Bank of Mozambique. An operating account for the benefit of of REFP NPMU and sub accounts opened for the Umbrella Fund, ASCAs activities and PPMUs. The operating account will be opened for purposes of receiving funds from the designated account in local currency/Mozambican Meticais (MZN). Funds shall be received in the designated account and transferred into the operating account from which expenditure at NPMU level, transfers to the implementing partners and reconciliations are done;
- b) The PMU, headed by the Project Coordinator shall have been fully constituted and adequately staffed with in addition to the Project Coordinator, a Financial Manager and Monitoring and Evaluation Officer will have been recruited;
- c) A draft PIM/financial procedures manual will have been developed for purposes of REFP in the form and substance acceptable to the Fund and submitted to IFAD for approval;
- d) Implement the use of accounting software should be coded with the REFP comprehensive chart of accounts to facilitate generation of reports as required by the IFAD;
- e) Should the proposed liquidity risk mitigation in respect of counterpart contribution be considered, as an exception to Section 11.01(a) of the general conditions, based on the experience of ongoing IFAD operations in Mozambique, and request from the Government, the IFAD loan will cover taxes and duties as a mitigation measure to curb the ongoing financial crisis in Mozambique that started in 2015, with a significant depreciation of the Metical against the US dollar which has constrained GoM's ability to meet its direct monetary contribution to IFAD projects in the form of funds to cover taxes and VAT. During Mid-Term Review of REFP, IFAD and GoM will review the overall economic and financial situation of the country and agree if the IFAD loan should continue to cover taxes; and
- f) The provision under Section 11.01(c), the use of any proceeds of the financing to pay for taxes is subject to the IFAD's policy of requiring economy and efficiency in the use of its financing. Therefore if IFAD determines that the amount of any such tax is excessive, discriminatory or otherwise unreasonable, the fund may by notice to the borrower reduce the percentages of eligible expenditures to be financed under the financing agreement.

I. Project Financial Profile

Nature of project eligible expenditures - REFP expenditure categories have been assigned in accordance with the standard flex cube expenditure categories. Eligible expenditures include the following expenditure categories: (i) equipment and materials, (ii) consultancies, (iii) salaries and allowances, and (iv) operating costs. The summary costs and financing plan are shown in the table below. Detailed cost tables are presented in appendix 9.

Financing Plan. REFP will be financed by GoM and IFAD with a combined project direct costs estimated at about USD 62 million over a five-year Project implementation period will be funded as follows: IFAD loan USD 53 million under concessionary terms, the private sector/ financial institutions and financial Intermediaries are expected to contribute USD 5 million, beneficiary contribution of about USD 1 million and GoM will finance a counterpart contribution of USD 3 million to cover salaries of own staff involved in implementation of the project.

II. Implementation arrangements

A. Implementing and participating organisations with fiduciary responsibilities

BNI will be the lead project agency implementing the project on behalf of the MEF, the borrower. The Project Management Unit (PMU) will be responsible for overall project implementation in consultation with other relevant national agencies and ministries to ensure consistency with national policies. The NPMU established by BNI at National level will be composed of project specific staff recruited and fully dedicated to the projector headed by a Project Coordinator. The PMU will be accountable to the Chief Executive Officer of BNI, who will be the executive level head responsible for the strategic direction of the project. The BNI Chief Executive Officer my delegate this responsibility to a Senior Officer to oversee the operations of the PMU. A Finance Manager, assisted by an Accountant will be recruited and will be supervised by the Coordinator and supported by the Head of Finance at BNI.

The PMU will be responsible for project coordination and management of fiduciary issues in conformity with the standards and requirements agreed upon between GoM and IFAD; and manage the project in accordance with the Financing Agreement and other project documents such as the Letter to the Borrower, the Project Design Report and the PIM. It will also be responsible for the day-to-day management of the project.

Division of Advisory and Structured Finance has been identified as the lead for the Umbrella Fund that will be implemented by BNI. Under the Division, there is a Capital Markets and Research Department that is responsible for among others fund management. BNI has confirmed that the current staff structure is adequate to manage the proposed funds. It is however noted that should staff be required in the course of implementation, BNI will competitively recruit the required staff and cover their cost within the fund management fees.

FARE will manage the activities related to ASCAs and this will be handled within its current structure in coordination with the NPMU.

The following will be the roles and responsibilities of the other implementing organisations.

- a) A lean structure has been proposed for the PPMUs where provincial and district level activities will be coordinated. However, given its lean structure, there will be technical backstopping from the NPMU, BNI and FARE, and engagement of technical service providers to support activities at the lower levels. . Except for BNI and FARE, no other strategic partners have been pre-identified and as such, identification of service providers will be through competitive procurement;
- b) REFP PMU will be the central financial management hub of the project responsible for data processing and reporting. Payments to service providers and contractors will be centralised except for low level operational costs and payments that may be transferred to provincial accounts whenever appropriate;
- c) Payment of advances to service providers/contractors will be in line with public procurement provisions and stipulated in the contracts for service provision.

III. Financial Management Risk Assessment

A. Inherent risks, Country issues, Entity risks and Project design

Major Country accountability issues affecting fiduciary environment.

- a) The last PEFA assessment of Mozambique was in 2015. Compared to the previous one carried out in 2010, 71% Mozambique's indicators either improved or remained the same. Aggregate PEFA scores are high for legal and policy frameworks but implementation of these frameworks is weaker. Upstream elements of the Public Financial Management cycle (e.g. budget preparation, tax policy) perform better than downstream functions, including budget execution, procurement, internal controls, accounting, and audit follow-up. Key among areas of deficiency is procurement practices which continue to lag behind international best practices.
- b) Government accountability, transparency and corruption factors. TI perception index for 2016 shows Mozambique scored 27 (down from 31 in 2015) on the 1 100 scale with a rank of 142 out of 176 Countries assessed. This ranking puts Mozambique in the high risk category.

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 7: Financial management and disbursement arrangements

The implementation arrangements that pose a risk of low disbursements arise from delays in start-up due to delays in setting up the PMU and delays in submission of withdrawal applications; delays in financial reporting, among others.

Overall assessment indicates that Mozambique mitigated is a high risk country, characterized by weak procurement systems and weak internal controls. Design arrangements have taken into account this high inherent risk, and proposed hybrid implementation and financial management arrangements that are based on IFAD requirements and GoM systems.

B. Project Control Risks

Table 7: Summary of FM Risks and mitigating actions

	Initial Risk Assessment	Proposed mitigation	Final Risk Assessment
Inherent Risk			
1. TI Index	Н	-	Н
Control Risks			
1. Organisation and Staffing	Н		M
2. Budgeting	M		M
3. Funds Flow and Disbursement arrangements	Н		Н
4. Internal Controls	Н		Н
5. Accounting systems, Policies and Procedures	M		М
6. Reporting and Monitoring	Н		M
7. Internal Audit	M		M
8. External Audit	Н		M
Fiduciary Risk @ Design	Н		M

IV. Financial Management and Disbursement arrangements

Organisation and staffing/Main-streamed PMU. The Project will be implemented within the Government of Mozambique's institutional framework. The Ministry of Economy and Finance will have the overall responsibility of managing the Project whose implementation responsibility has been delegated to BNI and FARE. These will be supplemented by service providers selected from both the private and public sector. The National Project Management Unit (NPMU) will be established within FARE, based in Maputo for the day-to-day management of the Project. Being a national project, into two sub-units covering the planned target geographical regions based in Beira and the other in Nampula or Cabo Delgado shall be established. The choice of Nampula or Cabo Delgado will be further evaluated prior to start up.

The NPMU will be responsible for overall coordination of implementation, including preparation of the Annual Work Plan and Budget, procurement, progress reporting, monitoring and evaluation and financial management. It will also ensure liaison with other related government or donor-supported projects/programmes to explore and exploit any existent synergies and avoid duplication. The Sub-Units at the provinces, as seen in the experience of PROSUL and PROAQUA located in provincial capitals should enhance the level of ownership and engagement by local Governments to guarantee a high level of delivery of project results. The Project will also rely on other Government entities which will act as implementing agencies for specific subcomponents. This will be supplemented by contracted service providers where internal capacity will have been deemed inadequate.

The key implementation risk is availability of qualified and experienced financial management staff for the Project. REFP will thus identify the staff competitively, under the oversight BNI... REFP will expose recruited staff to IFAD specific procedures and provide capacity building opportunities for financial management staff during implementation.

Budgeting.

Implementation risk in respect of budgeting relate to failure to meet budget deadlines for the submission of the AWPB's due to the non- availability of clear planning schedules and lack of clarity of REFP requirements at low levels and inadequate budget control.

The project will be implemented on the basis of approved Annual Work Plans and Budgets (AWPBs). The budgeting process will be done jointly between PMU and implementing agencies using a bottom – up approach. The PMU will consolidate the AWPB, present it for approval by the Board in accordance with the PIM. To facilitate proper budget monitoring and control, PMU will ensure timely

completion of the budgeting process to facilitate early posting of the same into the TOMPRO accounting software.

Budgeting should involve the Project finance team, technical staff, procurement officer and the M & E Officer. This should ensure that the expenditures categories are well aligned and the logframe is considered at budgeting time. It should also realistically inform the procurement plan as procurement action timelines will be clearly attended.

Prior to incurring any expenditure, a No Objection on the AWPB and the related Procurement Plan should have been obtained from IFAD. The requirement is submission of the AWPB together with the Procurement Plan no later than 60 days prior to the beginning of the fiscal/budget year.

Disbursement arrangements and Flow of Funds – Project design has put into consideration the country fiduciary risk profile and proposed financial management arrangements that will ensure that the loan proceeds and other financing sources will be used for their intended purposes. This has been on the basis of lessons learned under existing IFAD financed projects in Mozambique.

Under REFP, BNI with the authority of MEF will open a designated account in USD in the Central Bank (Bank of Mozambique) designated in USD to the benefit of BNI. An operating account will be opened in a commercial bank acceptable to both GoM and IFAD and Sub-Project accounts will be opened for the Umbrella Fund and RPMUs. . All sub accounts will receive funds from the project operating account. MEF will communicate the authorised signatories to IFAD.

Withdrawal applications will be under the advance/replenishment procedure by use of SMART Statement of Expenditure (SoE). Specific thresholds on the SoEs will be applied for goods, works and services to determine the transactions whose support documents will be required at submission of withdrawal applications and those that will not support documents. SoEs will also be reviewed during missions and will be audited by independent auditors appointed by FARE.

An initial advance, the authorised allocation has been estimated at USD 2,000,000 will be accessed upon meeting the disbursement conditions (if any). The key supporting documents include evidence of meeting of disbursement conditions; bank account numbers, names and related signatories; and signatories of the withdrawal applications. Subsequent withdrawals will be on the basis of SoEs, where withdrawal applications will be submitted upon spending up to 30% of the authorised allocation or 90 days since the last withdrawal application was submitted.

To the extent possible, financial management will be centralised at PMU with most transactions centralised as procurements will be aggregated. Where it will be determined that the implementing agencies/partners will require financing from the project, funds to transfers will be on the basis of planned activities with specific activity based advances. Subsequent transfers will be upon justification of previous advances. Contracted service providers identified through a competitive procurement process will be paid in accordance with provisions of individual contracts.

Funds may also be withdrawn by use of direct payment procedure where payments with a value of equivalents of USD 100,000 for a single transaction or single service provider or contractor may be made. This withdrawal procedure will require all relevant support documents including a contract, evidence of receipt of goods/provision of service and invoice.

The funds flow chart attached depicts the use of the standard disbursement methods including: i) direct payment method for bigger payments over USD 100,000; ii) use of advance withdrawal/designated account; and iii) reimbursement if the GoM has pre-financed any transactions. Detailed instructions for disbursements will be included in the Letter to the Borrower (LTB) issued for REFP and the Project Financial Manual.

Withdrawal applications will be under the advance/replenishment procedure by use of SMART Statement of Expenditure (SoE). Specific thresholds will be applied for goods, works and services. REFP will use electronic archiving of the supporting documentation to allow IFAD to review electronically the statements of expenditure before processing withdrawal requests. Depending on the how well and how first REFP will adopt the electronic filing; the thresholds will be reviewed from time to time. SoEs will also be reviewed during missions and will be audited by independent auditors appointed by GoM.

REFP Funds flow Chart - The Project will have one external funding source, the IFAD loan. Domestic funding sources will include GoM, participating financial institutions and Beneficiaries. The funds flow chart is attached at annex 1.

The financial management risks under the area of funds flow and disbursement include the following:

- a) Experience has shown that the biggest project risk has concerned slow implementation, thus slow disbursement. This comes with challenges of low funds uptake with a possibility of a project failing to absorb funds allocated as has been the case with PRONEA Support Project;
- b) Late submission of withdrawal applications in excess of 90 days; and
- c) Poorly coded chart of accounts that will make it difficult to generate SoEs from the system and make reporting cumbersome.
- 2. **The** proposed mitigations for the financial management risks under the area are:
- a) Submission of withdrawal application upon realising 30% expenditure of the authorised allocation or 90 days from the last submission of a withdrawal application, whichever is earlier:
- b) Setting up the chart of accounts will be a loan covenant. As part of Start-up activities, coding of the chart of accounts and related configuration will be key tasks for project management.

Internal Controls. In a main-streamed PMU, working within GoM systems internal controls should be strong. These controls will be enhanced by addressing the following challenges that have been experienced under PAFIR, PROSUL and PROAQUA.

- a) Inadequate filing of SoE support documents has been a challenge in the portfolio. IFAD ICO has initiated an electronic archiving system project which should help improve filling. REFP will implement the same to ease access and review of SoE support documents as part of improvement of internal controls;
- b) Improvement of contract management will be required. Under PROSUL for example the Land Tenure Service Provider (LTSP) was contracted in a manner that payments would be based on submission of financial reports and supporting documentation rather than deliverables. Whereas reports would be required contracts should provide for mechanisms to reward/pay for measurable. Individual service providers public or private will be engaged on performance based MOUs/contracts linked to agreed milestones. Payments to these service providers will be made by PMU upon verifying deliverables from the NPMU operating account or directly from IFAD by direct payments on the basis of withdraw applications generated by NPMU:
- c) Development and update of a PIM will be part of the Project Coordinator's role whose performance shall be assessed against existence of an acceptable PIM, among other deliverables:
- d) At project level, internal controls will be set to ensure that project resources are properly utilised for purposes they are meant and funds reach intended beneficiaries. GoM financial management procedures relevant to REFP will be included in the PIM. The key controls should include evidence of funds reaching intended beneficiaries and the use of financial management procedural manuals, adequate segregation of duties with the following functional responsibilities performed by different units or persons, budget control, proper use of accounting software, data backup, and storage of accounting records, among others;
- e) Internal controls related to the Umbrella Fund The Umbrella Fund will be managed by BNI that has been selected on the basis of its capability to manage similar funds, and will operate under the direct supervision of the NPMU. The bulk of payments under the Umbrella Fund will be in the form of matching grants either directly to the grantees or by way of asset financing. Management of the fund will follow specific guidelines under each window. Funds flow will be from the Umbrella fund account to the individual grantees or directly to their suppliers as shall be provided for in the manual;
- f) Grantees will be required to maintain specific grant accounts, a set of financial statements with reports generated using templates developed jointly by the Umbrella Fund Manager and NPMU.SOEs and the related support documents will mirror the thresholds provided for under The Letter To Borrower. Grantees should keep specific support documents under a master file arrangement to ensure a state of audit readiness at all times;

- g) The matching grants will be replenished at point of disbursement to grantees and not when the grantees have fully utilised the grants, but separate ledgers will be maintained to facilitate monitoring of grants that will have not been fully justified. A performance-based (not input-based) payment schedule against which grants will have to be monitored will be included in grant contracts. Grantees shall have a clear business objective and operate in the formal sector (e.g. have a Bank account, keep financial records). They will be provided with trainings and reporting guidelines (including templates) to build their capacity to accurately account for the funds received before disbursements:
- h) A grants manual, with a set of specific measures will be developed to guarantee transparency of the entire process and minimize the risk of fraud. These should include: i) detailed selection criteria (through a transparent process); ii) grant approval process; iii) grant management and monitoring system; iv) arrangements for linking disbursements with payment of the beneficiary's contribution (if required), including meeting any down payment requirement for contribution before disbursement of grant funds; v) involvement of commercial banking institutions; and vi) provision of technical assistance for beneficiaries. More details can be found in other sections of the PDR (including component 2 description);
- i) Further, after the allocation of the grants under their respective windows, the borrower shall ensure that audits of the grant allocation process, approval and use of grant funds are carried out by the project Auditor for small grants but recipients of large grants will be required to submit audit reports audited by independent service provider acceptable to IFAD. Provision of audit reports by large grantees will not exempt them from being visited or inspected by the REFP auditors and staff. Withdrawals from the grants category may only be made on condition that IFAD has determined that such audits are satisfactory;
- j) <u>Beneficiary contribution</u>: Grantees will open specific bank accounts for receipt of grant funds and for banking their own contribution. They will however not be required to deposit their respective contribution into their own bank account in the same tranches as they expect to receive from the project. Instead, they will keep analytical records as regards their own contributions and justify these where needed. Specific templates on the format and content of the reports will be provided by NPMU. Transfers of grants will be in tranches based on achievements of certain milestones by the grantees as defined in the grant agreements. For bigger grants, it will also be allowed for REFP to pay the suppliers directly after the grantee has confirmed that they have paid the supplier their contribution on the matching grant;
- k) <u>Taxes and Grants</u>: The tax element in grants does not cause ineligibility for IFAD financing purposes as in other transactions. It will be taken that the tax element is paid from the portion contributed by the beneficiary.

Adherence to the internal control framework will be verified during the internal and external audit exercises and reported to the IFAD in the form of an internal audit report and Management letter, in line with IFAD's audit guidelines. Compliance to the internal controls will also be part of the fiduciary checks performed during supervision and implementation support missions.

Accounting Systems, policies and procedures. REFP will use a hybrid systems with a standalone accounting software and a mix of GoM policies and procedures justified on the basis of challenges that have been experienced with the government e-SISTAFE accounting software and the complexity of the project; the products and multiple sites

- a) IFAD portfolio in Mozambique is currently using parallel systems, the e-SISTAFE system and TOMPRO accounting system. FARE accounting is done under PREMAVERA for entire operations. TOMPRO has been used for accounting needs of PAFIR with provision to post data into the GoM e-SISTAFE a Government integrated financial management information system, which is also the system under use by PROSUL (TOMPRO being used as parallel accounting software). e-SISTAFE does not facilitate reporting by category and by component, but reports by financier. The MS Excel used for data manipulation to report by category and component by financier is time consuming and prone to errors. The financial management manual is based on the e-SISTAFE and for PAFIR a specific manual was developed.
- b) The system (e-SISTAFE) is also characterised by operational closure from 15 December to about 15 February to facilitate closure of the financial year. This renders this period inactive for project operations yet the period coincides with a crop production cycle where agricultural campaign activities are at their highest, requiring more resources. In 2016, PRONEA (National Agriculture Extension Programme) Support Project was authorized to disburse 25 per cent of its financial

resources outside e-SISTAFE, in consideration of the end-of-the year system closure. Whereas this was an appropriate action in the circumstances, it took the project to the operation of a parallel system during that period.

- c) In order to meet IFAD reporting requirements, projects have been using e-SISTAFE in parallel with other accounting software. MEF has expressed commitment to re-configure e-SISTAFE to meet IFAD reporting requirements. This should facilitate migration of all programmes in the portfolio onto the system. Coupled with its in-built controls and the fact that REFP will have a designated account, the project will use e-SISTAFE.
- d) It should be noted that there has been significant delays in addressing these challenges. In consideration of the same, it is recommended that REFP will implement the use TOMPRO accounting software which it has already acquired and installed. Correct set up of the accounting software will be a key requirement at start-up of the project.
- e) The key risks in this area relate to improper coding of the chart of accounts that may not facilitate production of required reports (including SMART SOEs); unavailability of personnel to manage the complex project accounting work; delays in manual returns and inaccuracy of data provided.

TOMPRO accounting software will be installed at NPMU, BNI Umbrella Fund and FARE. At the Province (PPMU) and service provider level financial returns will be manual. PPMU will develop reporting templates to be used to ease reporting and data consolidation. The accounting systems, policies, and procedures to be used by the NPMU will follow IFAD requirements and GoM systems. To ease application, the relevant aspects of the GoM systems will be documented in the Financial Procedures Manual that will also capture IFAD requirements. The manual will describe the accounting system, internal control procedures, basis of accounting, standards to be followed, authorization procedures, financial reporting process, budgeting procedures, financial forecasting procedures, and contract management. In addition, the manual should document withdrawal procedures and auditing arrangements. The manual will also pick key financial management related aspects from the individual operation guidelines of the funds.

Payments to service providers will be performance based where invoices will be settled after verification of delivery against agreed milestones. For reimbursable expenses, the service providers will avail all support documents to their claims to facilitate verification

Financial reporting.

REFP will be required to ensure that complete, accurate and timely reports are produced in accordance with International Public Sector Accounting Standards (IPSAS). The PMU will be the financial management and reporting hub, responsible for posting, reconciling and reporting on project finances. BNI Umbrella Fund and FARE will be required to maintain computerised accounting systems that mirrors the chart of accounts of PMU to facilitate consolidation of data. Further, service providers and Regional PMUs will be required to submit reports to NPMU on a quarterly basis. Reporting should be done no later than 10 days following end of quarter to facilitate timely consolidation of reports and onward reporting by PMU.

In line with the IFAD reporting requirements, NPMU will prepare and present Interim Financial Reports on a semi-annual basis. The contents of the reports will consist of at least the following: a statement of source and uses of funds, a statement of uses of funds by project component by financier and expenditure category, and a summary variance report explaining financial performance for the period. The PMU will also produce annual project financial statements in line with IFAD reporting requirements.

The key risks include inadequate failure by implementing partners, service providers and grantees to report accurately and on a timely basis; and inadequate/incompatible disclosures. Inadequate chart of accounts/ failure by TOMPRO to produce reports by category and by component by financier. This necessitates the cumbersome data manipulation in MS excel which is prone to errors and time consuming.

TOMPRO will be configured to meet REFP's reporting needs with BNI Umbrella Fund and FARE using the same accounting software and chart of accounts to ease consolidation. The explanatory notes should be presented in a systematic manner with items on the statement of cash receipts and

Appendix 7: Financial management and disbursement arrangements

payments cross-referenced to any related information in the notes. The grantees and other service providers will be given standard reporting templates to ease data consolidation. The PMU will conduct periodic field visits to verify on a sample basis the accuracy and reliability of submitted reports and documents. This effort will be supplemented by internal auditors, IFAD/GoM missions and external auditors.

The Mozambique portfolio has developed an e-archiving system that has been implemented by the existing projects. This should ease filing and document verification both internally by NPMU and internal auditors and IFAD. It is recommended that the project takes on this initiative upon start-up of implementation.

Internal Audit. Internal Audit Department of BNI will be responsible for provision of internal audit services to the project. This will provide assurance that the project is being implemented in accordance with the PIM, complies with GoM regulations and is complying with the financing covenants. The key risk is that internal audits will not be monitored to ensure adequate scope, reasonableness of recommendations and implementation of recommendations.

Considering this risk, internal audit of the project will be included in the audit plan of the internal audit department of BNI to cover project audits twice every year. Internal audit reports and action plans to implement audit recommendations will be shared with IFAD as a reporting requirement. The PMU will need to agree with Internal Audit department of BNI before the beginning of each year on the time and number of the missions planned to be undertaken so that they are included in the AWPB.

External Audit. The statutory audits of both BNI and FARE are conducted by private audit firms with the current ones being Deloitte and KPMG, respectively. The audits of BNI have been conducted on a timely basis with reports issued within three to four months following end of a fiscal year in line with the practice in other financial institutions. FARE on the other hand has been experiencing delays in concluding its audits with an example of the report for the FYE 31 December, 2015 issued on 31 December, 2016, one year following the end of the fiscal year. In the case of REFP this will constitute a significant delay in audit of the financial statements that is not acceptable to IFAD. The option of use of the government external auditor, the Tribunal Administrativo (TA) is challenging as there would be delays arising out of their audit calendar. GoM requires that entities submit their draft financial statements to TA on 31st May each fiscal year. For REFP this would leave available one month within which to submit audited financial statements which would be impractical. The use of TA will however be reviewed in the course of implementation to determine their consideration for the audit of REFP. It is proposed that the external audits of REFP will be conducted by private audit firms competitively selected and acceptable to both GoM and IFAD.

To mitigate the above challenges, the project statutory audits will be conducted on an annual basis by a private audit firm in accordance to IFAD audit guidelines. Statutory audits will provide mandatory opinions on the general purpose financial statements, operation of the designated account and the use of the SoE procedure. The auditor's scope of work shall cover the operations of PMU, the Umbrella Fund, operations of FARE and selected grantees. All grantees will maintain a state of readiness for audit as shall be detailed in the PIM and specific fund manuals Statutory audit terms of reference will require the Fund's 'No Objection' on an annual basis.

V. Implementation Readiness

The actions needed to mitigate financial management risks are summarised below:

Table 8: FM Actions Summary

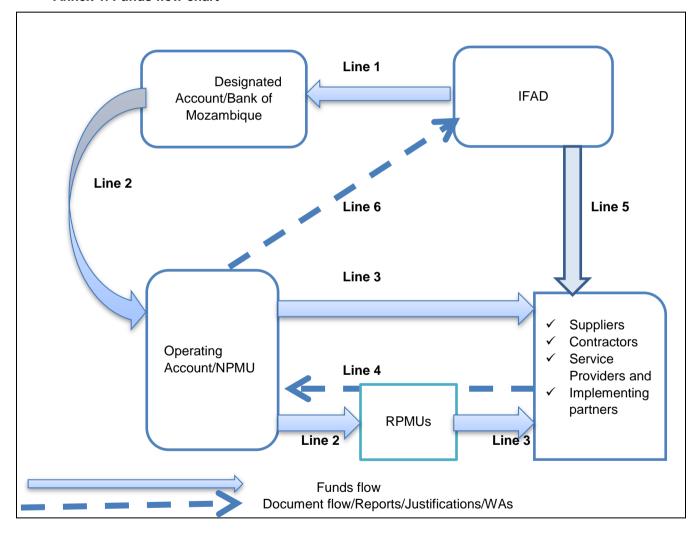
	Action	Target Date / Covenants
1.	Constituting PMU headed by a Project Coordinator with fully dedicated staff recruited on fixed term performance based contracts	Within first six months or as shall be agreed during negotiations
2.	Compile the first AWPB and its related 18 months Procurement Plan	Withdrawal condition
3.	Develop a draft PIM that should include a comprehensive	Within first six months of entry into

Appendix 7: Financial management and disbursement arrangements

	financial management manual with a comprehensive project chart of accounts	force
4.	Appoint a National Project Steering Committee	Within six months of entry into force
5.	Implement TOMPRO accounting software to meet the accounting and reporting requirements of project.	Part of start-up activities

Supervision and Implementation Support Plan for Financial Management. The risk profile described above requires IFAD implementation support especially in the first two years of implementation. Initial implementation support resources should include facilitation of the PMU to put in place the systems and controls to manage fiduciary aspects of REFP. In the first two years, it is proposed that there should be at least two IFAD missions supplemented to ensure financial management systems and tools are in place and implemented.

Annex 1. Funds flow chart



- a) Line 1: Advance withdrawal/replenishment to the designated account by IFAD in USD on the basis of withdrawal applications;
- b) Line 2: Transfer of funds from the USD designated account at Bank of Mozambique to the Operating Account and operating account to RPMUs accounts in MZN.
- c) Line 3:Payments for goods supplied, works executed, services rendered, salaries and other expenses for Project implementation and management;

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 7: Financial management and disbursement arrangements

- d) Line 4: Necessary transactional documents and reports are compiled/obtained from suppliers/contractors/service providers including evidence of completion of service/delivery of goods and justification from implementing partners;
- e) Line 5: Direct payments for payments with high value equivalents of USD 100,000 and above; and
- f) Line 6: Justification and information flow from MEF/PMU to IFAD including availability of support documents for review. Documents are also filed and accessed electronically.

Appendix 8: Procurement

Procurement of Goods, Works and Services financed by the IFAD loan and grant will be undertaken by Banco Nacional de Investimento (BNI), as delegated by the Ministry of Economy and Finance (MEF) in accordance with GoM's Procurement guidelines and procedures to the extent they are not in conflict with IFAD Project Procurement guidelines. The use of the Borrower's procurement regulations is provided for under IFAD's General Conditions, provided they are deemed to be consistent with IFAD's guidelines. Further, this is in line with the various commitments of the international donor community to work towards increasing the use of national systems where they are compatible with the requirement of the donors.

The IFAD procurement guidelines and handbook require an assessment of national procurement systems as part of project design. The assessment has been done in two stages: (i) overarching country assessment and (ii) project specific assessment at BNI.

Overarching Country assessment. The government body responsible for oversight of the Procurement Regulation is the Unit for the Supervision of Acquisitions (Unidade Funcional de Supervisão das Aquisições – UFSA). Ministerial Diplomas 141 and 142/2006 of 05 September established UFSA and approved the structure of Unidade Gestora Executora de Aquisições (UGEA) – Unit responsible for acquisition. The Procurement Regulation requires that all procurement procedures abide by a number of principles including legality, public interest, transparency, openness, equality, competitiveness, impartiality and sound financial management. In addition procurement processes must be decentralised wherever possible as indicated by UFSA, and must strive to optimise the benefits of procurement (for example through collective purchasing/aggregation of purchases).

The latest version of public procurement regulations is Decree number 5/2016 of 8 March. This regulation guides the tendering of public works, supply of goods and provision of services to the state. They apply to all bodies and institutions of the state, including state owned companies. There is a requirement that public procurement fulfil a number of criteria including legality, public interest, transparency, openness, equality, competitiveness, impartiality and good financial management.

According to the regulations, procurement at all levels of government, including procurement using funds from donor agencies must be undertaken under the regulations. The entity planning to undertake a procurement process must first send a request to the unit responsible for management and execution of acquisitions (UGEA). This request must include: the need and purpose of the proposed procurement; Specifications; Detailed contract estimate and budget provision and any specific requirements that must be made of bidders.

In the Country Procurement Assessment Review (CPAR) carried out jointly by the World Bank, African Development Bank and the donor community in June, 2008 it was noted that there has been improvement in the legal and regulatory framework for procurement in Mozambique. It was noted that whereas there are a number of aspects that provide opportunities for improvement, the system has been embraced with International financiers increasingly relying on Mozambique's systems for National Competitive Bidding, with fewer exceptions to the national regulations, and move to organically integrated project implementation units.

Overall the Country's legal framework provides an adequate operational environment for procurement under REFP. It should however be noted that whenever there are inconsistencies between the GoM procurement procedures and IFAD project procurement guidelines, the IFAD guidelines will prevail.

Project Specific Assessment. REFP will be implemented by the MEF which under the procurement law is a UGEA; a Ministry duly authorised to engage in Public Procurement. The ministry has delegated BNI as a Lead Project Agency. A PMU established under the supervision of the Chief Executive Officer of BNI will run the day to day implementation of the project.

During the design mission, a procurement assessment was carried out on BNI - the lead project agency (LPA) and the host of the NPMU in accordance with the IFAD procurement guidelines and handbook. The assessment also drew lessons from the procurement processes of BNI and experiences with other projects in the portfolio. Below is a summary of the assessment, highlighting key issues that will require to be addressed.

Table 9: Summary of Procurement Risks /Findings and Actions (Risk Mitigation Matrix)

1							
No	Area	Major findings/Actions proposed					
1.	Personnel capacity and Procurement planning	 a) Poor planning and monitoring leading to significant delays in executing procurement actions. Examples under PROSUL procurement delays have been noted. In the Project Completion Report of PAFIR, procurement delays were registered as a key challenge; 					
		b) To address the above, procurement planning will be a requirement as part of the annual work plan and budget and will involve all PMU personnel including a Procurement Officer,a Project Finance Manager and BNI staff involved in procurement under the Umbrella Fund. This should facilitate matching of desired implementation timelines with processes and planned targets with available funds from the different allocations including financiers;					
		c) Availability of qualified and experienced Procurement personnel has been noted as a challenge. RFEP will train procurement staff in the preparation and updating and monitoring of procurement plans in the IFAD recommended format but also including GoM mandatory requirement; and					
		d) Records management is among the key risks. Under RFEP, a checklist of procurement records that must be on each procurement file will be developed. This will be made a filing requirement and the electronic filing system (e-Archive) currently being developed by IFAD ICO together with the existing projects will be a requirement.					
2.	Contract management	Time and cost overruns arising out of weaknesses in contract management has been identified as one of the challenges. Delays in implementation start-up have been common in the portfolio and have been linked to challenges with contract management. Subsequent delays in management of contracts with Service Providers brought additional pressure to achieve physical outputs. This has also been identified under PROSUL at MTR and PROAQUA. This may affect quality of implementation with negative implications for long-term sustainability; Contract management will require to be improved.					
		appointed contract manager; technical staff; Finance and Procurement departments; and					
		Provide training in contract management					
3.	Delays by the Tribunal Administrativo to clear	Proactive follow up by NPMU and BNI to ensure quick action by Tribunal Administrativo. Submissions should also be comprehensive to reduce on the back and forth communication.					
	contracts						
3.	Tribunal Administrativo to clear	Service Providers brought additional pressure to achieve physical outputs. This has also been identified under PROSUL at MTR and PROAQUA. This may affect quality of implementation with negative implications for long-term sustainability; Contract management will require to be improved. Contract management should be well planned and coordinated between the appointed contract manager; technical staff; Finance and Procurement departments; and Provide training in contract management Proactive follow up by NPMU and BNI to ensure quick action by Tribunate Administrativo. Submissions should also be comprehensive to reduce on the					

Procurement organisation structure. RFEP NPMU will be established under the supervision of BNI. Given the small structure of the NPMU, RFEP procurement will be implemented using the structure of the procuring entity, where a' Tender Committee as provided for in the procurement guidelines will be appointed and approved by MES. This should draw membership from the PMU to facilitate sharing of implementation experiences and guidance on project specific subject matter requirements. A project specific Procurement Officer responsible for procurement planning, procurement executions, reporting

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 8: Procurement

and ensuring existence of and compliance with procedures will be competitively recruited and will be supervised by the Project Coordinator.

In procuring common use items for both the NPMU headquarters and at the RPMU, requirements shall be aggregated and procured at NPMU. This should facilitate selection of appropriate procurement methods, time saving and other benefits of bulk procurement. This will be in line with GoM Public Procurement regulations that require aggregation of procurement needs.

To ensure quick turn over of procurement actions and central management of processes, all invitations to tender and expression of interests shall be published through PMU. It is PMU that will ensure that the necessary approvals and the required No Objections are obtained prior to implementing any procurement actions both at the NPMU and the Umbrella Fund.

Procurement planning. All procurement will be executed only against approved procurement plans and AWPBs, specifying items to be procured, responsibility for the procurement and the appropriate procurement methods. A detailed procurement cycle will be included in the PIM.

The procurement plan for each year will be consistent with the project's AWPB. Items procured outside the procurement plan and the related AWPB will be declared mis-procurement and the related expenditure will be ineligible for financing from the loan proceeds.

The consolidated Procurement Plan will be submitted together with the AWPB to the Project Steering Committee for approval, and to IFAD for a no objection as part of the RFEP project AWPB and later to the department of procurement for information and subsequently into MEF plans – for monitoring purposes.

Summary of key areas to consider during procurement planning:

- a) A brief description of each procurement activity to be undertaken during planning period;
- b) The estimated value of each activity in USD equivalent to MZN;
- c) The method of procurement to be adopted for each activity;
- d) Works Procurement Packages with Methods and Time Schedule;
- e) Goods Procurement Packages with Methods and Time Schedule;
- f) Service Procurement Packages (both Consultancy and Non-Consultancy Assignments) with Selection Methods and Time Schedule;
- g) Requirements as contained in the specific funding windows that will require requests for Expression of Interest will also be included in the plan under the services category;
- h) The method of review IFAD will undertake for each activity (Post or Prior Review); and
- Timelines showing milestones when the key stages of the procurement cycle will be achieved.

Bidding Documents. The conduct of a transparent and successful procurement is dependent on the quality of bidding documents. Thus, to guard against omissions; costly amendments arising out of bidders seeking clarifications and related delays; and unnecessary cost overruns. It will be essential that bid documents get very well prepared and obtain necessary approvals. Under RFEP, the GoM standard bid documents will be used and adapted to suit each specific procurement items. IFAD clearance of the Standard Bidding Documents/TOR and specifications in respect of RFEP will be a requirement.

Contract Management and procurement records. The NPMU will be held responsible for overall contract management including monitoring of performance of the implementing agencies as appropriate and establishing Contract Management systems. The NPMU contract management system will include: (i) management of contract start-up issues, (ii) opening and updating a contracts register (iii) monitoring of contract implementation, (iv)claims management, (v) implementation of penalty clauses (vi) contract amendments, (vii) contract completion and closure and (viii) record keeping including e-filling.

Procurement records shall include request to initiate a procurement, the rationale for the method of procurement, solicitation document including TOR/specifications/bid documents, selection of the contract type, advertisement, record of sale of bids, record of receipt of bids (both successful and successful bids), record of opening of bids, evaluation minutes and report, the justification for the award, award letter, acceptance letter, contracts incl. amendments if any, and other correspondences related to the procurement, including approvals and No Objections. Under the IFAD general

conditions, records are kept for ten years after project closure. A checklist for some of the key information that should be included in a procurement file will be included with more details in the PIM.

Particular Methods of Procurement of Goods, Works, and Non-consulting Services and related thresholds are proposed.

In accordance with the IFAD procurement Handbook, international competitive bidding (ICB) will be carried out in accordance with the World Bank guidelines. This will be mandatory for procurement contracts with the following values:

- a) Goods, above USD 200,000
- b) Works, above USD 1,000,000 and
- c) Services above USD 100,000.

A summary of other methods are indicated in the table below.

Expenditure Category	Contract Value Threshold (USD)	Procurement/Selection Method				
	>1,000,000	International Competitive Bidding (ICB)				
Works	≥ 50,000 ≤ 1,000,000	National Competitive Bidding (NCB)				
	< 50,000	Shopping				
	All values	Direct Contracting				
	≤ 200,000	ICB				
Goods	≥ 10,000 < 200,000	NCB				
	< 10,000	Shopping				
	All values	Direct Contracting				

Table 10: Thresholds for Procurement and Review Methods

None Consulting Services. Non consulting services will be procured using the following methods.

- a) Request for Quotations:
 - Internationally: for contracts valued over USD 200,000 equivalent, and
 - Nationally: for contracts valued over USD 50,000 equivalent up to and including (e.g. USD 200,000 equivalent;
- b) National Shopping applies to contracts valued up to and including USD 50,000 equivalent. **Consulting Services**. The Quality and Cost Based Selection will be the standard method applied unless otherwise approved. The following processes will apply:
 - a) Request for Proposal (Internationally)- for contracts with a value over USD 200,000 equivalent; and
 - b) Request for Proposal (Nationally) for contracts with a value up to and including USD 200,000.

Prior-Review by IFAD: In accordance with paragraph 80 of the IFAD Project Procurement Guidelines, the following will be subject to prior review by IFAD:

- a) Award of any contract for goods and equipment to cost USD 100,000 or equivalent or more:
- b) Award of any contract for works estimated to cost USD 100,000 or equivalent or more;
- c) Award of any contract for consulting services estimated to cost of USD 50,000 or equivalent or more;
- d) All contracts done under direct procurement method;
- e) Memoranda of Understanding (MOU) or any equivalent contractual vehicle entered into between RFEP/FARE with any entity including GoM agencies.

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 8: Procurement

For NCB, GoM regulations will apply. All bidding documents will need to be satisfactory to IFAD and subject to the additional procedures and modifications stipulated below and to be reflected in the Financing Agreement.

Qualification. Qualification criteria shall entirely concern the bidder's capability and resources to perform the contract considering objective and measurable factors. The qualification criteria shall be clearly specified in the bidding documents, and all criteria so specified and only such criteria so specified shall be used to determine whether a bidder is qualified. Qualification criteria shall be assessed on a 'pass or fail' basis, and merit points shall not be used. Bidders' qualifications may be assessed by post-qualification and such an assessment shall be conducted separately from the technical and commercial evaluation of the bids.

Advertisement. A shorter version of the advertisement text, including the minimum relevant information, shall be published in a national newspaper of wide circulation provided that the full text is simultaneously published in the official gazette or on a widely used website or electronic portal with free national and international access.

Bid preparation time, submission and opening. Bidders shall be given at least forty five days for ICB, thirty days for NCB and fourteen days for selective tendering, from the date of the invitation to bid or the date of availability of bidding documents, whichever is later, to prepare and submit bids in line with Public Procurement Regulations. It is good practice to publish bids when the tender documents are ready for issuance. This should shorten the time for the specific procurement cycle and allow adequate time to address clarifications whenever they arise.

Bids shall be opened in public, immediately after the deadline for their submission in accordance with the procedures stated in the bidding documents. The public bid opening shall take place in only one session. At the public bid opening, the names of the bidders and the total amount of each bid and of any alternative bids if they have been requested or permitted, shall be read aloud and recorded when opened. Bids shall not be evaluated as part of the bid opening process, and no bid shall be rejected during the public bid opening session, except for late bids. Bidders shall not be allowed to submit their bids or additional information after the deadline for submission of bids has expired.

Bid validity. No automatic extension of the bid validity shall apply. If justified by exceptional circumstances, an extension of the bid validity may be requested in writing by the Project to all bidders before the original bid validity expiration date and it shall cover only the minimum period required to complete the evaluation and award of the contract. It is important to note that where bid security is a requirement, extension of the validity period should correspond to the bid validity.

Bid evaluation. Evaluation of bids shall be made in strict adherence to the evaluation criteria declared in the bidding documents. Evaluation criteria other than price shall be quantified in the manner in which they will be applied for the purpose of determining the lowest evaluated bid shall be established in the bidding documents. A weighting/scoring system shall be used.

- a) A contract shall be awarded to the qualified bidder offering the lowest-evaluated and substantially responsive bid;
- b) Bidders shall not be eliminated on the basis of minor, non-substantial deviations;
- c) Requests for clarification and the bidder's responses shall be made in writing and all the clarifications made shall be notified to all the bidders; and
- d) After the public opening of bids, information relating to the examination, clarification, and evaluation of bids and recommendations concerning the awards shall not be disclosed to bidders or other persons not officially concerned with this process until publication of the award of the contract.

Rejection of all bids and re-bidding. Without the Fund's prior concurrence, there will be no procurement process where all the bids will be rejected, or which will be cancelled, and new bids solicited. This also applies to corrections on bid documents that had been previously given a No Objection by IFAD.

Securities. Bid securities shall not exceed 3 percent of the estimated cost of the contract; and performance securities shall not exceed 10 percent of the contract price. The successful bidder shall be given at least 15 days from the receipt of notification of contract award to submit a performance

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 8: Procurement

security. No advance payment shall be made without a suitable advance payment security in accordance with Public Procurement Regulations.

Complaints by bidders and handling of complaints. The borrower shall establish an effective and independent protest mechanism allowing bidders to protest and to have their protest handled in a timely manner. The GoM complaint management procedure shall be used.

Contract and contract modifications. Contracts shall be in writing and the bid of the successful bidder shall become part of the contract documents. In the case of contracts signed after prior review by IFAD, the IFAD's No Objection shall be obtained before agreeing to any type of amendment, such as (a) a material extension of the stipulated time for performance of a contract; (b) any substantial modification of the scope of services or other significant changes to the terms and conditions of the contract; or (c) the proposed termination of the contract. A copy of all contracts and amendments shall be furnished to the IFAD for its record.

Right to inspect/audit. In accordance with the Procurement Guidelines, each bidding document and contract financed from the proceeds of the financing shall stipulate that bidders, suppliers, and contractors, and their subcontractors, agents, personnel, consultants, service providers or suppliers, shall permit the IFAD, at its request, to inspect their accounts, records, and other documents relating to the submission of bids and contract performance and to have them audited by auditors appointed by IFAD. Acts intended to materially impede the exercise of the IFAD's inspection and audit rights constitute an obstructive practice as defined in the Procurement Guidelines.

Fraud and corruption. In accordance with the Procurement Guidelines, each bidding document and contract financed from the proceeds of the financing shall include provisions on matters pertaining to fraud and corruption. The IFAD will sanction a firm or individual, at any time, in accordance with prevailing IFAD sanctions procedures, including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time.

All contracts must be listed in the Register of Contracts, which should be updated and submitted to the IFAD on a quarterly basis. In accordance with the GoM Public Procurement Regulations, all contracts are subject to review by Tribunal Administrativo (TA). NPMU should ensure that the requirement is met.

Appendix 9: Project cost and financing

- 1. **Main Assumptions**. The Rural Enterprise Finance Project will be implemented over a 6-year period. Project costs and financing were calculated based on consultations with relevant project subcomponent leaders of the design team. All costs were produced using COSTAB.
- 2. **Inflation.** Information on the current as well as projections on inflation were collected from the regular reports prepared by the Economist Intelligence Unit (EIU¹³⁴). Local inflation (CPI) reached an average all-time high in 2016 of 19.9% and has steadily decreased. In 2017, the EIU estimates that the average inflation will be 15%. The forecast shows inflation to decrease sharply to 6.5% in 2018 (PY1), before rising slowly in 2019 (PY2) to 6.7%. The decrease in inflation will be driven mainly by lower oil prices, and the stabilization of food prices following the recovery from shocks to internal production due to weather related events. As the forecast does not go beyond 2021 (at 5.9%), we have set the inflation for project years 5 and 6 equal to the forecasted inflation for 2021. The inflation on foreign exchange is based on the EIU forecasts for the Unit Value Index (in USD) of manufacturers.
- 3. **Exchange rate**. After a of continuous depreciation of the Mozambican Metical against the US dollar in 2016, Bank of Mozambique has tightened fiscal policy in 2017, establishing a single exchange rate applicable by all banks. As at September 2017 the official exchange rate for the USD was 1 USD = 60 MZN. Considering the volatile situation, the exchange rate forecast presented by the EIU was adjusted for the purposes of the project to 1 USD = 64.4 MZN in PY1 to 1 USD = 78.3 MZN in PY5 and 6.

Table 11: Inflation and Exchange rates for COSTAB

Republic of Mozambique REFP - Rural Enterprise Financing Project Inflation and Exchange Rates

		Up to						
	Up to	Project						
	Negotiation	Start	2018	2019	2020	2021	2022	2023
Inflation (in %'s) /a								
MOST								
Annual rates								
Local	15.0	15.0	6.5	6.7	5.1	5.9	5.9	5.9
Foreign	1.4	1.4	2.0	5.9	4.1	4.5	4.5	4.5
Compounded rates								
Local	15.0	15.0	18.7	26.6	34.0	41.4	49.7	58.6
Foreign	1.4	1.4	2.4	6.5	11.8	16.6	21.8	27.3
NONE								
Annual rates								
Local	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compounded rates								
Local	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exchange rates (Local/Foreign) /b								
MOST								
Rates actually used	60.0	60.0	64.4	68.9	73.5	76.0	78.3	78.3
Constant purchasing parity rates	60.0	68.0	78.9	80.9	81.6	82.5	83.6	84.8
% deviation	0.0	-11.8	-18.4	-14.8	-9.9	-7.9	-6.4	-7.6
NONE								
Rates actually used	60.0	60.0	64.4	68.9	73.5	76.0	78.3	78.3
Constant purchasing parity rates	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
% deviation	0.0	0.0	7.3	14.8	22.5	26.7	30.5	30.5

a Yearly values are within Each Project Year
b Yearly values are at Project Year Midpoints

4. **Physical contingencies.** A physical contingency of 5% has been applied to all goods (equipment, vehicles, etc.) and services. This measure will allow for fluctuations in the costs of these expenditure categories due to uncertainties not fully accounted for during design. No contingencies

¹³⁴ http://www.eiu.com/

have been applied to the expenditure category for funds disbursed as part of grants or loans (for on lending) to project beneficiaries.

- 5. **Project Costs.** Total project costs including price and physical contingencies, duties and taxes are estimated at USD 72.5 million. Of this amount, USD 55.9 million is foreign exchange content, and around USD 13.1 million corresponds to duties and taxes.
- 6. Project components are (i) Component 1: Improved access to adaptive financial services to rural entrepreneurs, totalling USD 51.4 million); (ii) Component 2: Capacity building and support for local institutions and rural entrepreneurs, totalling USD 10.6 million and (iii) Institutional support and Programme Management, totalling USD 10.5 million.
- 7. A summary breakdown of the Project costs by component and financier is presented in the table below.

Table 12: REFP breakdown components and financiers

	IFAD		Private Sector		Beneficiaries		GoM		Tota	ıl
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Improved access to adaptive financal services for rural entrepreneurs										
The Graduation and Outreach Programme	10,188.7	83.5	997.5	8.2	100.0	0.8	915.2	7.5	12,201.4	16.8
The Crowding in Fund	6,000.2	51.0	4,002.5	34.0	1,000.0	8.5	758.4	6.4	11,761.1	16.2
3. Line of Credit	27,087.3	98.6	-	-	-	-	382.9	1.4	27,470.2	37.9
Subtotal	43,276.2	84.1	5,000.0	9.7	1,100.0	2.1	2,056.5	4.0	51,432.7	70.9
B. Capacity building and support for institutions and rural entrepreneurs										
Support to essential local institutions	6,469.1	94.5	-	-	-	-	378.5	5.5	6,847.5	9.4
Business Development Support	2,882.6	76.9	-	-	-	-	868.1	23.1	3,750.7	5.2
Subtotal	9,351.7	88.2	-	-	-	-	1,246.5	11.8	10,598.2	14.6
C. Programme Management	9,520.7	90.6	-	-	-	-	985.2	9.4	10,505.9	14.5
Total PROJECT COSTS	62,148.6	85.7	5,000.0	6.9	1,100.0	1.5	4,288.3	5.9	72,536.8	100.0

- 8. **Project Financing.** REFP will be financed by: an IFAD loan (USD 62.1 million, 85.7% of total project costs), Government of Mozambique (USD 4.3 million, 5.9% of total project costs), the Private Sector (which includes Banks, Micro-banks and MFIs) for a total of USD 5 million and the project beneficiaries (USD 1.1 million, 1.7% of total project costs). The IFAD financing will be provided as loan in USD on highly concessionary terms and will absorb the entire PBAS allocation for Mozambique for the period 2016-2018 (USD 62,148, 581). Finally, the IFAD loan will finance taxes.
- 9. The Government of Mozambique will finance the salaries of its own staff who will support the implementation of the project on a pro-rata basis, as well as the costs of the PMU office in Maputo.

Table 13: REFP financing plan

	IFA)	Private Sector		Beneficiaries		GoM		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
- · · · · · · · · · · · · · · · · · · ·	400.0	400.0					0.0		400.0	0.0
Equipment & Materials	426.8	100.0	-	-	-	-	0.0	-	426.8	0.6
Vehicles	775.4	100.0	-	-	-	-	-0.0	-	775.4	1.1
Consultancies	14,507.9	75.2	997.5	5.2	100.0	0.5	3,686.0	19.1	19,291.4	26.6
Credit, Guarantee Funds	32,537.3	86.7	4,002.5	10.7	1,000.0	2.7	-	-	37,539.8	51.8
Training	5,380.6	100.0	-	-	-	-	0.0	-	5,380.6	7.4
Workshop	1,282.8	100.0	-	-	-	-	0.0	-	1,282.8	1.8
Salaries & Allowances	6,018.3	98.4	-	-	-	-	98.7	1.6	6,117.0	8.4
Operating Costs	1,219.6	70.8	-	-	-	-	503.6	29.2	1,723.2	2.4
Total PROJECT COSTS	62,148.6	85.7	5,000.0	6.9	1,100.0	1.5	4,288.3	5.9	72,536.8	100.0

Table 14: Expenditure accounts by financier

Republic of Mozambique REFP - Rural Enterprise Financing Project Expenditure Accounts by Financiers (USD)

												Local	
_	IFA)	Private S	ector	Benefici	aries	GoM	l	Tota	1		(Excl.	Duties &
-	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	For. Exch.	Taxes)	Taxes
I. Investment Costs													
A. Funds	32,537.3	86.7	4,002.5	10.7	1,000.0	2.7	-	-	37,539.8	51.8	37,539.8	-	-
B. Consulting Services	5,082.8	87.1	750.0	12.9	-	-	0.0	-	5,832.8	8.0	3,799.1	1,679.7	354.1
C. Studies	459.5	100.0	-	-	-	-	0.0	-	459.5	0.6	126.3	255.0	78.1
D. Training	5,380.6	100.0	-	-	-	-	0.0	-	5,380.6	7.4	929.0	3,877.0	574.6
E. Equipment and materials	426.8	100.0	=	-	-	-	0.0	-	426.8	0.6	113.8	240.4	72.5
F. Workshops	1,001.2	100.0	-	-	-	-	0.0	-	1,001.2	1.4	87.1	743.9	170.2
G. Meetings	281.6	100.0	=	-	-	-	0.0	-	281.6	0.4	-	233.8	47.9
H. Vehicles	775.4	100.0	-	-	-	-	-0.0	-	775.4	1.1	358.7	290.1	126.6
I. Technical Assistance	8,965.6	69.0	247.5	1.9	100.0	0.8	3,686.0	28.4	12,999.1	17.9	7,749.7	3,547.0	1,702.4
Total Investment Costs	54,910.7	84.9	5,000.0	7.7	1,100.0	1.7	3,686.0	5.7	64,696.7	89.2	50,703.5	10,866.8	3,126.4
II. Recurrent Costs													
A. Travel costs	384.6	100.0	-	-	-	-	0.0	-	384.6	0.5	103.5	215.7	65.4
B. Operation & Maintenance	319.9	100.0	-	-	-	-	0.0	-	319.9	0.4	88.6	176.9	54.4
C. Salaries	5,011.2	100.0	-	-	-	-	-	-	5,011.2	6.9	5,011.2	-	-
D. Allowances and Benefits	622.5	86.3	=	-	-	-	98.7	13.7	721.3	1.0	4.7	716.5	=
E. Office and general expenses	899.7	64.1	-	-	<u>-</u> _	-	503.6	35.9	1,403.3	1.9		1,164.7	238.6
Total Recurrent Costs	7,237.9	92.3	-	-	-	-	602.3	7.7	7,840.2	10.8	5,208.0	2,273.9	358.3
Total PROJECT COSTS	62,148.6	85.7	5,000.0	6.9	1,100.0	1.5	4,288.3	5.9	72,536.8	100.0	55,911.5	13,140.7	3,484.7

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 9: Project cost and financing

Table 15: Project components and sub-components summary

Republic of Mozambique REFP - Rural Enterprise Financing Project Components Project Cost Summary

_			(MZN)					(USD)		
				% Foreign	% Total Base				% Foreign	% Total Base
<u>-</u>	Local	Foreign	Total	Exchange	Costs	Local	Foreign	Total	Exchange	Costs
A. Improved access to adaptive financal services for rural entrepreneurs										
The Graduation and Outreach Programme	215,783.3	467,373.0	683,156.4	68	16	3,596.4	7,789.6	11,385.9	68	16
2. The Crowding in Fund	73,294.1	618,402.0	691,696.1	89	17	1,221.6	10,306.7	11,528.3	89	17
3. Line of Credit	10,099.3	1,634,362.0	1,644,461.3	99	39	168.3	27,239.4	27,407.7	99	39
Subtotal	299,176.7	2,720,137.0	3,019,313.7	90	73	4,986.3	45,335.6	50,321.9	90	73
B. Capacity building and support for institutions and rural entrepreneurs										
Support to essential local institutions	197,571.0	156,638.5	354,209.5	44	9	3,292.9	2,610.6	5,903.5	44	9
Business Development Support	128,123.6	65,646.4	193,770.0	34	5	2,135.4	1,094.1	3,229.5	34	5
Subtotal	325,694.7	222,284.8	547,979.5	41	13	5,428.2	3,704.7	9,133.0	41	13
C. Programme Management	241,446.5	355,025.1	596,471.6	60	14	4,024.1	5,917.1	9,941.2	60	14
Total BASELINE COSTS	866,317.9	3,297,446.9	4,163,764.8	79	100	14,438.6	54,957.4	69,396.1	79	100
Physical Contingencies	38,810.6	16,976.4	55,787.0	30	1	646.8	282.9	929.8	30	1
Price Contingencies	288,763.3	737,800.2	1,026,563.5	72	25	1,539.9	671.1	2,211.0	30	3
Total PROJECT COSTS	1,193,891.8	4,052,223.5	5,246,115.3	77	126	16,625.4	55,911.5	72,536.8	77	105

Table 16: Expenditure accounts by components - Totals including contingencies

Republic of Mozambique

REFP - Rural Enterprise Financing Project

Expenditure Accounts by Components - Totals Including Contingencies

(USD)

Improved access to adaptive financal services for rural

Capacity building and

		entrepreneurs	iai	support for	•		
	The		_	and rural en	trepreneurs	-	
	Graduation			Support to			
	and	The		essential	Business	_	
	Outreach Programme	Crowding in Fund	Line of Credit	local institutions	Development Support	Programme Management	Total
I. Investment Costs					• •		
A. Funds	450.0	10,002.5	27,087.3	-	-	-	37,539.8
B. Consulting Services	3,750.0	1,000.2	-	577.2	-	505.4	5,832.8
C. Studies	-	-	-	118.5	74.8	266.2	459.5
D. Training	2,000.7	-	-	686.6	2,486.2	207.1	5,380.6
E. Equipment and materials	9.0	-	-	18.7	-	399.1	426.8
F. Workshops	629.6	-	=	70.5	-	301.0	1,001.2
G. Meetings	281.6	-	=	-	-	-	281.6
H. Vehicles	-	-	=	33.0	=	742.4	775.4
I. Technical Assistance	5,080.5	758.4	382.9	4,850.4	1,189.7	737.1	12,999.1
Total Investment Costs	12,201.4	11,761.1	27,470.2	6,355.0	3,750.7	3,158.2	64,696.7
II. Recurrent Costs							
A. Travel costs	-	-	=	384.6	=	-	384.6
B. Operation & Maintenance	-	-	-	68.0	-	251.8	319.9
C. Salaries	-	-	=	-	=	5,011.2	5,011.2
D. Allowances and Benefits	-	-	=	-	=	721.3	721.3
E. Office and general expenses		-	-	39.9	-	1,363.4	1,403.3
Total Recurrent Costs		-	-	492.5	-	7,347.7	7,840.2
Total PROJECT COSTS	12,201.4	11,761.1	27,470.2	6,847.5	3,750.7	10,505.9	72,536.8
Taxes	597.7	299.0	65.1	1,078.8	637.6	806.5	3,484.7
Foreign Exchange	7,974.0	10,363.8	27,270.0	2,990.9	1,267.7	6,045.1	55,911.5

Table 17: Expenditure accounts by years – Totals including contingencies

Republic of Mozambique REFP - Rural Enterprise Financing Project Expenditure Accounts by Years -- Totals Including Contingencies (USD)

Totals Including Contingencies 2018 2019 2020 2021 2022 2023 **Total** I. Investment Costs A. Funds 6,831.7 6,831.7 6,831.7 6,681.7 6,181.7 4,181.2 37,539.8 B. Consulting Services 1,370.6 1,788.8 1,786.6 292.4 307.2 287.3 5,832.8 C. Studies 199.5 124.4 459.5 135.6 D. Training 1,137.6 1,138.3 1,102.9 1,072.4 528.0 401.3 5,380.6 E. Equipment and materials 328.4 19.7 19.9 21.3 18.3 19.3 426.8 F. Workshops 416.7 281.1 205.6 31.4 32.3 34.2 1,001.2 G. Meetings 80.1 79.9 39.6 40.4 281.6 41.6 H. Vehicles 775.4 775.4 I. Technical Assistance 1,965.8 2,968.9 2,927.0 2,344.5 1,761.6 1,031.3 12,999.1 **Total Investment Costs** 13,105.8 13,108.2 12,913.2 10,608.6 8,870.7 6,090.1 64,696.7 **II. Recurrent Costs** 221.6 98.1 A. Travel costs 64.8 384.6 62.4 63.0 63.7 41.9 43.3 45.7 319.9 B. Operation & Maintenance C. Salaries 835.2 835.2 835.2 835.2 835.2 835.2 5,011.2 721.3 D. Allowances and Benefits 135.9 127.1 119.2 115.3 111.9 111.9 E. Office and general expenses 235.8 234.9 233.2 224.4 230.7 244.3 1,403.3 **Total Recurrent Costs** 1,334.1 1,481.8 1,349.3 1,216.8 1,221.1 1,237.1 7,840.2 **Total PROJECT COSTS** 14,439.9 14,590.0 14,262.5 11,825.4 10,091.8 7,327.1 72,536.8

Table 18: Project Components by Year - Base costs

Republic of Mozambique REFP - Rural Enterprise Financing Project Project Components by Year -- Base Costs (USD)

				Base Cost			
	2018	2019	2020	2021	2022	2023	Total
A. Improved access to adaptive financal services for rural entrepreneurs							
The Graduation and Outreach Programme	1,946.6	3,640.0	3,500.9	1,078.5	731.1	488.8	11,385.9
2. The Crowding in Fund	2,265.5	2,265.5	2,265.5	2,265.5	2,265.5	200.9	11,528.3
3. Line of Credit	4,734.6	4,734.6	4,734.6	4,734.6	4,234.6	4,234.6	27,407.7
Subtotal	8,946.7	10,640.1	10,501.0	8,078.6	7,231.2	4,924.3	50,321.9
B. Capacity building and support for institutions and rural entrepreneurs							
Support to essential local institutions	1,528.2	1,203.6	1,073.6	908.0	783.0	407.0	5,903.5
Business Development Support	801.9	735.9	735.9	735.9	175.0	44.9	3,229.5
Subtotal	2,330.2	1,939.5	1,809.5	1,643.9	958.0	451.8	9,133.0
C. Programme Management	2,530.0	1,491.9	1,450.2	1,533.5	1,423.5	1,512.1	9,941.2
Total BASELINE COSTS	13,806.8	14,071.5	13,760.8	11,256.0	9,612.7	6,888.3	69,396.1
Physical Contingencies	243.2	183.7	164.5	153.3	107.3	77.7	929.8
Price Contingencies							
Inflation							
Local	630.9	693.7	799.7	897.0	791.7	730.5	4,543.5
Foreign	38.3	76.9	124.4	169.7	149.5	112.2	671.1
Subtotal Inflation	669.2	770.6	924.2	1,066.7	941.2	842.7	5,214.6
Devaluation	-279.4	-435.8	-586.9	-650.6	-569.3	-481.6	-3,003.6
Subtotal Price Contingencies	389.8	334.8	337.2	416.2	371.9	361.1	2,211.0
Total PROJECT COSTS	14,439.9	14,590.0	14,262.5	11,825.4	10,091.8	7,327.1	72,536.8
Taxes	901.7	681.5	610.4	583.6	411.8	295.7	3,484.7
Foreign Exchange	10,269.4	11,393.4	11,412.0	9,141.5	8,054.2	5,641.1	55,911.5

Table 19: Project Components by Years - Investment/Recurrent Costs

Republic of Mozambique REFP - Rural Enterprise Financing Project Project Components by Year -- Investment/Recurrent Costs (USD)

			Totals Inc	luding Continge	ncies		
	2018	2019	2020	2021	2022	2023	Total
A. Improved access to adaptive financal services for rural entrepreneurs							
1. The Graduation and Outreach Programme							
Investment Costs	2,077.9	3,807.0	3,643.4	1,225.0	848.5	599.5	12,201.4
Recurrent Costs	-	-	-	-	-	-	-
Subtotal	2,077.9	3,807.0	3,643.4	1,225.0	848.5	599.5	12,201.4
2. The Crowding in Fund							
Investment Costs	2,294.3	2,296.4	2,298.5	2,306.3	2,316.3	249.2	11,761.1
Recurrent Costs		<u>-</u>	<u>-</u> _	<u>-</u> _	-	<u>-</u>	<u>-</u>
Subtotal	2,294.3	2,296.4	2,298.5	2,306.3	2,316.3	249.2	11,761.1
3. Line of Credit							
Investment Costs	4,740.6	4,741.8	4,743.3	4,745.4	4,247.8	4,251.2	27,470.2
Recurrent Costs			-		-	<u>-</u>	<u>-</u>
Subtotal	4,740.6	4,741.8	4,743.3	4,745.4	4,247.8	4,251.2	27,470.2
Subtotal	9,112.9	10,845.2	10,685.2	8,276.8	7,412.7	5,099.9	51,432.7
B. Capacity building and support for institutions and rural entrepreneurs							
1. Support to essential local institutions							
Investment Costs	1,602.9	1,093.4	1,090.8	1,062.9	972.6	532.5	6,355.0
Recurrent Costs	100.7	257.6	134.2	-	-	<u>-</u>	492.5
Subtotal	1,703.5	1,351.0	1,225.0	1,062.9	972.6	532.5	6,847.5
2. Business Development Support							
Investment Costs	904.1	840.0	852.7	878.0	217.1	58.8	3,750.7
Recurrent Costs		-		-			_
Subtotal	904.1	840.0	852.7	878.0	217.1	58.8	3,750.7
Subtotal	2,607.6	2,191.1	2,077.7	1,940.8	1,189.7	591.3	10,598.2
C. Programme Management							
Investment Costs	1,486.0	329.5	284.5	391.0	268.4	398.8	3,158.2
Recurrent Costs	1,233.4	1,224.2	1,215.1	1,216.8	1,221.1	1,237.1	7,347.7
Subtotal	2,719.5	1,553.7	1,499.5	1,607.8	1,489.5	1,635.9	10,505.9
Total PROJECT COSTS	14,439.9	14,590.0	14,262.5	11,825.4	10,091.8	7,327.1	72,536.8
Total Investment Costs	13,105.8	13,108.2	12,913.2	10,608.6	8,870.7	6,090.1	64,696.7
Total Recurrent Costs	1,334.1	1,481.8	1,349.3	1,216.8	1,221.1	1,237.1	7,840.2

Table 20: Detailed cost table - sub-component 1.1

Republic of Mozambique REFP - Rural Enterprise Financing Project Table 1.1. The Graduation and Outreach Programme **Detailed Costs**

								ı	Jnit Cost	_													
				Q	uantitie	s			legotiatio		В	ase Cost	- Negotia	tion (USD)			Total	s Includin	ng Conting	encies (L	JSD)	
	Unit	2018	2019	2020		2022	2023		(USD)	2018			2021	2022	2023	Total	2018	2019	2020	2021	2022	2023	Total
I. Investment Costs				-																			
A. Graduation Promotion Sub-Programme																							
Sensitization of beneficiaries	Lumpsum									113.4	113.4	113.4				340.1	130.6	130.7	130.5				391.9
Selection of Financial Service Providers	Lumpsum									113.4	106.8	53.4	53.4			213.6	130.0	121.2	62.1	64.2			247.5
Government monitoring of performance of loans and the second	•									106.8	106.8	106.8	106.8	106.8	106.8	640.8	118.8	121.2	124.2	128.4	133.2	140.0	765.8
Targeting selection	Lumpsum									106.8	106.8	100.0	100.0	100.0	100.0	213.6	118.8	121.2	127.2	120.4	100.2	140.0	240.0
5. Monitoring and coaching	Lumpuum									100.0	100.0					210.0	110.0	121.2					240.0
Technical Support /b	Lumpsum	50	50	50	50	50		250	1.068	53.4	53.4	53.4	53.4	53.4		267.0	59.4	60.6	62.1	64.2	66.6		312.9
Linkages to Formal Financial Institutions	Lumpsum	-	100	100	100	-		300	1.068	- 00.4	106.8	106.8	106.8	- 00.4		320.4		121.2	124.2	128.4	-		373.8
Monitoring and Evaluation	Number	1	1	1	1	1		5	53.404	53.4	53.4	53.4	53.4	53.4		267.0	59.4	60.6	62.1	64.2	66.6		312.9
Establishment of VSLAs/ASCAs	Lumpsum	50	50	50	50			200	0.534	26.7	26.7	26.7	26.7	- 00.4		106.8	29.7	30.3	31.1	32.1	-		123.1
Subtotal	Lumpsum	30	30	30	30			200	0.554	133.5	240.3	240.3	240.3	106.8		961.3	148.5	272.7	279.5	288.8	133.2	 -	1.122.8
6. Savings mobilization										100.0	210.0	210.0	2.0.0			001.0			2,0.0	200.0	100.2		1,122.0
Community sensitization meeting	Meeting	30	30	30	30	30		150	1.15	34.5	34.5	34.5	34.5	34.5		172.5	40.1	39.9	39.6	40.4	41.6		201.6
Establishment of community savings groups	Lumpsum	-	30	30	40	-		100	1.068	04.0	32.0	32.0	42.7	04.0		106.8		36.4	37.3	51.3	-1.0		125.0
Incentives for saving	Beneficiary	3 000	3,000	3.000		_		9.000	0.05	150.0	150.0	150.0		_	_	450.0	150.0	150.0	150.0	-	_	_	450.0
Provision of savings facilities	Number	-	30	30	40			100	0.077	.00.0	2.3	2.3	3.1			7.7		2.6	2.7	3.7			9.0
Subtotal			00	00				.00	0.011	184.5	218.9	218.9	80.3	34.5		737.0	190.1	228.9	229.6	95.5	41.6		785.6
7. Selection of enterprises										104.0	210.0	210.0	00.0	04.0		707.0	100.1	220.0	220.0	55.5	41.0		700.0
Meetings for selection of enterprises	Workshop	1	1	_	_	_		2	34.5	34.5	34.5	_		_	_	69.0	40.1	39.9	_	_	_	_	80.0
Enterprise specific training workshops	Workshop	1	1	_	_	_		2		45.3	45.3	_		_	_	90.7	52.2	52.3	_	_	_	_	104.5
Support from Government experts /c	Lumpsum							_	10.010	-	10.7	10.7	10.7	_	_	32.0	-	12.1	12.4	12.8	_	_	37.4
Market survey	Study	1	_	_	_	_		1	21.361	21.4	-	-	-	_	_	21.4	23.8	.2	12.4	12.0	_	_	23.8
Subtotal	Olday								21.001	101.2	90.5	10.7	10.7			213.1	116.1	104.3	12.4	12.8			245.7
8. Training and Capacity Building											00.0					2.0				.2.0			2.0
Development of training curriculum and manual	Number	1	_	_	_	_		1	24.566	24.6	_	_		_	_	24.6	27.3	_	_	_	_	_	27.3
Review of training curriculum /d	Lumpsum								2	5.3	_	_			_	5.3	5.9	_	_	_	_	_	5.9
Training workshops	Lumpsum									38.5	38.5	38.5		_	_	115.6	44.4	44.4	44.4	_	_	_	133.2
Training of beneficiaries	Lumpsum									281.0	281.0	281.0	281.0	281.0	281.0	1.685.9	326.4	325.2	322.8	329.3	338.5	358.5	2.000.7
Subtotal	Lampoum									349.4	319.5	319.5	281.0	281.0	281.0	1.831.4	404.1	369.6	367.1	329.3	338.5	358.5	2,167.2
Subtotal										1.095.6	1.303.0	1.062.9	772.5	529.1	387.8	5.150.9	1.226.9	1.470.0	1.205.4	919.0	646.5	498.5	5.966.4
B. Outreach Expansion Sub-Programme										.,	.,	.,				-,	.,	.,	.,				-,
Private sector participation	Number	_	5	5	_	_		10	75	_	375.0	375.0			_	750.0	_	375.0	375.0	_	_	_	750.0
Participation of Government credit entities	lumpsum	_	5	5	2	_		12	52	-	260.0	260.0	104.0	_	_	624.0	-	260.0	260.0	104.0	_	-	624.0
Participation of Financial Institutions	Number	5	10	10	_	_		25	150	750.0	1.500.0	1.500.0	-		_	3.750.0	750.0	1.500.0	1.500.0	-	_	_	3,750.0
Beneficiary level participation	Number	10	20	30	20	20	10		10.1	101.0	202.0	303.0	202.0	202.0	101.0	1,111.0	101.0	202.0	303.0	202.0	202.0	101.0	1,111.0
Subtotal		. 0	_0		_0	0				851.0	2.337.0	2.438.0	306.0	202.0	101.0	6.235.0	851.0	2.337.0	2.438.0	306.0	202.0	101.0	6,235.0
Total										1,946.6	3,640.0	3,500.9	1,078.5	731.1		11,385.9	2,077.9	3,807.0	3,643.4	1,225.0	848.5		12,201.4

[\]a Carried out by BM

[\]b For monitoring and evaluation activities

[\]c Participation and training of workshop participants

[\]d By Government microfinance experts

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 9: Project cost and financing

Table 21: Detailed cost table - sub-component 1.2

Republic of Mozambique REFP - Rural Enterprise Financing Project Table 1.2. The Crowding In Fund /a Detailed Costs

Unit Cost -

								•	000	•													
				Qu	antiti	es		Ne	egotiatio	on		Base Cost	- Negotia	ation (USE))			Total	s Includir	g Contin	gencies (l	JSD)	
	Unit	2018	2019	2020	2021	2022	2023	Total	(USD)	2018	2019	2020	2021	2022	2023	Total	2018	2019	2020	2021	2022	2023	Total
I. Investment Costs																							
A. Fund Management /b																							
Fund Management Costs	Lumpsum									147.5	147.5	147.5	147.5	147.5	147.5	884.9	163.2	162.6	161.3	164.6	169.2	179.2	1,000.2
2. Support from Government institutions /c																							
Supervision of Fund Management by Bank of Mozambique	Lumpsum									53.4	53.4	53.4	53.4	53.4	53.4	320.4	59.4	60.6	62.1	64.2	66.6	70.0	382.9
Support in appraisal of agriculture projects /d	Lumpsum									32.0	32.0	32.0	32.0	32.0	-	160.2	35.6	36.4	37.3	38.5	40.0	-	187.7
Support in appraisal of fisheries and aquaculture projects /e	Lumpsum									32.0	32.0	32.0	32.0	32.0		160.2	35.6	36.4	37.3	38.5	40.0		187.7
Subtotal										117.5	117.5	117.5	117.5	117.5	53.4	640.8	130.7	133.3	136.6	141.2	146.6	70.0	758.4
Subtotal										265.0	265.0	265.0	265.0	265.0	200.9	1,525.8	293.8	295.9	298.0	305.8	315.8	249.2	1,758.6
B. Contribution from participating Financial Institutions /f	Lumpsum									800.5	800.5	800.5	800.5	800.5	-	4,002.5	800.5	800.5	800.5	800.5	800.5	-	4,002.5
C. Matching contribution from beneficiaries /g	Beneficiary	200	200	200	200	200	-	1,000	1	200.0	200.0	200.0	200.0	200.0	-	1,000.0	200.0	200.0	200.0	200.0	200.0	-	1,000.0
D. Disbursement of funds	Beneficiary	200	200	200	200	200	-	1,000	5	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0		5,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0		5,000.0
Total										2,265.5	2,265.5	2,265.5	2,265.5	2,265.5	200.9	11,528.3	2,294.3	2,296.4	2,298.5	2,306.3	2,316.3	249.2	11,761.1

[\]a For around 1,000 beneficiaries and maximum loans of USD 5,000

[\]b For the management of the crowding in fund and Line of Credit

[\]c Supervision activities to be financed by Government

[\]d From Ministry of Agriculture and Food Security (MASA)

[\]e From Ministry of Sea, Inland Waters, and Fisheries (MIMAIP)

[\]f Including Banks and Microfinance Institutions. Calculated as a loan of 40% of maximum investment (USD 10,000)

[\]g Estimated at around 10% of maximum investment (USD 10,000)

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 9: Project cost and financing

Table 22: Detailed cost table - sub-component 1.3.

Republic of Mozambique REFP - Rural Enterprise Financing Project Table 1.3. Line of Credit **Detailed Costs**

								Unit Cost	-													
				Qua	antities			Negotiatio	on		Base Cost	- Negoti	ation (USI	0)			Total	s Includir	g Contin	gencies (USD)	
	Unit	2018	2019	2020	2021 2	022 2023	<u>Tota</u>	(USD)	2018	2019	2020	2021	2022	2023	Total	2018	2019	2020	2021	2022	2023	Total
I. Investment Costs																						
A. Financing existing and emerging micro agro-enterprises /a	Lumpsum								1,491.2	1,491.2	1,491.2	1,491.2	1,491.2	1,491.2	8,947.3	1,491.2	1,491.2	1,491.2	1,491.2	1,491.2	1,491.2	8,947.3
B. Financing outgrower schemes on a pilot basis /b	Lumpsum								500.0	500.0	500.0	500.0	-	-	2,000.0	500.0	500.0	500.0	500.0	-	-	2,000.0
C. Financing production/working capital /c	Lumpsum								2,090.0	2,090.0	2,090.0	2,090.0	2,090.0	2,090.0	12,540.0	2,090.0	2,090.0	2,090.0	2,090.0	2,090.0	2,090.0	12,540.0
D. Financing ASCAs for on-lending to members /d	Lumpsum								600.0	600.0	600.0	600.0	600.0	600.0	3,600.0	600.0	600.0	600.0	600.0	600.0	600.0	3,600.0
E. Support from Government Financial Institutions /e	Lumpsum								53.4	53.4	53.4	53.4	53.4	53.4	320.4	59.4	60.6	62.1	64.2	66.6	70.0	382.9
Total									4,734.6	4,734.6	4,734.6	4,734.6	4,234.6	4,234.6	27,407.7	4,740.6	4,741.8	4,743.3	4,745.4	4,247.8	4,251.2	27,470.2

[\]a To cover also allied sectors of agriculture. To cover around 3,500 enterprises. Loans ranging between 500-4000 US\$

[\]b To finance 1-3 outgrower schemes impacting approximately 300 smallholder farmers.

[\]c For 'subsistence' and 'emerging' farmers, as well as individual local traders and aggregators through seggregated loans averaging 300-1000 US\$

[\]d To undertake agriculture activities or setting up micro-enterprises that offer anciliary services to farmers

[\]e On reviewing LoC strategy and feasibility

Table 23: Detailed cost table - sub-component 2.1

					antities				Unit Cost -			se Cost -							Includin				
	Unit	2018	2019	2020	2021	2022	2023	Total	Negotiation (USD)	2018	2019	2020	2021	2022	2023	Total	2018	2019	2020	2021	2022	2023	Total
I. Investment Costs																							
A. Capacity building for financial services intermediaries																							
Conduct training need assessment	Study	1	-	-	-	-	-	1 💆	55.042	55.0	-	-	-	-	-	55.0	62.4	-	-	-	-	-	62.4
Delivering trainings to financial service providers	Number	-	5	5	5	5	-	20	11.008	-	55.0	55.0	55.0	55.0	-	220.2	-	63.0	63.7	65.5	67.7	-	259.8
Developing training manuals/materials	Number	18	-	-	-	-	-	18		96.1	-	-	-	-	-	96.1	106.9	-	-	-	-	-	106.9
Financial product development /a	Lumpsum									138.0	-	-	-	-	-	138.0	160.3	-	-	-	-	-	160.3
Support of Government Financial Institutions /b	Lumpsum									-	182.8	182.8	182.8	182.8	-	731.2		207.5	212.6	219.7	228.0	-	867.8
Enhancing mobility of Formal Financial Service Providers /c	Lumpsum	25	25	25	25	_	_	100	. 5	125.0	125.0	125.0	125.0		_	500.0	125.0	125.0	125.0	125.0	-	-	500.0
Subtotal										414.2	362.8	362.8	362.8	237.8		1.740.5	454.6	395.4	401.3	410.2	295.7		1.957.2
B. Strengthening existing ASCAs																.,							.,
Strengthening and linking matured ASCAS to the FFIs	Lumpsum									99.1	-	-	-	-	-	99.1	112.2	-	-	-	-	-	112.2
Developing financial products that meet the needs of ASCAs	Lumpsum									51.8	_	_	_	_	_	51.8	57.2	_	_	_	_	_	57.2
Develop simplified IT supported MIS /d	Lumpsum									96.1	_	_	_	_	_	96.1	106.9	_	_	_	_	_	106.9
Subtotal										247.0						247.0	276.4						276.4
C. Establishing and training the apex of ASCAs										211.0						20	270.1						270.1
Hiring core staff	2 Person-Month	12	12	12	12	12	12	72 (0.805/Person-Month	19.3	19.3	19.3	19.3	19.3	19.3	115.9	22.4	22.4	22.2	22.6	23.3	24.7	137.6
Developing operational manual and strategic plan	Lumpsum								0.000/1 0.0011 11.011.11	23.5				.0.0		23.5	26.1				20.0		26.1
Training staff	Lumpsum									19.8	19.8	_	_	_	_	39.6	22.4	22.7	_	_	_	_	45.1
Vehicle (4WD) for enhanced mobility	1									29.8	15.0	_	_	_	_	29.8	33.0			_	_	_	33.0
Conducting workshops and conferences	Number	3	_	_	_	_	_	3	20.405	61.2	_	_	_	_	_	61.2	70.5	_	_	_	_	_	70.5
Purchase of office equipment /e	Lumpsum	0						0	20.400	16.5	_	_	_	_	_	16.5	18.7	_		_	_	_	18.7
Subtotal	Lumpsum									170.1	39.1	19.3	19.3	19.3	19.3	286.5	193.3	45.0	22.2	22.6	23.3	24.7	331.1
D. Build a database and promote social performance management of MFIs /f										170.1	33.1	15.5	13.3	15.5	19.5	200.5	193.3	45.0	22.2	22.0	23.3	24.1	331.1
Training in social performance management of MFIs	Number	1	1	1	_	_	_	3	49.538	49.5	49.5	49.5	_	_	_	148.6	56.1	56.7	57.3	_	_	_	170.1
Performance Monitoring Officer	Person-Month	12	12	12	12	12	-	60		20.7	20.7	20.7	20.7	20.7	-	103.5	22.9	22.8	22.6	23.1	23.8	-	115.2
Integrate data in Government database	Lumpsum	12	12	12	12	12		00	1.725	10.7	10.7	10.7	10.7	10.7		53.4	11.9	12.1	12.4	12.8	13.3		62.6
Subtotal	Lumpsum									80.9	80.9	80.9	31.4	31.4		305.5	90.9	91.6	92.4	35.9	37.1		347.9
E. Supporting the transformation of FARE	Lumpsum									157.5	157.5	157.5	157.5	157.5	157.5	945.2	175.2	178.8	183.2	189.3			1.129.6
F. Strengthen the Development Finance Coordination Secretariat under MEF	Lumpsum									213.6	213.6	213.6	213.6	213.6	213.6	1.281.7	237.6	242.4	248.4			280.0	1,129.6
G. Capacity building of regulatory department of MFIs /g	Lumpsum									213.0	213.0	213.0	213.0	213.0	213.0	1,201.7	237.0	242.4	240.4	230.7	200.5	200.0	1,331.0
Training the staff of the regulation and supervision department for microfinance	Lumpsum		1	1	1	4	4	5	16.513		16.5	16.5	16.5	16.5	16.5	82.6		18.9	19.1	19.6	20.3	21.4	99.3
Undetake a study to identify the challenges of growth	Study	-	'			'	'	5	10.513	49.5	10.5	16.5	16.5	10.5	16.5	49.5	56.1	10.9	19.1	19.0	20.3	21.4	56.1
, , , ,	Lumpsum									106.8	106.8	106.8	106.8	106.8	-	534.0	118.8	121.2	124.2	128.4	133.2	-	625.8
Implement financial literacy promotion activities Subtotal	Lumpsum									156.3	123.3	123.3	123.3	123.3	16.5	666.1	174.9	140.1	143.3	148.0		21.4	781.3
Total Investment Costs										1.439.7	977.4	957.6	908.0	783.0		5.472.6			1.090.8	1.062.9		532.5	6.355.0
II. Recurrent Costs										1,435.7	311.4	331.0	300.0	703.0	407.0	3,472.0	1,002.5	1,055.4	1,050.0	1,002.5	312.0	332.3	0,333.0
A. Capacity building for financial service provider intermediaries																							
International exposure visits for policymakers	Lumpsum										26.7				_	26.7	_	28.9					28.9
International exposure visits for CEOs of Finance Providers	Lumpsum										61.4	-	-	-	-	61.4		70.6		-	-	-	70.6
Subtotal	Lumpsum										88.1		 -			88.1	<u> </u>	99.5					99.5
B. Strengthening existing ASCAs										_	00.1	_		_	_	00.1	_	33.3	_	_	-	_	33.3
Conducting exposure visits among the ASCAs	Number	10	10					20	2.202	22.0	22.0					44.0	24.9	25.2					50.1
C. Establishing and strengthening the apex of ASCAs	Number	10	10	-	-	-	-	20	2.202	22.0	22.0	-	-	-	-	44.0	24.9	25.2	-	-	-	-	30.1
	Month	12	12	12				36	1.651	19.8	19.8	19.8				59.4	22.4	22.7	22.9				68.0
Providing the recurrent budget Administrative costs /h	Lumpsum	12	12	12	-	-	-	36	1.031	11.5	11.5	11.5	-	-	-	34.5	13.4	13.3	13.2	-	-	-	39.9
Follow up, monitoring and supervision of ASCAs		8	8	0				24	4.403	35.2	35.2	35.2	-	-	-	105.7	39.9	40.3	40.8	-	-	-	
Subtotal	Number	8	0	0	-	-	-	24	4.403	66.5	66.5	66.5	 -	<u>-</u> -	<u>-</u>	199.6	75.7	76.3	76.9				121.0 228.9
										66.5	66.5	66.5	-	-	-	199.0	75.7	70.3	70.9	-	-	-	220.9
D. Capacity building of regulatory department of MFIs	Numba-		1	1				2	40.500		40.5	49.5				00.4		56.7	E7 0				1110
International exposure visits in Africa and Asia Total Recurrent Costs	Number	-	1	1	-	-	-	2	49.538	88.6	49.5 226.2	116.1	 -	<u>-</u> -	 -	99.1 430.9	100.7	257.6	57.3 134.2			<u> </u>	114.0 492.5
Total Recurrent Costs											1.203.6		908.0	783.0	407.0			1,351.0		1.062.0	072.0	F22 F	
i Viai										1,020.2	1,203.6	1,073.0	900.0	100.0	407.0	5,805.5	1,703.5	1,351.0	1,223.0	1,002.9	312.0	JJZ.5	0,047.3

[\]a For banks, microbanks, credit only institutions and ASCAs through twining arrangement

[\]b For training and review/preparation of training materials and financial products - co-shared with Government

[\]c To reach remote districts and remote villages within the district

[\]d Easy to use and cost-effective. System should improve performance and transparent reporting system

[\]e Desktops and laptops, printers, fax and photocopy machine, etc

[\]f Through Mozambican Association of MFIs

[\]g In addition, promote financial literacy and consumer protection through Bank of Mozambique

[\]h Office rent, utilities, etc

Table 24: Detailed cost table - component 2.2

Republic of Mozambique
REFP - Rural Enterprise Financing Project
Table 2.2. Support to Business Development Services and Market Linkages
Detailed Costs

Unit Cost -

				Q	uantitie	es			<u>N</u> egotiatio	o <u>n</u>	Bas	e Cost -	Negoti	ation (L	JSD)			Totals I	ncluding	g Conti	ngencie	s (USD	<i>'</i>)
	Unit	2018	2019	2020	2021	2022	2023	Total	(USD)	2018	2019	2020	2021	2022	2023	Total	2018	2019	2020	2021	2022	2023	Total
I. Investment Costs																							
A. Business Development training																							
Selection from aggregators /a	Number	125	125	125	125	-	-	500	0.661	82.6	82.6	82.6	82.6	-	-	330.3	93.5	94.5	95.5	98.2	-	-	381.7
Selection from Service Providers /b	Number	250	250	250	250	-	-	1,000	0.495	123.8	123.8	123.8	123.8	-	-	495.4	140.3	141.7	143.3	147.3	-	-	572.6
Selection from incubated start-up entrepreneurs /c	Beneficiary	625	625	625	625	-	-	2,500	0.396	247.7	247.7	247.7	247.7	-	-	990.8	280.6	283.4	286.6	294.6	-	-	1,145.2
Support from Government experts in agripreneurs /d	Lumpsum									106.8	106.8	106.8	106.8	-	-	427.2	118.8	121.2	124.2	128.4	-	-	492.6
5. Mapping study	Study	1	-	-	-	-	-	1	66.051	66.1						66.1	74.8						74.8
Subtotal										627.0	560.9	560.9	560.9	-	-	2,309.7	708.1	640.8	649.6	668.5	-	-	2,667.0
B. Training and equipment for youth to engage in MSEs																							
Vocational training for selected youth /e	Beneficiary	200	200	200	200	200	-	1,000	0.165	33.0	33.0	33.0	33.0	33.0	-	165.1	37.4	37.8	38.2	39.3	40.6	-	193.3
Support provided by Government youth experts /f	Lumpsum									32.0	32.0	32.0	32.0	32.0	-	160.2	35.6	36.4	37.3	38.5	40.0	-	187.7
Mentorship for youth /g	Lumpsum	3	3	3	3	3	3	18	7.477	22.4	22.4	22.4	22.4	22.4	22.4	134.6	24.9	25.5	26.1	27.0	28.0	29.4	160.8
Subtotal										87.5	87.5	87.5	87.5	87.5	22.4	459.9	98.0	99.6	101.6	104.7	108.6	29.4	541.9
C. Training for women and women-headed households in MSEs																							
Training for women in business skills	Beneficiary	200	200	200	200	200	-	1,000	0.165	33.0	33.0	33.0	33.0	33.0	-	165.1	37.4	37.8	38.2	39.3	40.6	-	193.3
Support provided by Government gender experts /h	Lumpsum									32.0	32.0	32.0	32.0	32.0	-	160.2	35.6	36.4	37.3	38.5	40.0	-	187.7
Mentorship for women in MSEs /i	Lumpsum	3	3	3	3	3	3	18	7.477	22.4	22.4	22.4	22.4	22.4	22.4	134.6	24.9	25.5	26.1	27.0	28.0	29.4	160.8
Subtotal										87.5	87.5	87.5	87.5	87.5	22.4	459.9	98.0	99.6	101.6	104.7	108.6	29.4	541.9
Total										801.9	735.9	735.9	735.9	175.0	44.9	3,229.5	904.1	840.0	852.7	878.0	217.1	58.8	3,750.7

[\]a Agricultural and non-agricultural aggregators

[\]b Total 1,000 agricultural and non-agricultural Service Providers trained

[\]c A total of 2,500 agricultural and non-agricultural entrepreneurs trained

[\]d Evaluated pro-rata

[\]e In business skills and MSEs

[\]f Evaluated pro-rata

[\]g To be implemented in regions North, Centre and South

[\]h Evaluated pro-rata

[\]i TA to be implemented in regions North, Center and South

Table 25: Detailed cost table - component 3

Republic of Mozambique
REFP - Rural Enterprise Financing Project
Table 3. Institutional Support and Programme Management
Detailed Costs

				Oua	ntities				Unit Cost -		D-	se Cost -	Nogotiati	ion (USD)				Totale	Including	a Contina	noncioe (IIGD)	
	Unit	2018	2019 2			022 2	023 T		otiation (USD)	2018					2023	Total	2018					2023	Total
-						<u></u>		otal Hog	journal (GGS)							- TOTAL							- rotai
I. Investment Costs																							
A. Nutrition sensitive activities																		40.0	40.7				07.0
Training and sensitization on diversification of food production	Lumpsum									11.0	11.0 5.5	11.0 5.5	-	-	-	33.0 11.0	12.5	12.6 6.3	12.7 6.4	-	-	-	37.8 12.7
Training and sensitization on improved processing, storage and preservation of food	Lumpsum									-			-	-	-					-	-	-	
Nutrition education and community behavior change /a Facilitate Training for SETSAN personnel on Monitoring and Evaluation of nutrition indicators	Session								F 7F	6.8	6.8	6.8	6.8	6.8	6.8	40.8	7.8	7.8	7.8	8.0	8.2 6.6	8.7	48.5 13.0
	Contract	1	-	-	-	1	-	2	5.75	5.8	-			5.8	50.4	11.5	6.4	-		-		70.0	
Support from SETSAN personnel to field activities /b	Lumpsum									53.4	53.4	53.4	53.4	53.4	53.4	320.4	59.4	60.6	62.1	64.2	66.6	70.0	382.9
Conduct consumption survey /c	Study	1	-	-	1	-	1	3	5.504	5.5 82.5	76.7	76.7	5.5 65.7	66.0	5.5 65.7	16.5 433.3	92.3	87.3	89.0	6.5 78.7	81.5	7.1 85.9	19.9 514.7
Subtotal										82.5	76.7	76.7	65.7	00.0	05.7	433.3	92.3	87.3	89.0	78.7	81.5	85.9	514.7
B. Strengthening Knowledge Management system Develop and implement KM and communication action plan	Lumpsum									_	26.7					26.7		30.3					30.3
												44.0	44.0	11.0	44.0	26.7 66.1	40.5	12.6	40.7	40.4	40.5	440	
Prepare, package and dessiminate knowledge products	Lumpsum									11.0 19.8	11.0 19.8	11.0	11.0	11.0	11.0	39.7	12.5 22.9	22.9	12.7	13.1	13.5	14.3	78.7 45.7
Organise and conduct the M&E training workshops /d	Lumpsum											19.8	19.8	40.0	19.8	119.0	22.9	22.9	22.8	23.4		25.4	141.4
Organise and conduct annual participatory planning workshop	Lumpsum									19.8	19.8	5.3	19.8	19.8 5.3	19.8		5.9	22.9		23.4	24.1 6.7	25.4	18.8
Systematise procedures for baseline survey and impact studies /e Monitor and supervise KM and communication activities	Lumpsum									5.3 5.3	5.3	5.3	5.3	5.3	5.3	16.0 32.0	5.9	6.1	6.2 6.2	6.4	6.7	7.0	38.3
Subtotal	Lumpsum								_	61.4	82.7	41.5	36.2	41.5	36.2	299.5	70.1	94.7	48.0	42.9	50.9	46.7	353.3
C. Strenghtening of M&E /f										61.4	82.7	41.5	36.2	41.5	36.2	299.5	70.1	94.7	48.0	42.9	50.9	46.7	353.3
Assess M&E capacity	Lumpsum	4						4.7	32.042	32.0						32.0	35.6						35.6
Develop M&E database	Lumpsum	1	-	-	-	-	-	1.7	32.042 32.042	32.0	-	-	-	-	-	32.0	35.6	-	-	-	-	-	35.6
Procure and Install Interactive data dashboard	Number	1	-	-	-	-	-	1 🔻	55.042	55.0	-	-	-	-	-	55.0	62.4	-	-	-	-	-	62.4
Install and implement M&E database	Number	1	-	-	-	-	-	1 -	16.513	16.5	-	-	-	-	-	16.5	18.7	-	-	-	-	-	18.7
Training on use of M&E database	Lumpsum		-	-	-	-	-	2 🕶	16.513	16.5	16.5	-	16.5	-	-	33.0	10.7	18.9	-	19.6	-	-	38.5
Monitor performance of M&E system	Lumpsum	-		-	'	-	-	1 7	16.021	-	16.5	16.0	10.5	-	-	16.0	-	10.9	18.6	19.0	-	-	18.6
Subtotal	Lumpsum	-	-		-	-	-		16.021	135.6	16.5	16.0	16.5	 -	 -	184.7	152.3	18.9	18.6	19.6		 -	209.5
D. Mainstreaming gender and youth										133.0	10.5	10.0	10.5	-	_	104.7	132.3	10.5	10.0	13.0	_	-	203.3
Technical Assistance for development of Gender Strategy	Contract	1	_	_	_	_	_	1 🐔	21.361	21.4	_	_	_	_	_	21.4	23.8	_	_	_	_	_	23.8
Training workshop on gender awareness in REFP	Lumpsum		- 1	1	1	1	1	6	16.513	16.5	16.5	16.5	16.5	16.5	16.5	99.1	18.7	18.9	19.1	19.6	20.3	21.4	118.1
Subtotal	Lumpsum	'			'		'	U	10.515	37.9	16.5	16.5	16.5	16.5	16.5	120.4	42.5	18.9	19.1	19.6	20.3	21.4	141.8
E. National Programme Management Unit										31.5	10.5	10.5	10.5	10.5	10.5	120.4	42.5	10.5	15.1	13.0	20.5	21.4	141.0
1. Vehicles																							
Double cabin pick-up /g	Number	6	_	_	_	_	_	6	42.504	255.0	_	_	_	_	_	255.0	282.7	_	_	_	_	_	282.7
Small car /h	Number	1			_	_		1 7	31.978	32.0			_		_	32.0	35.5				_		35.5
Subtotal	Number								01.570	287.0						287.0	318.3						318.3
2. Office Equipment										201.0						201.0	0.0.0						0.0.0
Desktop Computers /i	Number	12	_	_	_	_	_	12	1.651	19.8	_	_	_	_	_	19.8	22.4	_	_	_	_	_	22.4
Laptop	Number	10	_	_	_	_	_	10	1.651	16.5	_	_	_	_	_	16.5	18.7	_	_	_	_	_	18.7
File server /j	Number	1	_	_	_	_	_	1 7	2.202	2.2	_	_	_	_	_	2.2	2.5	_	_	_	_	_	2.5
Heavy duty scanner /k	Number	1	_	_	_	_	_	1.7	1.101	1.1	_	_	_	_	_	1.1	1.2	_	_	_	_	_	1.2
Electronic archiving installation /I	Loan	1	_	_	_	_	_	10	11.008	11.0	_	_	_	_	_	11.0	12.5	_	_	_	_	_	12.5
Multifunctional Printer	Number	1	_	_	_	-	_	1.7	1.651	1.7	_	_	_	_	_	1.7	1.9	_	_	_	_	_	1.9
Office furniture	Set	12	_	_	_	-	_	12	1.101	13.2	_	_	_	_	_	13.2	15.0	_	_	_	_	_	15.0
File cabinets /m	Set	1	_	-	-	_	_	1 7	2.202	2.2	-	_	_	_	_	2.2	2.5	-	_	_	-	_	2.5
Accounting software purchase	Lumpsum	1	_	_	_	-	_	1.7	11.008	11.0	_	_	_	_	_	11.0	12.5	_	_	_	_	_	12.5
Meeting room furniture	Set	1	_	_	_	_	_	1.7	3.303	3.3	_	_	_	_	_	3.3	3.7	_	_	_	_	_	3.7
Fridge	Number	1	_	_	_	-	_	1 🐔	0.33	0.3	_	_	_	_	_	0.3	0.4	_	_	_	_	_	0.4
Subtotal										82.3						82.3	93.3						93.3
Start-up workshop	Workshop	1	_	_	_	-	_	1 🐔	56.681	56.7	_	_	_	_	_	56.7	65.3	_	_	_	_	_	65.3
Baseline/preparatory studies	Study	1	-	-	-	-	-	1.5	55.042	55.0	-	-	-	-	-	55.0	62.4	-	-	-	-		62.4
Mid-term review and impact assessment	Study		-	-	1	-		1 🐔	99.076	-	-	-	99.1		-	99.1	-		-	117.8	-	_	117.8
Project completion and impact evaluation	Study	-	-	-		-	1	1 🕶	99.076	-	-	-	-	-	99.1	99.1	-	-	-	-	-	128.4	128.4
7. Audit	Contract	1	1	1	1	1	1	6 🕶	21.361	21.4	21.4	21.4	21.4	21.4	21.4	128.2	23.8	24.2	24.8	25.7	26.6	28.0	153.2
								-															

Table 26: Detailed cost table - component 3 (continued)

' '	•																						
8. Technical Assistance																							
Environmental and social specialist	Person-Day	60	60	60	60	60	60	360	0.362	21.7	21.7	21.7	21.7	21.7	21.7	130.4	24.0	24.0	23.8	24.3	24.9	26.4	147.4
Gender and youth specialist	Person-Day	60	60	60	60	60	46	346	0.345	20.7	20.7	20.7	20.7	20.7	15.9	119.4	22.9	22.8	22.6	23.1	23.8	19.3	134.5
Legal expert	Person-Day	30	30	30	30	30	30	180	0.345	10.4	10.4	10.4	10.4	10.4	10.4	62.1	11.4	11.4	11.3	11.6	11.9	12.6	70.2
Other experts /n	Person-Day	60	60	60	60	60	60	360	0.345	20.7	20.7	20.7	20.7	20.7	20.7	124.2	22.9	22.8	22.6	23.1	23.8	25.2	140.4
Subtotal	i cison bay	00	00	00	00	00	00	500	0.040	73.5	73.5	73.5	73.5	73.5	68.7	436.1	81.3	81.0	80.4	82.0	84.3	83.4	492.5
9. Knowledge Management										10.0	10.0	10.0	7 0.0	70.0	00.7	100.1	01.0	01.0	00.1	02.0	01.0	00.1	102.0
Publication material on Environmental issues	Lumpsum									1.7	1.7	1.7	1.7	1.7	1.7	9.9	1.9	1.9	1.9	2.0	2.0	2.1	11.8
Communication and visibility	Lumpsum									2.2	2.2	2.2	2.2	2.2	2.2	13.2	2.5	2.5	2.5	2.6	2.7	2.9	15.7
Subtotal	Lumpsum									3.9	3.9	3.9	3.9	3.9	3.9	23.1	4.4	4.4	4.5	4.6	4.7	5.0	27.5
Subtotal										579.8	98.7	98.7	197.8	98.7		1,266.6	648.6	109.7	109.7	230.1	115.7	244.8	1,458.6
F. Regional Management Unit - North										373.0	30.1	30.1	157.0	30.1	132.3	1,200.0	040.0	105.7	105.7	230.1	113.7	244.0	1,430.0
1. Vehicles																							
Double cabin pickup	Number	3						3	42.504	127.5					_	127.5	141.4						141.4
2. Office Equipment	Number	3	-	-	-	-	-	3	42.504	127.5	-	-	-	-	-	127.5	141.4	-	-	-	-	-	141.4
	Number							4	4.054	6.6							7.5						7.5
Desktop Computer /o		4	-	-	-	-	-	4	1.651		-	-	-	-	-	6.6		-	-	-	-	-	7.5
Laptop	Number	1	-	-	-	-	-	1	1.651	1.7	-	-	-	-	-	1.7	1.9	-	-	-	-	-	1.9
Office furniture	Set	4	-	-	-	-	-	4	1.101	4.4	-	-	-	-	-	4.4	5.0	-	-	-	-	-	5.0
Meeting room furniture	Set	1	-	-	-	-	-	1	3.303	3.3	-	-	-	-	-	3.3	3.7	-	-	-	-	-	3.7
Fridge	Number	1	-	-	-	-	-	1	0.55	0.6					<u>-</u>	0.6	0.6						0.6
Subtotal										16.5						16.5	18.7						18.7
Subtotal										144.0	-	-	-	-	-	144.0	160.1	-	-	-	-	-	160.1
G. Regional Management Unit - Center																							
1. Vehicles																							
Double cabin pickup	Number	3	-	-	-	-	-	3	42.504	127.5	-	-	-	-	-	127.5	141.4	-	-	-	-	-	141.4
2. Office Equipment								_															
Desktop Computer /p	Number	4	-	-	-	-	-	4	1.651	6.6	-	-	-	-	-	6.6	7.5	-	-	-	-	-	7.5
Laptop	Number	1	-	-	-	-	-	1 💆	1.651	1.7	-	-	-	-	-	1.7	1.9	-	-	-	-	-	1.9
Office furniture	Set	4	-	-	-	-	-	4	1.101	4.4	-	-	-	-	-	4.4	5.0	-	-	-	-	-	5.0
Meeting room furniture	Set	1	-	-	-	-	-	1 💆	3.303	3.3	-	-	-	-	-	3.3	3.7	-	-	-	-	-	3.7
Fridge	Number	1	-	-	-	-	-	1	0.55	0.6	-				-	0.6	0.6		-		-		0.6
Subtotal										16.5						16.5	18.7						18.7
Subtotal										144.0	-	-	-	-	-	144.0	160.1	-	-	-	-	-	160.1
H. Regional Management Unit - South																							
1. Vehicles								_															
Double cabin pickup	Number	3	-	-	-	-	-	3	42.504	127.5	-	-	-	-	-	127.5	141.4	-	-	-	-	-	141.4
2. Office Equipment								_															
Desktop Computer /q	Number	4	-	-	-	-	-	4	1.651	6.6	-	-	-	-	-	6.6	7.5	-	-	-	-	-	7.5
Laptop	Number	1	-	-	-	-	-	1	1.651	1.7	-	-	-	-	-	1.7	1.9	-	-	-	-	-	1.9
Office furniture	Set	4	-	-	-	-	-	4	1.101	4.4	-	-	-	-	-	4.4	5.0	-	-	-	-	-	5.0
Meeting room furniture	Set	1	-	-	-	-	-	1 🔽	3.303	3.3	-	-	-	-	-	3.3	3.7	-	-	-	-	-	3.7
Fridge	Number	1	-	-	-	-	-	1 💆	0.55	0.6						0.6	0.6	-				-	0.6
Subtotal										16.5	-	-	-	-	-	16.5	18.7	-	-	-	-	-	18.7
Subtotal										144.0	-	-	-	-	-	144.0	160.1	-	-	-	-	-	160.1
Total Investment Costs										1,329.2	291.2	249.5	332.7	222.7	311.4	2,736.6	1,486.0	329.5	284.5	391.0	268.4	398.8	3,158.2
II. Recurrent Costs																							
A. Programme Management Unit																							
1. National Team																							
Project Manager	Person-Month	12	12	12	12	12	12	72	6	72.0	72.0	72.0	72.0	72.0	72.0	432.0	72.0	72.0	72.0	72.0	72.0	72.0	432.0
Financial Management Specialist	Person-Month	12	12	12	12	12	12	72	5	60.0	60.0	60.0	60.0	60.0	60.0	360.0	60.0	60.0	60.0	60.0	60.0	60.0	360.0
Procurement Specialist	Person-Month	12	12	12	12	12	12	72	4.5	54.0	54.0	54.0	54.0	54.0	54.0	324.0	54.0	54.0	54.0	54.0	54.0	54.0	324.0
Monitoring & Evaluation Specialist	Person-Month	12	12	12	12	12	12	72	5	60.0	60.0	60.0	60.0	60.0	60.0	360.0	60.0	60.0	60.0	60.0	60.0	60.0	360.0
Rural Finance Specialist	Person-Month	12	12	12	12	12	12	72	4.5	54.0	54.0	54.0	54.0	54.0	54.0	324.0	54.0	54.0	54.0	54.0	54.0	54.0	324.0
Innovation and Outreach Officer	Person-Month	12	12	12	12	12	12	72	4	48.0	48.0	48.0	48.0	48.0	48.0	288.0	48.0	48.0	48.0	48.0	48.0	48.0	288.0
Accountant	2 Person-Month	12	12	12	12	12	12	72	3/Person-Month	72.0	72.0	72.0	72.0	72.0	72.0	432.0	72.0	72.0	72.0	72.0	72.0	72.0	432.0
Administrative Assistant	Person-Month	12	12	12	12	12	12	72	2	24.0	24.0	24.0	24.0	24.0	24.0	144.0	24.0	24.0	24.0	24.0	24.0	24.0	144.0
Driver	2 Person-Month	12	12	12	12	12	12	72	1/Person-Month	24.0	24.0	24.0	24.0	24.0	24.0	144.0	24.0	24.0	24.0	24.0	24.0	24.0	144.0
Subtotal										468.0	468.0	468.0	468.0	468.0	468.0	2,808.0	468.0	468.0	468.0	468.0	468.0	468.0	2,808.0

Table 27: Detailed cost table - component 3 (continued 2)

2. Operating costs																								
PMU Office rental /r	Month	12	12	12	12	12	12	72	4.6		55.2	55.2	55.2	55.2	55.2	55.2	331.2	64.1	63.9	63.4	64.7	66.5	70.4	393.0
Perdiem	Day	300	300	300	300	300	300	1,800	0.2	2 (60.0	60.0	60.0	60.0	60.0	60.0	360.0	58.7	54.9	51.4	49.7	48.3	48.3	311.3
Vehicle O&M /s	Lumpsum										8.8	8.8	8.8	8.8	8.8	8.8	52.8	10.0	10.1	10.2	10.5	10.8	11.4	63.0
General office expenses /t	Month	12	12	12	12	12	12	72	2.3		27.6	27.6	27.6	27.6	27.6	27.6	165.6	32.1	31.9	31.7	32.4	33.3	35.2	196.5
Utilities /u	Lumpsum	12	12	12	12	12	12	72	1.15		13.8	13.8	13.8	13.8	13.8	13.8	82.8	16.0	16.0	15.9	16.2	16.6	17.6	98.3
Subtotal											65.4	165.4	165.4	165.4	165.4	165.4	992.4	180.9	176.7	172.6	173.4	175.5	182.9	1,062.1
Subtotal										63	33.4	633.4	633.4	633.4	633.4	633.4	3,800.4	648.9	644.7	640.6	641.4	643.5	650.9	3,870.1
B. Government staff costs																								
Support staff from Bank of Mozambique /v	Persons	5	5	5	5	5	5	30	0.3		1.5	1.5	1.5	1.5	1.5	1.5	9.0	1.5	1.4	1.3	1.2	1.2	1.2	7.8
Support staff from Ministry of Economy and Finance	Number	5	5	5	5	5	5	30	0.345	5	1.7	1.7	1.7	1.7	1.7	1.7	10.4	2.0	2.0	2.0	2.0	2.1	2.2	12.3
Support staff from FARE offices and decentralized offices /w	Lumpsum										15.1	15.1	15.1	15.1	15.1	15.1	90.7	14.8	13.8	13.0	12.5	12.2	12.2	78.4
Subtotal											18.3	18.3	18.3	18.3	18.3	18.3	110.1	18.3	17.2	16.2	15.8	15.4	15.6	98.5
C. Regional Management Team - North																								
1. Region North Team																								
Area Coordinator	Person-Month	12	12	12	12	12	12	72	4	4 4	48.0	48.0	48.0	48.0	48.0	48.0	288.0	48.0	48.0	48.0	48.0	48.0	48.0	288.0
Monitoring and Evaluation Officer	Person-Month	12	12	12	12	12	12	72	3	3 :	36.0	36.0	36.0	36.0	36.0	36.0	216.0	36.0	36.0	36.0	36.0	36.0	36.0	216.0
Finance and Administrative Officer	Person-Month	12	12	12	12	12	12	72	2.5		30.0	30.0	30.0	30.0	30.0	30.0	180.0	30.0	30.0	30.0	30.0	30.0	30.0	180.0
Driver	Person-Month	12	12	12	12	12	12	72	0.7	7	8.4	8.4	8.4	8.4	8.4	8.4	50.4	8.4	8.4	8.4	8.4	8.4	8.4	50.4
Support staff from DPEFs /x	Number	5	5	5	5	5	5	30	0.15	5	0.8	0.8	0.8	0.8	0.8	0.8	4.5	0.7	0.7	0.6	0.6	0.6	0.6	3.9
Subtotal										12	23.2	123.2	123.2	123.2	123.2	123.2	738.9	123.1	123.1	123.0	123.0	123.0	123.0	738.3
2. Operating Costs																								
Perdiem	Day	100	100	100	100	100	100	600	0.2	2 :	20.0	20.0	20.0	20.0	20.0	20.0	120.0	19.6	18.3	17.1	16.6	16.1	16.1	103.8
Vehicle O&M	Lumpsum										8.8	8.8	8.8	8.8	8.8	8.8	52.8	10.0	10.1	10.2	10.5	10.8	11.4	63.0
Office rent	Month	12	12	12	12	12	12	72	2.3	3 :	27.6	27.6	27.6	27.6	27.6	27.6	165.6	32.1	31.9	31.7	32.4	33.3	35.2	196.5
General Office expenses	Month	12	12	12	12	12	12	72	0.288	3	3.5	3.5	3.5	3.5	3.5	3.5	20.7	4.0	4.0	4.0	4.0	4.2	4.4	24.6
Subtotal											59.9	59.9	59.9	59.9	59.9	59.9	359.1	65.6	64.3	63.0	63.4	64.3	67.1	387.8
Subtotal										18	83.0	183.0	183.0	183.0	183.0	183.0	1,098.0	188.7	187.4	186.0	186.5	187.3	190.1	1,126.1
D. Regional Management Team - Centre																								
1. Region North Team																								
Area Coordinator	Person-Month	12	12	12	12	12	12	72	4	4 4	48.0	48.0	48.0	48.0	48.0	48.0	288.0	48.0	48.0	48.0	48.0	48.0	48.0	288.0
Monitoring and Evaluation Officer	Person-Month	12	12	12	12	12	12	72	3	3 :	36.0	36.0	36.0	36.0	36.0	36.0	216.0	36.0	36.0	36.0	36.0	36.0	36.0	216.0
Finance and Administrative Officer	Person-Month	12	12	12	12	12	12	72	2.5	5 :	30.0	30.0	30.0	30.0	30.0	30.0	180.0	30.0	30.0	30.0	30.0	30.0	30.0	180.0
Driver	Person-Month	12	12	12	12	12	12	72	0.7	7	8.4	8.4	8.4	8.4	8.4	8.4	50.4	8.4	8.4	8.4	8.4	8.4	8.4	50.4
Support staff from DPEFs /y	Number	5	5	5	5	5	5	30	0.15	5	8.0	0.8	0.8	0.8	0.8	0.8	4.5	0.7	0.7	0.6	0.6	0.6	0.6	3.9
Subtotal										12	23.2	123.2	123.2	123.2	123.2	123.2	738.9	123.1	123.1	123.0	123.0	123.0	123.0	738.3
2. Operating Costs																								
Perdiem	Day	100	100	100	100	100	100	600	0.2	2 :	20.0	20.0	20.0	20.0	20.0	20.0	120.0	19.6	18.3	17.1	16.6	16.1	16.1	103.8
Vehicle O&M	Lumpsum										8.8	8.8	8.8	8.8	8.8	8.8	52.8	10.0	10.1	10.2	10.5	10.8	11.4	63.0
Office rent	Month	12	12	12	12	12	12	72	2.3	3 :	27.6	27.6	27.6	27.6	27.6	27.6	165.6	32.1	31.9	31.7	32.4	33.3	35.2	196.5
General Office expenses	Month	12	12	12	12	12	12	72	0.288	3	3.5	3.5	3.5	3.5	3.5	3.5	20.7	4.0	4.0	4.0	4.0	4.2	4.4	24.6
Subtotal											59.9	59.9	59.9	59.9	59.9	59.9	359.1	65.6	64.3	63.0	63.4	64.3	67.1	387.8
Subtotal										18	83.0	183.0	183.0	183.0	183.0	183.0	1,098.0	188.7	187.4	186.0	186.5	187.3	190.1	1,126.1
E. Regional Management Team - South																								
1. Region North Team																								
Area Coordinator	Person-Month	12	12	12	12	12	12	72	4	4 4	48.0	48.0	48.0	48.0	48.0	48.0	288.0	48.0	48.0	48.0	48.0	48.0	48.0	288.0
Monitoring and Evaluation Officer	Person-Month	12	12	12	12	12	12	72	3	3 :	36.0	36.0	36.0	36.0	36.0	36.0	216.0	36.0	36.0	36.0	36.0	36.0	36.0	216.0
Finance and Administrative Officer	Person-Month	12	12	12	12	12	12	72	2.5	5 :	30.0	30.0	30.0	30.0	30.0	30.0	180.0	30.0	30.0	30.0	30.0	30.0	30.0	180.0
Driver	Person-Month	12	12	12	12	12	12	72	0.7		8.4	8.4	8.4	8.4	8.4	8.4	50.4	8.4	8.4	8.4	8.4	8.4	8.4	50.4
Support staff from DPEFs /z	Number	5	5	5	5	5	5	30	0.15		0.8	0.8	0.8	0.8	0.8	0.8	4.5	0.8	0.8	0.8	0.8	0.8	0.8	4.7
Subtotal			-								23.2	123.2	123.2	123.2	123.2	123.2	738.9	123.2	123.2	123.2	123.2	123.2	123.2	739.1

Table 28: Detailed cost table - component 3 (continued 3)

2. Operating Costs																							
Perdiem	Day	100	100	100	100	100	100	600	0.2	20.0	20.0	20.0	20.0	20.0	20.0	120.0	19.6	18.3	17.1	16.6	16.1	16.1	103.8
Vehicle O&M	Lumpsum									8.8	8.8	8.8	8.8	8.8	8.8	52.8	10.0	10.1	10.2	10.5	10.8	11.4	63.0
Office rent	Month	12	12	12	12	12	12	72	2.3	27.6	27.6	27.6	27.6	27.6	27.6	165.6	32.1	31.9	31.7	32.4	33.3	35.2	196.5
General Office expenses	Month	12	12	12	12	12	12	72	0.288	3.5	3.5	3.5	3.5	3.5	3.5	20.7	4.0	4.0	4.0	4.0	4.2	4.4	24.6
Subtotal										59.9	59.9	59.9	59.9	59.9	59.9	359.1	65.6	64.3	63.0	63.4	64.3	67.1	387.8
Subtotal										183.0	183.0	183.0	183.0	183.0	183.0	1,098.0	188.8	187.5	186.2	186.6	187.5	190.3	1,126.9
Total Recurrent Costs										1,200.8	1,200.8	1,200.8	1,200.8	1,200.8	1,200.8	7,204.6	1,233.4	1,224.2	1,215.1	1,216.8	1,221.1	1,237.1	7,347.7
Total										2,530.0	1,491.9	1,450.2	1,533.5	1,423.5	1,512.1	9,941.2	2,719.5	1,553.7	1,499.5	1,607.8	1,489.5	1,635.9	10,505.9

[\]a Maternal and child feeding, care, hygiene and sanitation

[\]b On beneficiaries' diversification of food production and nutrition education

[\]c Baseline, midterm and at completion

[\]d Specifically on M&E systems and procedures

[\]e Specifically on data collection and analysis

[\]f Specifically on M&E and Management Information Systems (MIS). DPEF - Provincial Directorate of Economy and Finance

[\]g 2 for PMU, 2 for FARE, 2 for the Development Finance Coordination Secretariat under MEF

[\]h For office duties

[\]i Including monitor, keyboard and mouse, and printer.

[\]j To house accounting software and electronic archiving system

[\]k For electronic archiving

[\] Includes purchase and installation costs

[\]m For filing of project documentation

[\]n Consultants

[\]o Complete with monitor, keyboard, mouse and printer

[\]p Complete with monitor, keyboard, mouse and printer

[\]q Complete with monitor, keyboard, mouse and printer

[\]r Estimated rental cost of office space conceded by Government to PMU

[\]s 10% of purchase price

[\]t Stationery, petty cash, etc.

[\]u Water, electricity, internet access forfeited by GoM for use of office space \v Bank of Mozambique personnel supporting project activities (pro rata)

[\]w Salaries for FARE staff who support the project on a pro-rata basis.

[\]x DPEF - Provincial Directorate of Economy and Finance. Evaluated pro-rata.

[\]y DPEF - Provincial Directorate of Economy and Finance. Evaluated pro-rata.

[\]z DPEF - Provincial Directorate of Economy and Finance. Evaluated pro-rata.

Appendix 10: Economic and Financial Analysis

This Appendix presents the financial and economic analysis of the Rural Enterprise Financing Project (REFP).

I. Project benefits and beneficiaries

- 7. **Project Benefits.** Financial benefits will be in the form of increased financial returns of the HHs targeted by REFP. Social benefits will include a reduction in poverty rates in the areas targeted by the Project, with special measures taken to ensure inclusion of disadvantaged groups. This will be the effect of the increased financial returns for HHs consequent to Project interventions. Environmental benefits will consist of reduced land degradation and increased carbon sequestration of rangelands. Due to limited data availability, only the HH increased returns are taken into account here.
- 8. Project benefits not quantified in this analysis will include a more conducive environment for access to finance for small rural entrepreneurs. In addition, linking farmers to formal financial institutions will generate a higher number of registered enterprises and as a consequence, a higher volume of taxable production, which will benefit the overall Mozambican economy. Considering the multi-faceted Mozambican fiscal regime for taxpayers based on their overall yearly revenue, number of dependents, as well as exceptional regimes for micro, small and medium enterprises, we've excluded the actual calculation of taxes paid under the various production models.
- 9. **Direct Project Beneficiaries.** Direct project beneficiaries will be approximately 287,700 individuals involved in the major value chains: agriculture, fisheries, horticulture and processing of goods. This EFA presents a few production models used as proxy to the actual activities that the target group will be engaging too. As such, we note that the model is a simplification of the actual dynamic and complex economic situation in the target areas.
- 10. For the purposes of this EFA we have computed the main economic benefits of the production models accessing loans under the line of credit and grants under the crowding in fund based on the number of enterprises (for the case of the interventions under the Crowding-in Fund and Line of Credit), and actual number of people for the case of farmers not accessing funds under REFP. More specifically, and as noted in appendix 2 (Poverty, targeting and gender): a total of 63,370 MSMEs will be supported and this will benefit 209,400 poor rural entrepreneurs. In addition, 78,300 beneficiaries will benefit directly from access to non-financial products to give the total beneficiary poor rural entrepreneurs of 287,700. As such, the 287,700 project beneficiaries represent actual individuals, and not households.

Table 29: Beneficiaries of project activities

	Number of enterprises	Direct Beneficiaries
Crowding in Fund	1,000	20,000
Graduation Promotion and Outreach Programme	0	20,000
Line of Credit	62,370	169,400
Component 2 non-financial products		
beneficiaries with no access to Financial	0	78,300
products		
		287,700

- 11. The total period used for the analysis of the profitability of the project is 20 years. Considering the projected rate of uptake of the project by the beneficiaries, as well as the slow accrual of benefits, a 20-year lifespan allows us to better evaluate the impact of the project on farmers' livelihoods.
- 12. Costs and benefits have been evaluated at constant 2017 prices. The effects of inflation on prices and revenue have not been taking into account in the analysis. This is justified based on the overall difficulty in forecasting inflation for a period of time beyond 3 to 5 years.

II. Financial Analysis

- **Objectives.** A financial analysis was carried out for each of the proposed interventions to assess their viability. Of particular importance, the analysis was needed to verify if the new activities would be profitable to the beneficiaries in the project areas. Of particular importance, the analysis is necessary to establish if farmers are able to make a higher profit even in face of additional costs related to debt servicing. Based on the analysis, it was therefore possible to assess the level of increased cash-flow for beneficiaries participating in the project.
- Methodology and financial models. The analysis was carried out based on production models which are typical of the ongoing IFAD projects in Mozambique that currently access credit through the windows made available through the projects. The analysis was needed to verify if there are indeed net increases in revenue as a result of REFP, based on production model that take into account the various credit lines that will be available to project beneficiaries.
- Market prices used to cost the activities were based on two sources of information: the prices recorded by project field staff throughout the country, made available by the project Coordinators, and the information on prices published regularly by the Ministry of Agriculture and Food Security on its platform for market prices of agricultural products 135. Labour costs (and unemployment rate) were based on information published yearly by the National Institute of Statistics 136
- Financial Discount rate (FDR). The financial discount rate used in the financial analysis was based on information published by Bank of Mozambique 137 on the interest rates applicable in the country by Commercial Banks, and on long term Government bonds. Due to the ongoing economic and financial crisis in Mozambique, interest rates applicable by banks for lending have soared, having reached all-time highs of 25% to 30% in December 2016. Currently, the long-term Mozambican bond rate is 22.35%. For the purposes of the analysis of the financial suitability of each model, we have set the FDR to 22%.
- Credit analysis for production models. Based on the assumptions made in the detailed description of the project, the interest rate will spread over the different intermediation levels need to cover costs and risks. This will be ensured through linking lending rates from the apex financing institution to the central bank reference rate, so that rates remain positive in real terms and proper spreads and incomes are generated for all intermediaries in the financial intermediation chain. The current reference rate for loans is the Maputo Inter-Bank Offered Rate (MAIBOR), which has been set to 21.5% by Bank of Mozambique in August 2017. For the purposes of our credit analysis we have used a proxy annual interest rate of 22.5% for the loans offered to the project beneficiaries. In addition, we have assumed that loans to farmers will be seasonal, i.e. repayable in one instalment at the end of the production season.
- Project beneficiaries will have access to two main financing windows: the crowding-in fund and the Line of Credit. The crowding-in fund aims at improving access to finance for otherwise unbankable small and medium sized enterprises. The facility will support investments in productive assets such as on farm production equipment, post-harvest machinery and equipment, and processing equipment thereby allowing beneficiaries to increase production and productivity and increase their incomes. This grant acts as an incentive to crowd-in the beneficiary to co-finance the productive equipment in an agreed ratio with participating financial service providers providing part of the investment cost through an interest-bearing loan. The grant from the project and the matching component from the beneficiary are intended to reduce financial service provider's loan exposure and repayment risks. The crowding in fund has been simulated as a cost-sharing initiative whereby farmers will contribute with 20% of total investment. Participating Financial Institutions (PFIs) with 40%, and REFP will provide a matching grant of 40%. The amount of the grant provided under the grant will not exceed USD 5,000 (MZN 300,000), and in average should be between USD 2,000 (MZN 120,000) and USD 5,000.

¹³⁵ http://www.masa.gov.mz/sima/

¹³⁶ http://www.ine.gov.mz/estatisticas/estatisticas-sectoriais

¹³⁷ http://www.bancomoc.mz/fm_pgTab1.aspx?id=106

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 10:Economic and Financial Analysis

- 19. The *line of credit* will be provided to MFIs and Commercial Banks at a pre–determined rate. Participating Financial Institutions will agree to stipulate loans with reasonable interest rate to clients under the project not exceeding the Central Bank's reference rate. These loans may be used for purchase of seeds, chemical inputs, fishing net, feeds and other low value inputs, hiring or purchasing of agriculture implements, hiring of labour, repairing boats, and meeting of working capital requirements. Loans of different sizes with a cap of USD 1,000 dollars will be refinanced under this component. For the purposes of our analysis, the line of credit has been simulated with micro-loans not exceeding USD 300 (MZN 18,000), small loans not exceeding USD 750 (MZN 45,000), and medium loans of up to USD 1,000 (MZN 60,000).
- 20. **Assumptions for production models.** As REFP will target several different kinds of enterprises, this analysis seeks to evaluate the profitability of modelled production models. In addition, we considered the effects of access to credit in the production models, especially in view of the high annual interest rate charged by commercial banks and MFIs. However, and as stated above, for the purposes of the implementation of REFP the interest rate to be charged to the target beneficiary will take into account that the loan funds are developmental in nature and not one of profit maximisation.
- 21. We've analysed a total of 10 production models. Most of the models are related to agriculture and fisheries activities already implemented in the various IFAD-funded projects in Mozambique. Value addition through processing has also been included, with the model of a cassava processing plant being part of the overall analysis. To remain conservative in the analysis, we have set the maximum success rate of some of the financial models slightly below the theoretical rate as calculated in the production model. This is the case for the horticulture, aquaculture, livestock models and the cassava processing plant. This slight underperformance would then capture better real world situations.
- 22. The <u>horticulture model</u> is based on tomatoes, a high-value crop, owing to the high initial investment costs. We consider a without project production area of 0.1 ha under tomato cultivation. In this initial phase, the farmer is able to produce tomatoes on an average of once per year. in addition, the plants are watered by hand, as the farmer has not installed any irrigation system. Under covered agriculture practices, the farmer accesses financing through REFP to install a shade net and a drip irrigation system which allows her to produce tomatoes on two cycles per year. The model assumes that the farmer will receive a grant from the *crowding-in fund*, and will access a loan from PFIs. In addition, the farmer is expected to contribute to the investment from her own savings.
- 23. The <u>cassava processing unit</u> represents an example of value addition. In this model, a rural entrepreneur accesses financing through REFP to set-up a small processing unit to produce cassava chips. This model assumes existing technical capacity from the entrepreneur in managing a reasonably complex processing enterprise, as the small factory will employ 5 people on a monthly basis. Financing is accessed through a grant from the crowding in fund, as well as a contribution from the beneficiary, and a loan from a PFI.
- 24. The <u>cassava farm</u> model represents some of IFAD's current target groups in areas of implementation of the IFAD project PROSUL: smallholder farmers producing at a subsistence level in 1 ha plots that, with access to credit may increase productivity. The choice of cassava is based on its relatively low price per kilogram, which better models the very poor subsistence farmers. our target group. The farmer will have access to a micro-loan from a PFI to purchase inputs (fertilizers, herbicides) to increase the productivity of the farm. It is assumed that the micro-loan is seasonal and repayable in one single instalment at the end of the production cycle.
- 25. <u>Livestock</u> is modelled around a typical farmer who wants to access supplementary feeds and better veterinary care to increase the weight of the animals at the moment of selling. As noted by PROSUL, there's potential there for a substantial increase in productivity is farmers are trained and have access to the necessary credit to purchase feeds, veterinary drugs and the services of vets. The model also assumes that the access to greater veterinary care reduces the mortality rate of animals, allowing the farmers to sell more animals at the end of a typical 24-month production cycle. In addition, the model assumes that the farmer will have access to a small season loan repayable at the end of the production cycle.
- 26. The fisheries model is well aligned with ProPESCA's current interventions along the Mozambican coast. In this model, fishermen access credit to purchase improved boats and outboard engines to allow them to fish further away from the coast, and increase productivity while also

decreasing the time spent in the sea. The fishermen would access financing through the crowding-in fund.

- 27. The <u>naval carpenter model</u> represents those rural people who will engage in REFP activities in activities other than farming, fishing and value addition. This model is encountered in ProPESCA, whereby boat carpenters are supported by the project in increasing their production output for fishermen engaged in the project. Here, a modelled carpenter accesses a medium loan through the line of credit to purchase improved tools, which allow him to increase the output of boats per year. we assume this loan to be seasonal, and repayable in one instalment at the end of the production cycle.
- 28. The <u>aquaculture model</u> is based on PROAQUA's activities implemented throughout the project areas. One of the most critical issues that limit productivity of fish ponds has identified by the project is access to fish feeds and the current stocking rate of the ponds. Farmers are unable to purchase improved feeds, and rely on household-produced feeds, and the stocking rate of the farms is typically low. In this model, we assume that a farmer will access a micro-loan under the line of credit to enlarge his pond, purchase improved feeds, while also purchasing additional fish fingerlings to increase the population rate of the ponds to 2 fingerlings per square metre. Once again, the micro-loan is assumed to be seasonal.
- 29. The <u>barber shop</u> model represents those rural people who will engage in REFP in non-agriculture activities. In this model, a barber in a peri-urban area accesses financing through REFP to to purchase additional tools, as well as renting a small building to set-up his barber shop and hiring additional labour. It is assumed that the financing will be through a seasonal loan, repayable semi-annually.
- 30. Finally, we analysed the profitability of two small farms (<u>maize and beans</u>, and <u>sesame and soya beans</u>), which represent those farmers that will receive business training under REFP, as well as participate in the savings associations ASCAs. However, these farmers will not have access to credit through REFP. These farmers are well represented by the activities currently implemented under the IFAD project PROMER. In the model we consider that farmers will slowly increase their areas under production from the initial 1.0ha in PY1 up to 2ha in PY5, with increments of 0.2ha per year.
- 31. In order to closely reflect the actual performance of the models, we've considered a failure rate for the loans provided to producers, which has the effect of reducing the net benefits evaluated in the overall EFA. Based on data available from FARE, the failure rate of the projects has been set to 20%.
- 32. **Results of the Financial Analysis.** The analysis of the proposed models show that there's substantial increase in net revenue for smallholder farmers as show in the table below:

Table 30: Income analysis

	Yearly revenue stream before taxes				
	WOP (MZN)	WP* (MZN)	WOP (USD)	WP* (USD)	% increase
# Actitivity					
1 Shadenet	94,522	186,696	1,575	3,112	97.52%
2 Cassava processing plant	0	350,333	0	5,839	NA
3 Cassava farm	26,513	61,969	442	1,033	133.73%
4 Livestock prodcution	53,187	94,711	886	1,579	78.07%
5 Fishermen	30,398	54,618	507	910	79.68%
6 Naval Carpenter	64,090	230,990	1,068	3,850	260.42%
7 Aquaculture	11,785	18,392	196	307	56.06%
8 Maize and beans farm	3,230	9,068	54	151	180.70%
9 Sesame and soyabeans farm	5,256	15,578	88	260	196.42%
10 Small Barbershop	22,800	41,500	380	692	82.02%
*at full WP					

Table 31: Loan structure and IFAD contribution

		per sing	le enterprise,	beneficiary/	In MZN		Overall In USD
		Size of financing	Beneficiary	Banks	Share of IFAD	Share of IFAD	Total IFAD
			contribution		contribution	contribution	contribution
					(MZN)	(USD)	
Financing window	Enterprises						
1 Crowding-in fund	Shadenet	400,000	80,000	160,000	160,000	2,667	440,000
2 Crowding-in fund	Cassava processing plant	750,000	150,000	300,000	300,000	5,000	3,750,000
3 Line of Credit	Cassava farm	18,000			18,000	300	5,100,000
4 Line of Credit	Livestock production	52,000	7,000		45,000	750	2,925,000
5 Crowding-in fund	Fisheries	450,000	90,000	180,000	180,000	3,000	810,000
6 NA	Maize and beans farm*					NA	
7 NA	Sesame and soyabeans farm*	k				NA	
8 Line of Credit	Naval Carpenter	60,000			60,000	1,000	10,200,000
9 Line of Credit	Aquaculture	18,000			18,000	300	4,500,000
10 Line of Credit	Small Barbershop	18,000			18,000	300	4,800,000
							32,525,000
*analysed based or	n number of beneficiairies (and	not enterprises)					
Failure rate of loan	s 20%						

III. Economic Analysis

- 33. **Scope**. The economic analysis was carried on the project as a whole to evaluate its effect on the overall Mozambican economy.
- 34. **Methodology and assumptions**. An overall Project Economic Net Present Value (ENPV) and economic internal rate of return (EIRR) have been estimated by aggregating the net incremental benefits of all production models phased according to Project Years in which they are expected to be implemented. Benefit streams are analysed for a total period of 20 years. This is justified based on the rate of adoption of project interventions by farmers, in order to fully analyse the benefits that accrue once revenue streams are substantially equal for all project beneficiaries
- 35. The chosen Social Discount Rate (SDR) is 10%, based on the typical rates applied by the World Bank.
- 36. **Standard Conversion Factor (SCF).** The SCF was calculated based on the balance of payments information published by the Bank of Mozambique. Other sources of information were UNCOMTRADE international trade statistics database¹³⁸. Data on subsidies (on the import of fuels, mostly) was obtained from IMF Country Report on Mozambique, detailing that subsidies on fuels have ranged between 1% to 1.4% of GDP between 2013 and 2015. Mozambique has removed the subsidies on fuel in July 2017, however, for the purposes of our analysis we have considered a subsidy equivalent to 1.2% of GDP for the period considered in the balance of payments. The SCF is thus 0.88 based on the available data.

Table 32: Trade data - Mozambique - 2012 - 2016 (in millions MZN)

			Balance of p	ayments (USD	millions)			
year	imports	tax on imports	subsidies	exports tax	on exports	balance	GDP/a	average fuel
								subsidy (import)/b
2012	6,177	1,297	163	3,470	35	-2,707	14,534	163
2013	10,099	2,121	179	4,024	40	-6,075	16,019	179
2014	8,743	1,836	190	4,725	47	-4,018	16,961	190
2015	7,908	1,661	166	3,196	32	-4,712	14,798	166
2016	5,295	1,112	123	3,352	34	-1,943	11,015	123
ata on impots and expo	rts from World Ti	ade Yearbook (http:	s://comtrade.un.o	rg/pb/first.aspx)				
GDP data from http://e	data.worldbank.c	rg/country/mozamb	ique					
IMF estimates that imp	ort subsidy on fu	iel was on average 1	.2% of GDP betwee	en 2013 and 2015				

37. **Conversion factors and economic prices.** All prices used in the analysis were gathered at the domestic level. Mozambique applies import taxes ranging from 0% up to a maximum of 20% on

¹³⁸ https://comtrade.un.org/

most goods that cross the border¹³⁹. Valued Added Tax (VAT) is 17%. For the commodities under analysis in our models, we note that the export tax applied is zero.

- 38. Based on the import tax for each of the project inputs as published by Mozambique's Customs Authority, as well as based on the VAT and export taxes it was possible to calculate specific Conversion Factors for each input and output related to the production models. These conversion factors are presented in the tables presented in the annexes to the this working paper.
- 39. Economic prices were converted from financial prices per single input and output based on their classification as: tradable and exported goods/services, tradable and imported, non-tradable, and shadow wage. The production/revenue of all models was treated as tradable exported goods (label *Te* in the EFA models), and as such the economic prices were obtained as the market prices, free of VAT and free of export taxes, adjusted by the SCF. Regarding the inputs, the economic price for tradable national goods (*Tn*), was calculated as the market price free of VAT. The economic price for tradable imported goods (*Ti*) was to set to the market price, free of VAT and free of import duty, adjusted by the SCF. The economic price for non-tradable goods (NT) was set to the market price free of VAT.
- 40. . **Shadow wage.** The unemployment rate in Mozambique, as published by National Statistics and recorded by Government of Mozambique was 24.5% in 2016. For the purposes of our analysis we have calculated the economic wage in the project areas using the unemployment rate as a proxy. As proposed in the IFAD Guidelines for EFA, we have set: $EW = MW^*(1-UR)$, where eW is the economic wage, eW the market wage and eW unemployment rate. For the analysis carried in this eW = 0.755*eW.
- 41. **Project costs.** Project economic costs were computed COSTAB. The economic costs of the project were obtained from COSTAB based on a standard conversion factor of 0.88 as discussed above. Where costs included in COSTAB were also computed in the activity models the same were deducted from the overall economic costs to avoid double-counting. As such, all project costs that should be disbursed as credit to producers were deducted from the total costs used in this EFA.
- 42. Benefits from grants extended to project participants have been excluded from the overall project costs to avoid double-counting.
- 43. **Project profitability indicators.** The overall Economic Internal Rate of Return (EIRR) of the Project is estimated at 17.2%. The Economic Net Present Value (ENPV) is MZN 4,101 million, or USD 68.3 million. As ENPV is positive and EIRR is above the Social Discount Rate the project is deemed economically viable and acceptable for investment.
- 44. **Sensitivity Analysis**. The sensitivity analysis evaluated the robustness of the proposed interventions. Proxies analysed were: reduction of project benefits (due, for example, to failure of the capacity building initiatives of the project), increase in project costs, delays (of 1 and 2 years), and the increase in the failure rate of the loans provided under REFP.
- 45. The sensitivity analysis also assessed the result in the delay of overall project benefits by one or two years (all production models). The results of the analysis are presented in the table below:

Table 33: Sensitivity Analysis

Republic of Mozambique REFP - Rural Enterprise Financing Project Sensitivity Analysis (Economic)

	Base case	Reducti	on in project be	enefits	Increa	ise in project c	osts
Indicator	10%	-5%	-10%	-15%	10%	20%	30%
ENPV (millions MZN)	4,101	2,918	1,735	552	3,847	3,593	3,339
ENPV (millions USD)	68	49	29	9	64	60	56
EIRR	17%	15.2%	13.2%	11.0%	16.6%	16.0%	15.5%

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¹³⁹ http://www.at.gov.mz/por/Pauta-Aduaneira

Republic of Mozambique
Rural Enterprise Financing Project (REFP)
Detailed design report
Appendix 10:Economic and Financial Analysis

Republic of Mozambique

REFP - Rural Enterprise Financing Project

Sensitivity Analysis (Economic)

	Base case	Increase i	n failure rate o	of loans	Delay in accrual o	f project benefits
Indicator	10%	25%	30%	35%	1 year	2 year
ENPV (millions MZN)	4,101	2,885.5	1,670.1	454.8	1,392	-1,070
ENPV (millions USD)	68	48.1	27.8	7.6	23	-18
EIRR	17%	15.2%	13.1%	10.9%	13.6%	8.6%

- 46. The results of the analysis show that the reduction of project benefits of up to 15% do not endanger the economic suitability of the project. However, were benefits accrued from the project to drop to 20%, ENPV would drop to negative values, with the EIRR below SDR, rendering the project no longer economically viable.
- 47. An increase of project costs of a maximum of 30% would not seriously imperil the project as ENPV would remain positive and EIRR well above the SDR.
- 48. An increase in the failure of the loans of up to 35% (from its base value of 20%) would not cause the project to become unfeasible, as ENPV is still positive and EIRR is above the SDR. However, (and while not modelled in the tables), if the failure rate of the loan drops to 40% the project would become economically unfeasible as ENPV would drop to negative values and EIRR would become lower than the SDR.
- 49. Finally, a delay in accrual of project benefits of 2 years would render the project economically unfeasible.

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 10:Economic and Financial Analysis

Table 34: REFP Economic Analysis

Republic of Mozambique

Rural Enterprise Financing Project (REFP)

Production Models

Economc Budget (in MZN millions)

	Without								W	ith											
Production Models	Project								P	oject											
	1 to 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 Tomato Shadenet	11,724	-2,940	-1,371	1,734	5,121	10,016	11,661	19,695	21,022	22,067	22,830	22,512	22,605	22,605	22,605	22,937	22,571	23,602	23,602	23,602	23,602
2 Cassava processing plant	0	16,029	68,863	126,411	183,251	232,377	284,405	324,203	337,946	347,055	337,856	340,839	340,839	345,912	345,912	345,912	356,057	356,057	356,057	356,057	356,057
3 Cassava farm	497,294	30,805	102,736	202,279	309,814	417,928	501,920	562,076	616,418	670,760	718,709	755,470	779,444	792,230	795,427	795,427	795,427	795,427	795,427	795,427	795,427
4 Livestock production	155,982	12,076	24,133	58,840	97,270	142,127	183,339	214,292	236,237	245,449	250,326	251,952	251,952	251,952	251,952	251,952	251,952	251,952	251,952	251,952	251,952
5 Fishing	9,783	-4,165	-4,467	-4,387	-2,752	-974	788	9,345	9,282	9,187	9,291	9,192	9,122	9,262	9,192	9,122	9,262	9,192	9,122	9,262	9,192
6 Maize and beans farm	89,746	16,196	41,460	75,213	116,214	158,253	197,764	221,708	238,055	248,373	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223
7 Sesame and soya beans farm	154,573	56,907	131,447	208,446	269,033	332,998	397,317	421,212	434,486	444,433	455,473	455,473	455,473	455,473	455,473	455,473	455,473	455,473	455,473	455,473	455,473
8 Naval carpenter	568,693	121,657	386,007	733,443	1,105,083	1,449,587	1,698,587	1,821,904	1,871,967	1,886,532	1,880,085	1,881,375	1,886,532	1,880,085	1,881,375	1,886,532	1,880,085	1,881,375	1,886,532	1,880,085	1,881,375
9 Aquaculture	135,461	-1,687	19,836	56,898	113,627	163,794	202,975	226,551	233,547	235,989	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055
10 Barbershop	375,517	24,993	101,956	216,307	329,684	457,841	579,475	656,284	688,619	708,778	727,308	723,921	727,308	727,308	726,294	727,308	724,936	726,294	727,308	727,308	726,294
A Total production models cash flows	1,998,773	269,871	870,599	1,675,184	2,526,344	3,363,946	4,058,232	4,477,271	4,687,580	4,818,625	4,889,157	4,928,012	4,960,554	4,972,105	4,975,507	4,981,941	4,983,042	4,986,649	4,992,751	4,986,444	4,986,649
Cash flows corrected for failure rate of loans (20%)	1,998,773	230,517	731,060	1,396,879	2,098,125	2,789,407	3,365,602	3,710,401	3,884,573	3,993,461	4,052,664	4,083,749	4,109,782	4,119,024	4,121,745	4,126,892	4,127,772	4,130,658	4,135,540	4,130,494	4,130,658
B Project Economic Costs (COSTAB)		663,834	690,596	675,787	528,098	437,118	398,282														
C Net cash flows (A-B)	1,998,773	-433,317	40,465	721,092	1,570,027	2,352,289	2,967,320	3,710,401	3,884,573	3,993,461	4,052,664	4,083,749	4,109,782	4,119,024	4,121,745	4,126,892	4,127,772	4,130,658	4,135,540	4,130,494	4,130,658
Incremental Economic Benefits		-2,432,091	-1,958,309	-1,277,681	-428,747	353,516	968,547	1,711,628	1,885,799	1,994,687	2,053,891	2,084,976	2,111,009	2,120,250	2,122,971	2,128,119	2,128,999	2,131,885	2,136,767	2,131,721	2,131,885

	millions MZN	millions USD
ENPV (@10% SDR)	4,100.8	68.3
EIRR	17.2%	
ex.rate: USD/MZN	60.0	

Table 35: Full sensitivity analysis

Republic of Mozambique																						
REFP - Rural Enterprise Financing	Project																					
Sensitivity Analysis (Economic)																						
		Base case		on in project be			ise in project c			in failure rate		Delay in accrual of	project benefits									
Indicator		10%	-5%	-10%	-15%	10%	20%	30%	25%	30%	35%		2 year									
ENPV (millions MZN)		4,101	2,918	1,735	552	3,847	3,593	3,339	2,885.5	1,670.1	454.8	1,392	-1,070									
ENPV (millions USD)		68	49	29	9	64	60	56	48.1	27.8	7.6	23	-18									
EIRR		17%	15.2%	13.2%	11.0%	16.6%	16.0%	15.5%	15.2%	13.1%	10.9%	13.6%	8.6%									
Reduction in project benefits		wo	WP																			
	PY	1 to 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	-5%	1,998,773.4	-444,843.2	3,911.8	651,248.0	1,465,120.5	2,212,818.6	2,799,039.9	3,524,881.0	3,690,343.9	3,793,787.8	3,850,031.2	3,879,561.6	3,904,292.9	3,913,072.3	3,915,657.5	3,920,547.6	3,921,383.8	3,924,125.5	3,928,763.0	3,923,969.7	3,924,125.5
			-2,443,616.6	-1,994,861.6	-1,347,525.4	-533,652.9	214,045.2	800,266.5	1,526,107.6	1,691,570.5	1,795,014.4	1,851,257.8	1,880,788.2	1,905,519.5	1,914,298.9	1,916,884.1	1,921,774.2	1,922,610.4	1,925,352.1	1,929,989.6	1,925,196.3	1,925,352.1
	-10%	1,998,773.4	-456,369.1	-32,641.2	581,404.1	1,360,214.3	2,073,348.3	2,630,759.8	3,339,360.9	3,496,115.3	3,594,114.7	3,647,398.0	3,675,374.2	3,698,803.8	3,707,121.2	3,709,570.2	3,714,203.0	3,714,995.2	3,717,592.5	3,721,986.0	3,717,445.0	3,717,592.5
			-2,455,142.5	-2,031,414.6	-1,417,369.3	-638,559.1	74,574.9	631,986.4	1,340,587.5	1,497,341.9	1,595,341.3	1,648,624.6	1,676,600.8	1,700,030.4	1,708,347.8	1,710,796.8	1,715,429.6	1,716,221.8	1,718,819.2	1,723,212.6	1,718,671.6	1,718,819.2
	-15%	1,998,773.4	-467,894.9	-69,194.3	511,560.1	1,255,308.1	1,933,878.0	2,462,479.7	3,153,840.9	3,301,886.7	3,394,441.7	3,444,764.8	3,471,186.7	3,493,314.7	3,501,170.0	3,503,483.0	3,507,858.4	3,508,606.5	3,511,059.6	3,515,209.0	3,510,920.3	3,511,059.6
			-2,466,668.3	-2,067,967.7	-1,487,213.3	-743,465.3	-64,895.4	463,706.3	1,155,067.5	1,303,113.3	1,395,668.3	1,445,991.4	1,472,413.3	1,494,541.3	1,502,396.6	1,504,709.6	1,509,085.0	1,509,833.2	1,512,286.2	1,516,435.6	1,512,146.9	1,512,286.2
Increase in project costs																						
	10%	1,998,773.4	-499,700.8	-28,594.8	653,513.3	1,517,217.0	2,308,577.2	2,927,491.8	3,710,401.0	3,884,572.5	3,993,460.8	4,052,664.4	4,083,749.1	4,109,782.0	4,119,023.5	4,121,744.7	4,126,892.2	4,127,772.4	4,130,658.4	4,135,540.0	4,130,494.5	4,130,658.4
			-2,498,474.2	-2,027,368.2	-1,345,260.1	-481,556.4	309,803.8	928,718.4	1,711,627.6	1,885,799.2	1,994,687.4	2,053,891.1	2,084,975.7	2,111,008.6	2,120,250.1	2,122,971.3	2,128,118.8	2,128,999.0	2,131,885.0	2,136,766.6	2,131,721.1	2,131,885.0
	20%	1,998,773.4	-566,084.3	-97,654.3	585,934.6	1,464,407.2	2,264,865.4	2,887,663.6	3,710,401.0	3,884,572.5	3,993,460.8	4,052,664.4	4,083,749.1	4,109,782.0	4,119,023.5	4,121,744.7	4,126,892.2	4,127,772.4	4,130,658.4	4,135,540.0	4,130,494.5	4,130,658.4
			-2,564,857.7	-2,096,427.7	-1,412,838.8	-534,366.2	266,092.0	888,890.2	1,711,627.6	1,885,799.2	1,994,687.4	2,053,891.1	2,084,975.7	2,111,008.6	2,120,250.1	2,122,971.3	2,128,118.8	2,128,999.0	2,131,885.0	2,136,766.6	2,131,721.1	2,131,885.0
	30%	1,998,773.4	-632,467.7	-166,713.9	518,355.9	1,411,597.4	2,221,153.7	2,847,835.4	3,710,401.0	3,884,572.5	3,993,460.8	4,052,664.4	4,083,749.1	4,109,782.0	4,119,023.5	4,121,744.7	4,126,892.2	4,127,772.4	4,130,658.4	4,135,540.0	4,130,494.5	4,130,658.4
			-2,631,241.1	-2,165,487.3	-1,480,417.5	-587,176.0	222,380.3	849,062.0	1,711,627.6	1,885,799.2	1,994,687.4	2,053,891.1	2,084,975.7	2,111,008.6	2,120,250.1	2,122,971.3	2,128,118.8	2,128,999.0	2,131,885.0	2,136,766.6	2,131,721.1	2,131,885.0
Increase in failure rate of loans																						
	25%	1,998,773.4	-443,155.8	5,580.2	651,515.7	1,462,971.9	2,208,654.2	2,794,162.4	3,518,683.5	3,683,820.6	3,787,169.9	3,843,541.4	3,872,683.2	3,897,089.1	3,905,753.0	3,908,304.1	3,913,129.9	3,913,955.1	3,916,660.7	3,921,237.3	3,916,507.0	3,916,660.7
			-2,441,929.2	-1,993,193.2	-1,347,257.7	-535,801.5	209,880.8	795,389.0	1,519,910.1	1,685,047.2	1,788,396.5	1,844,768.0	1,873,909.8	1,898,315.7	1,906,979.6	1,909,530.7	1,914,356.5	1,915,181.7	1,917,887.3	1,922,463.9	1,917,733.6	1,917,887.3
	30%	1,998,773.4	-452,994.2	-29,304.4	581,939.4	1,355,917.1	2,065,019.4	2,621,004.9	3,326,965.9	3,483,068.6	3,580,878.9	3,634,418.3	3,661,617.4	3,684,396.2	3,692,482.5	3,694,863.6	3,699,367.6	3,700,137.8	3,702,663.0	3,706,934.5	3,702,519.6	3,702,663.0
			-2,451,767.5	-2,028,077.8	-1,416,834.0	-642,856.3	66,246.1	622,231.5	1,328,192.5	1,484,295.2	1,582,105.5	1,635,644.9	1,662,844.0	1,685,622.8	1,693,709.1	1,696,090.2	1,700,594.2	1,701,364.4	1,703,889.6	1,708,161.1	1,703,746.2	1,703,889.6
	35%	1,998,773.4	-462,832.5	-64,189.1	512,363.2	1,248,862.2	1,921,384.7	2,447,847.4	3,135,248.4	3,282,316.6	3,374,587.9	3,425,295.3	3,450,551.5	3,471,703.3	3,479,212.0	3,481,423.0	3,485,605.3	3,486,320.5	3,488,665.4	3,492,631.7	3,488,532.2	3,488,665.4
			-2,461,605.9	-2,062,962.5	-1,486,410.2	-749,911.2	-77,388.7	449,074.0	1,136,475.0	1,283,543.2	1,375,814.5	1,426,521.9	1,451,778.1	1,472,929.9	1,480,438.6	1,482,649.6	1,486,831.9	1,487,547.1	1,489,892.0	1,493,858.3	1,489,758.8	1,489,892.0
Reduction in all benefits due to	delays in i	implementati	ion																			
	1 year	1,998,773.4	-663,834.4	-460,078.6	55,273.5	868,781.0	1,661,007.0	2,391,124.6	3,365,602.0	3,710,401.0	3,884,572.5	3,993,460.8	4,052,664.4	4,083,749.1	4,109,782.0	4,119,023.5	4,121,744.7	4,126,892.2	4,127,772.4	4,130,658.4	4,135,540.0	4,130,494.5
			-2,662,607.8	-2,458,852.0	-1,943,499.9	-1,129,992.4	-337,766.4	392,351.2	1,366,828.6	1,711,627.6	1,885,799.2	1,994,687.4	2,053,891.1	2,084,975.7	2,111,008.6	2,120,250.1	2,122,971.3	2,128,118.8	2,128,999.0	2,131,885.0	2,136,766.6	2,131,721.1
	2 year	1,998,773.4	-663,834.4	-690,595.6	-445,269.9	202,962.5	959,761.3	1,699,842.7	2,789,406.6	3,365,602.0	3,710,401.0	3,884,572.5	3,993,460.8	4,052,664.4	4,083,749.1	4,109,782.0	4,119,023.5	4,121,744.7	4,126,892.2	4,127,772.4	4,130,658.4	4,135,540.0
			-2,662,607.8	-2,689,369.0	-2,444,043.3	-1,795,810.9	-1,039,012.1	-298,930.7	790,633.2	1,366,828.6	1,711,627.6	1,885,799.2	1,994,687.4	2,053,891.1	2,084,975.7	2,111,008.6	2,120,250.1	2,122,971.3	2,128,118.8	2,128,999.0	2,131,885.0	2,136,766.6

Table 36: Tomato shade net, 0.1ha - Financial budget

	·		_																				
enterprise	Tomato shadenet 0.1ha, with project																						
Parameters		-	Jnits																				
	District (he)	WOP	WP 0.1				-				Init		/b- (84781) T	-4-1 (8.4781)									
	Plot size (ha) Yield (Kg/ha)	0.1 30,000		WP - total o				quipment nadenet (comp		-	init na	0.10	ost/ha (MZN) T 2,700,000	270,000									
	Number of cycles for Without Project (WOP)	30,000	2	WF - LOLAI O	2 cycles			rigation system			ia ia	0.10	500,000	50,000									
	Sale Price at farme gate (MZN/Kg)	50	50					otal	i (diip)		10	0.10	300,000	320,000									
	Seeds (MZN/ha)	62,600	62,600				-							,									
	Fertilizer (NPK) (MZN/ha)	20,000	20,000																				
	Insecticide (MZN/ha)	25,000	25,000																				
	External Labour (hired, unskilled, daily rate)	171	171		erage month	ly rural wage, co	nsidering a 21 d	ay work persor	n-days month	n (National s	tatistics)												
			WOP	WP																			
Revenue			PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Revenue	Intensity rate		F11-20	60%	65%	70%	75%	80%	85%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
	Yield (kg)		3.000	3.600	3.900	4.200	4,500	4.800	5.100	5.400	5.400	5,400	5.400	5,400	5,400	5.400	5,400	5,400	5,400	5,400	5,400	5.400	5.400
	Self consumption (kg, calculated as 1% of production)		30	36	39	42	45	48	51	54	54	54	54	54	54	54	54	54	54	54	54	54	54
	Post harvest loss (@10% of production WOP, @5% of production WP)		300	180	195	210	225	240	255	270	270	270	270	270	270	270	270	270	270	270	270	270	270
	Volume of sales (kg)		2,670	3,384	3,666	3,948	4,230	4,512	4,794	5,076	5,076	5,076	5,076	5,076	5,076	5,076	5,076	5,076	5,076	5,076	5,076	5,076	5,076
	Revenue (MZN)		133,500	169,200	183,300	197,400	211,500	225,600	239,700	253,800	253,800	253,800	253,800	253,800	253,800	253,800	253,800	253,800	253,800	253,800	253,800	253,800	253,800
Investment Cos						_		_															_
	Shadenet (replaced every 20 years)			270,000	13.500	13.500	0	13.500	13.500	13.500	0	0	13.500	13.500	13.500	13.500	0	13.500	0	13.500	13.500	13.500	0
	Shadenet parts (valued @ 5% of investment cost) Drip irrigation system (replaced every 10 years)			50.000	13,500 0	13,500 0	13,500 0	13,500 0	13,500 0	13,500 0	13,500 0	13,500 0	13,500 0	13,500 50,000	13,500 0								
	Drip system parts (valued @ 5% of investment cost)			30,000	2.500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2.500	0,000	2,500	2,500	2,500	2,500	2.500	2,500	2,500	2,500	2,500
	Total		0	320,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	63,500	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
Operating costs	s			,	.,	-,	,,,,,,	.,	.,	.,	.,	,,,,,,	-,	,	.,	-,	.,	,,,,,,	,,,,,,,	,,	.,	,,	.,
	Seeds (improved)		6,260	11,268	12,207	13,146	14,085	15,024	15,963	16,902	16,902	16,902	16,902	16,902	16,902	16,902	16,902	16,902	16,902	16,902	16,902	16,902	16,902
	Fertilizers		2,000	3,600	3,900	4,200	4,500	4,800	5,100	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400
	Insecticides		7,500	4,500	4,875	5,250	5,625	6,000	6,375	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750
	Water (available from irrigation scheme)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Labarra	Total Operating costs		15,760	19,368	20,982	22,596	24,210	25,824	27,438	29,052	29,052	29,052	29,052	29,052	29,052	29,052	29,052	29,052	29,052	29,052	29,052	29,052	29,052
Labour	Hand watering (person-day)	45	7,695																				
	Planting (person-day)	9	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539
	weeding (person-days)	6	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026
	Application of fertilizer/insecticide (person-day)	3	1,026	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513
	harvesting (person-day)	9	1,026	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539	1,539
	Family labour		5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130
	Total labour		17,442	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747	9,747
O&M																							
	O&M farming equipment (shovels, hoes, buckets, wheelbarrow, etc)		1,576 4,200	1,937 4.200	2,098	2,260	2,421	2,582 4,200	2,744 4,200	2,905	2,905	2,905	2,905	2,905 4,200	2,905	2,905 4,200	2,905	2,905	2,905 4,200	2,905 4,200	2,905 4,200	2,905	2,905 4,200
	Contribution to O&M main irrigation system (@ MZN350 per month) O&M of shadenet (1% of investment)		4,200	4,200	4,200 2,700	4,200 2,700	4,200 2,700	4,200 2,700	2,700	4,200 2,700	4,200 2,700	4,200 2,700	4,200 2,700	4,200 2,700	4,200 2,700	4,200 2,700	4,200 2,700	4,200 2,700	2,700	4,200 2,700	2,700	4,200 2,700	4,200 2,700
	O&M of drip irrigaton system (5% of investment)		0	0	2,500	2,700	2,500	2,500	2,500	2,700	2,700	2,700	2,500	2,500	2,700	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
	Total O&M		5,776	6,137	11,498	11,660	11,821	11,982	12,144	12,305	12,305	12,305	12,305	12,305	12,305	12,305	12,305	12,305	12,305	12,305	12,305	12,305	12,305
Total Costs			38,978	355,252	58,227	60,003	61,778	63,553	65,329	67,104	67,104	67,104	67,104	114,604	67,104	67,104	67,104	67,104	67,104	67,104	67,104	67,104	67,104
Net Revenue B	EFORE financing		94,522	-186,052	125,073	137,397	149,722	162,047	174,371	186,696	186,696	186,696	186,696	139,196	186,696	186,696	186,696	186,696	186,696	186,696	186,696	186,696	186,696
Credit Analysis																							
Financial inflow	vs Disbursement of short term loan			160,000																			
	Transfer from previous period			160,000	23,291	24,001	24,711	25,421	26,132	26.842	26,842	26,842	26,842	45,842	26,842	26.842	26.842	26,842	26,842	26,842	26,842	26,842	26,842
	Contribution from own savings			80,000	23,231	24,001	24,711	23,421	20,132	20,042	20,642	20,042	20,042	43,042	20,042	20,042	20,042	20,042	20,042	20,642	20,042	20,042	20,042
	Grants (crowding-in fund)			160,000	0																		
	Sub-Total financial inflows			400,000	23,291	24,001	24,711	25,421	26,132	26,842	26,842	26,842	26,842	45,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842
Financial outflo	ows																						
	Short term principal			160,000																			
	Short term Interest			26,064																			
	Transfer to next period (40% of operating costs for following year)			23,291	24,001	24,711	25,421	26,132	26,842	26,842	26,842	26,842	45,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842
Net Floressian	Sub-Total financial outflows			209,355	24,001 -710	24,711 -710	25,421 -710	26,132	26,842 -710	26,842	26,842	26,842	45,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842	26,842
Net Financing Net Revenue A	FTER financing			190,645 4,593	124,363	136,687	149,012	-710 161,336	173,661	186,696	186,696	186,696	-19,000 167,696	19,000 158,196	186,696	186,696	186,696	186,696	186,696	186,696	186,696	186,696	186,696
Incremental ne				-89,929	29,841	42,165	54,490	66,814	79,139	92,174	92,174	92,174	73,174	63,674	92,174	92,174	92,174	92,174	92,174	92,174	92,174	92,174	92,174
								,	.,	- , -			-,				. , .						- ,
	Total investment needs		400,000				MZN 156,290																
	Beneficiary contribution (20%)		80,000			55%																	
	Loan from Financial Institution (40%)		160,000	E	s/C	1.80																	
	Grant from crowding-in fund (40%)	-	160,000																				
	Grace period	(0 months																				

Table 37: Tomato shade net, 0.1ha - Economic analysis

enterprise	Tomato shadenet 0.1ha, with project																						
			CF (ir	nputs)			Fro	m financial to ecor	nomic prices:														
	SCF	0.88	toma	ato seeds		0.627		Tradable, exporte				+EXPTAX+VAT*EX	(PTAX) = MP*CF										
	Unemployment rate	24.5%	fertil	lizers, herbicide	s, insecticide	0.734	Tn -	Tradable, national	l	EP = N	IP/(1+VAT)=MI	P*CF											
	VAT	17.0%	shad	lenet, drip syste	m, equipme	0.700																	
	Export tax	0.0%	CF (c	outputs)			Ti -	Tradable, imported	i (inputs)	EP = N	1P*SCF/(1+VAT	T+IMPTAX+VAT*IN	MPTAX)=MP*CF										
	Import tax (seeds)	20.0%	toma	atoes		0.752	NT	- Non tradable		EP = N	1P/(1+VAT)=MI	P*CF											
	Import tax (fertilizers, insecticides, herbicides)	2.5%	CF (I	abour)		0.755	SW	- Shadow Wage		SW=M	W*(1-UNEMPI	LOYMENTRATE)											
	Import tax (shadenet, irrigation equipment)	7.5%		non tradable)		0.855		- Market Price	VAT	- Valued Added Tax		PTAX - import Tax											
			(,				Economic Price		TAX - Export Tax		TAX - Export Tax											
			WOP	WP																			
Revenue			PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Gross benefits (MZN)		100,410	127,262	137,867	148,472	159,077	169,682	180,287	190,892	190,892	190,892	190,892	190,892	190,892	190,892	190,892	190,892	190,892	190,892	190,892	190,892	190,892
Investment	t Costs																						
	Shadenet (replaced every 20 years)		0	188,909	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Shadenet parts (valued @ 5% of investment cost)		0	0	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445	9,445
	Drip irrigation system (replaced every 10 years)		0	34,983	0	0	0	0	0	0	0	0	0	34,983	0	0	0	0	0	0	0	0	0
	Drip system parts (valued @ 5% of investment cost)		0	0	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	0	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749
	Total		0	223,892	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	44,429	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195
Operating	costs																						
	Seeds (improved)		3.924	7,063	7,651	8.240	8.828	9.417	10,005	10,594	10,594	10,594	10,594	10,594	10.594	10,594	10,594	10,594	10,594	10.594	10,594	10,594	10,594
	Fertilizers		1.468	2,642	2,862	3,082	3,302	3,522	3,742	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962	3,962
	Insecticides		5,503	3,302	3,577	3,852	4,128	4,403	4,678	4,953	4,953	4,953	4,953	4,953	4,953	4,953	4,953	4,953	4,953	4,953	4,953	4,953	4,953
	Water (available from irrigation scheme)		3,303	3,302	3,311	3,032	4,120	4,403	4,070	4,555	4,555	4,555	4,555	4,555	4,555	4,555	4,555	4,555	4,555	4,555	4,555	4,555	4,555
	Total Operating costs		10,895	13,006	14.090	15,174	16,258	17,342	18,426	19,509	19,509	19,509	19,509	19,509	19,509	19,509	19,509	19,509	19,509	19,509	19,509	19.509	19,509
Labour	Total Operating costs		10,033	13,000	14,030	13,174	10,236	17,342	10,420	13,303	13,303	15,505	13,303	19,509	13,303	13,303	19,303	19,303	15,505	15,505	13,303	19,303	13,303
Labour	Hand watering (passen day)	45	5,810	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	Hand watering (person-day)	45		-	4 453	4.453	-	-	4 4 6 2	-	4.453	4.452	-		4 4 6 2	4 452	-	4.453	-	-	4 4 6 2	4.453	-
	Planting (person-day)	9	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162
	weeding (person-days)	6	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775
	Application of fertilizer/insecticide (person-day)	3	775	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387
	harvesting (person-day)	9	775	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162	1,162
	Family labour		3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873	3,873
	Total labour		13,169	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359
0&M																							
	O&M farming equipment (shovels, hoes, buckets, wheelbarrow, etc)		1,089	1,301	1,409	1,517	1,626	1,734	1,843	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951
	Contribution to O&M main irrigation system (@ MZN 350 per month)		4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200
	O&M of shadenet (1% of investment)		0	0	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889
	O&M of drip irrigaton system (5% of investment)		0	0	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749
	Total O&M		5,289	5,501	9,247	9,356	9,464	9,572	9,681	9,789	9,789	9,789	9,789	9,789	9,789	9,789	9,789	9,789	9,789	9,789	9,789	9,789	9,789
TOTAL COS	TS		29,353	249,758	41,891	43,083	44,275	45,468	46,660	47,852	47,852	47,852	47,852	81,086	47,852	47,852	47,852	47,852	47,852	47,852	47,852	47,852	47,852
Net Econor	nic Benefits		71,057	-122,496	95,976	105,389	114,801	124,214	133,627	143,040	143,040	143,040	143,040	109,806	143,040	143,040	143,040	143,040	143,040	143,040	143,040	143,040	143,040
Incrementa	al Net Economic Benefits			-193,554	24,918	34,331	43,744	53,157	62,570	71,983	71,983	71,983	71,983	38,749	71,983	71,983	71,983	71,983	71,983	71,983	71,983	71,983	71,983
	E	NPV @ 109	6 MZN	N 256,310	EIRR 25	.0%	B/C ratio 2.5																
	Phasing in of benefits	wo	P: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	# of beneficiaries		165	24	30	30	30	20	31														
	1			-2,940	2,303	2,529	2,755	2,981	3,207	3,433	3,433	3,433	3,433	2,635	3,433	3,433	3,433	3,433	3,433	3,433	3,433	3,433	3,433
	2				-3,675	2,879	3,162	3,444	3,726	4,009	4,291	4,291	4,291	4,291	3,294	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291
	- 3				-,	-3.675	2,879	3,162	3,444	3,726	4,009	4,291	4,291	4,291	4,291	3,294	4,291	4,291	4,291	4,291	4,291	4,291	4,291
	4					-,	-3,675	2,879	3,162	3,444	3,726	4,009	4,291	4,291	4,291	4,291	3,294	4,291	4,291	4,291	4,291	4,291	4,291
	-						3,073	-2.450	1.920	2.108	2,296	2.484	2.673	2.861	2.861	2.861	2.861	2.196	2.861	2.861	2.861	2.861	2.861
	5							-2,430	-3.797	2,108	3.267	3,559	3.851	4.142	4,434	4.434	4.434	4.434	3,404	4.434	4,434	4.434	4,434
	Total ('000 MZN)		11,724	-2,940	-1.371	1.734	5,121	10.016	11.661	19.695	21,022	22,067	22.830	22,512	22.605	22.605	22.605	22.937	22.571	23.602	23.602	23.602	23.602
	Total (UUU MZN)		11,/24	-2,540	-1,5/1	1,/34	3,121	10,010	11,001	19,095	21,022	22,007	22,030	22,312	22,000	22,000	22,003	22,957	22,3/1	23,002	23,002	23,002	23,002

Table 38: Cassava small processing unit - Financial budget

Enterprise	Cassava small processing unit, WP																					
Parameter	s																					
	Raw material processed (t/year)		ıll time produc				Equipment		ınit			otal (MZN)										
	Chips produced (t/year)	-	chips from 4K	g fresh roots			Facility/buildir	-	n2	100	1,500	150,000										
	Purchase price of fresh roots (MZN/Kg)	2					Chipping mach		number	2	45,000	90,000										
	Market price for chips (MZN/Kg)	11.5					Drying station		number	1	15,000	15,000										
	Transport (per 50Kg bag, for 10Km)	5					Water tanks (2		number	2	20,000	40,000										
	Electricity (MZN/year)		uated from a f	lour processing	plant of the san	ne scale	Miscellaneous	(handtools, p	protection eq			10,000										
	Water, price per 1000lt (MZN)	6								1	otal	305,000										
	Bags (50kg) (MZN/bag)	7.5																				
	labour (person-month)	3,591																				
Revenue			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Production rate		70%	75%	80%	85%	90%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
	Prouction of chips (kg)	2	175,000	187,500	200,000	212,500	225,000	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500	237,500
	Sale of chips (MZN)	2,0	012,500	2,156,250	2,300,000	2,443,750	2,587,500	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250	2,731,250
Investmen	t costs																					
	Equipment		305,000	0	0	0	0	0	0	0	0	145,000	0	0	0	0	0	0	0	0	0	0
Operating																						
	Purchase of raw material (kg)		700,000	750,000	800,000	850,000	900,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000	950,000
	Cost of raw material		400,000	1,500,000	1,600,000	1,700,000	1,800,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000
	Bags	5,000	26,250	28,125	30,000	31,875	33,750	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625	35,625
	Transport (farm gate to factory)	.,	49,000	56,250	64,000	72,250	81,000	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250	90,250
	Transport (factory to market)		12,250	14,063	16,000	18,063	20,250	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563	22,563
	Water (@5lt per kg)	5	19,950	21,375	22,800	24,225	25,650	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075	27,075
	Electricity	-	47,670	51,075	54,480	57,885	61,290	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695	64,695
	Total (MZN)	1.5	555,120	1,670,888	1,787,280	1,904,298	2,021,940	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208	2,140,208		
Labour		_,	,	_,,	_,,	_,	_,,-	_,,_	_,,_	_,,	_,,	_,,	_,,	_,,_	_,,	_,,	_,,	_,,	_,,	_,,	_,,	_,,
Luboui	Washing, peeling, chipping (for 1 year)	5	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460	215,460
	Management	1	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
	Total (MZN)	_	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460	225,460
0&M	Total (MEN)		.23,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400	223,400
Odivi	O&M on equipment (5% investment cost)		15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250
	Replacement of machinery/drying station		0	15,250	13,230	15,250	15,250	13,230	13,230	15,250	13,230	13,230	13,230	13,230	13,230	13,230	15,250	13,230	13,230	15,250	13,230	
	Total (MZN)		15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250	15,250
TOTAL CO		3	100.830	1.911.598	2.027.990	2.145.008	2.262.650	2.380.918	2.380.918	2.380.918	2.380.918	2.525.918	2.380.918	2.380.918	2.380.918	2.380.918	2.380.918	2.380.918	2.380.918	2.380.918		
	ue BEFORE Financing	,	-88,330	244,653	272,010	298,743	324,850	350,333	350,333	350,333	350,333	205,333	350,333	350,333	350,333	350,333	350,333	350,333	350,333	350,333	350,333	350,333
Net neven	de bel one i maneing		-00,330	244,033	272,010	250,743	324,030	330,333	330,333	330,333	330,333	203,333	330,333	330,333	330,333	330,333	330,333	330,333	330,333	330,333	330,333	330,333
Credit Ana Financial i					2112			B./ C				B144			m/4.5			BV4.5		B1/40	B1/4.0	
			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
				PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Disbursement of short term loan/a		300,000																			
	Disbursement of short term loan/a Transfer from previous period (working capita	l)	300,000	PY2 200,000	PY3 200,000	PY4 200,000	PY5	PY6	PY7	PY8 200,000	PY9 200,000	PY10 200,000	PY11 200,000	PY12 200,000	PY13	PY14 200,000	PY15 200,000	PY16 200,000	PY17 200,000	PY18 200,000	PY19 200,000	PY20 200,000
	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings	l)	300,000 0 150,000																			
	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund)	l)	300,000 0 150,000 300,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Financial c	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows	l)	300,000 0 150,000																			
Financial c	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows	1)	300,000 0 150,000 300,000 750,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Financial c	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal	1)	300,000 0 150,000 300,000 750,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Financial c	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest	1)	300,000 0 150,000 300,000 750,000 300,000 48,871	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Financial c	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest Transfer to next period (working capital)	1)	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest Transfer to next period (working capital) Sub-Total financial outflows	i)	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest Transfer to next period (working capital) Sub-Total financial outflows ing	1)	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871 201,129	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest Transfer to next period (working capital) Sub-Total financial outflows	1)	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000	200,000 200,000 200,000 200,000 0
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows sutflows Short term principal Short term Interest Transfer to next period (working capital) Sub-Total financial outflows sing ue AFTER Financing	I)	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871 201,129	200,000 200,000 200,000 200,000 0 244,653	200,000 200,000 200,000 200,000 0 272,010	200,000 200,000 200,000 200,000 0 298,743	200,000 200,000 200,000 200,000 0															
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term interest Transfer to next period (working capital) Sub-Total financial outflows ing ue AFTER Financing Total financing package	MZN 750,000	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871 201,129	200,000 200,000 200,000 200,000 0 244,653	200,000 200,000 200,000 200,000 0 272,010	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0	200,000 200,000 200,000 200,000 0
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest Transfer to next period (working capital) Sub-Total financial outflows ing ue AFTER Financing Total financing package Beneficiary contribution (20%)	MZN 750,000 150,000	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871 201,129	200,000 200,000 200,000 200,000 0 244,653 FNPV @ FIRR	200,000 200,000 200,000 0 272,010 22% M NA	200,000 200,000 200,000 200,000 0 298,743	200,000 200,000 200,000 200,000 0															
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term interest Transfer to next period (working capital) Sub-Total financial outflows ing ue AFTER Financing Total financing package	MZN 750,000 150,000 300,000	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871 201,129	200,000 200,000 200,000 200,000 0 244,653	200,000 200,000 200,000 200,000 0 272,010	200,000 200,000 200,000 200,000 0 298,743	200,000 200,000 200,000 200,000 0															
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest Transfer to next period (working capital) Sub-Total financial outflows ing ue AFTER Financing Total financing package Beneficiary contribution (20%) Loan (40%) Grant (40%)	MZN 750,000 150,000 300,000 300,000	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871 201,129	200,000 200,000 200,000 200,000 0 244,653 FNPV @ FIRR	200,000 200,000 200,000 0 272,010 22% M NA	200,000 200,000 200,000 200,000 0 298,743	200,000 200,000 200,000 200,000 0															
Net Financ	Disbursement of short term loan/a Transfer from previous period (working capita Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows utflows Short term principal Short term Interest Transfer to next period (working capital) Sub-Total financial outflows ing ue AFTER Financing Total financing package Beneficiary contribution (20%) Loan (40%) Grant (40%)	MZN 750,000 150,000 300,000	300,000 0 150,000 300,000 750,000 300,000 48,871 200,000 548,871 201,129	200,000 200,000 200,000 200,000 0 244,653 FNPV @ FIRR	200,000 200,000 200,000 0 272,010 22% M NA	200,000 200,000 200,000 200,000 0 298,743	200,000 200,000 200,000 200,000 0															

Table 39: Cassava small processing unit – Economic analysis

Enterprise	Cassava small processing unit. WP																					
					CF (costs)			From financia		•												
	SCF		0.88		cassava roots	0.627		Te - Tradable,				,	AX+VAT*EXPTA	X) = MP*CF								
	Unemployment rate		24.50%		Equipment	0.700		Tn - Tradable,	national		EP = MP/(1+\	/AT)=MP*CF										
	SCF = 1				CF (outputs)																	
	VAT		17.00%		cassava chips	0.752		Ti - Tradable, i		,			AX+VAT*IMPT	AX)=MP*CF								
	Export tax (applicable to all exports)		0.00%		CF (labour)	0.755		NT - Non trada			EP = MP/(1+\											
	Import tax (cassava roots)		20.00%		CF (non tradable,	0.855		SW - Shadow	- 0 -		•	UNEMPLOYME	,									
	Import tax (chipping machine, drying station))	7.50%					MP - Market F				IMPTAX - impo										
								EP - Economic	Price	EXPTAX - Exp	ort Tax	EXPTAX - Expo	rt Tax									
Revenue			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY2
	Sale of chips (MZN)		1,513,675	1,621,795	1,729,915	1,838,034	1,946,154	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274	2,054,274
Investment co	osts																					
	Equipment		213,397	0	0	0	0	0	0	0	0	101,451	0	0	0	0	0	0	0	0	0	(
Operating Co			-,									, -										
3	Cost of raw material		877,493	940,171	1,002,849	1,065,527	1,128,205	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883	1,190,883
	Bags	0	22,436	24,038	25,641	27,244	28,846	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449	30,449
	Transport (farm gate to factory)		41.880	48.077	54.701	61,752	69,231	77,137	77,137	77,137	77.137	77,137	77,137	77,137	77.137	77,137	77,137	77,137	77,137	77,137	77,137	77,137
	Transport (factory to market)		10,470	12,019	13,675	15,438	17,308	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284	19,284
	Water (@5lt per kg)	5	17,051	18,269	19,487	20,705	21,923	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141	23,141
	Electricity		40,744	43,654	46,564	49,474	52,385	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295	55,295
	Total (MZN)		1,010,074	1,086,229	1,162,917	1,240,140	1,317,897	1,396,189	1,396,189				1,396,189	1,396,189	1,396,189	1,396,189	1,396,189	1,396,189	1,396,189	1,396,189	1,396,189	1,396,189
Labour	,																		-	-		
	Washing, peeling, chipping (for 1 year)	5	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672	162,672
	Management (skilled)	1	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
	Total (MZN)		172,672	172,672	172,672	172,672	172,672	172,672	172,672	172,672	172,672	172,672	172,672	172,672	172,672	172,672	172.672	172,672	172,672	172,672	172,672	172,672
0&M	,		,	,-	,	,		,-	,-	,	,-	,-	,	,-	,-	,-	,	,-	,	,	,-	,-
	O&M on equipment (5% investment cost)		10,670	10,670	10,670	10.670	10,670	10,670	10,670	10,670	10,670	10,670	10,670	10,670	10,670	10,670	10.670	10,670	10,670	10,670	10,670	10,670
	Replacement of machinery/drying station		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total (MZN)		10.670	10.670	10.670	10.670	10.670	10.670	10.670	10.670	10.670	10,670	10.670	10.670	10.670	10.670	10.670	10.670	10.670	10.670	10,670	10,670
Total Costs	,		1,406,813	1,269,571	1,346,260	1,423,482	1,501,240	1,579,531	1,579,531	1,579,531	1,579,531	1,680,982	1,579,531	1,579,531	1,579,531	1,579,531	1,579,531	1,579,531	1,579,531	1,579,531	1,579,531	1,579,531
Net Economic	c Benefits		106,862	352,224	383,655	414,552	444,914	474,743	474,743	474,743	474,743	373,292	474,743	474,743	474,743	474,743	474,743	474,743	474,743	474,743	474,743	474,743
			ENPV @ :	10%	MZN 3,438,878	EIRR	NA	B/C ratio	1.3													
					2,,			_,	-													
Phasing in of		OP: P	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
# of enterpris	es	750	150	150		100	100	100										62,370	169,400	0	0	(
	1		16,029	52,834	57,548	62,183	66,737	71,211	71,211	71,211	71,211	55,994	71,211	71,211	71,211	71,211	71,211	71,211	71,211	71,211	71,211	71,21
	2			16,029	52,834	57,548	62,183	66,737	71,211	71,211	71,211	71,211	55,994	71,211	71,211	71,211	71,211	71,211	71,211	71,211	71,211	71,21
	3				16,029	52,834	57,548	62,183	66,737	71,211	71,211	71,211	71,211	55,994	71,211	71,211	71,211	71,211	71,211	71,211	71,211	71,21
	4					10,686	35,222	38,366	41,455	44,491	47,474	47,474	47,474	47,474	37,329	47,474	47,474	47,474	47,474	47,474	47,474	47,47
	5						10,686	35,222	38,366	41,455	44,491	47,474	47,474	47,474	47,474	37,329	47,474	47,474	47,474	47,474	47,474	47,47
	6							10,686	35,222	38,366	41,455	44,491	47,474	47,474	47,474	47,474	37,329	47,474	47,474	47,474	47,474	47,474
Total ('000 M	1ZN)	0	16,029	68,863	126,411	183,251	232,377	284,405	324,203	337,946	347,055	337,856	340,839	340,839	345,912	345,912	345,912	356,057	356,057	356,057	356,057	356,057

Net Revenue

Table 40: Cassava farm, 1ha – Financial budget (without project)

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Enterprise	Cassava farm 1ha, without project																					
Parameter	s Plot size (ha)	1.0																				
	Yield (Kg/ha)	30,000	One production	cycle per yea	ir																	
	Sale Price at farme gate (MZN/Kg)	2	Farm gate price																			
	Cuttings (MZN/ha)	400	400 cuttings pe	r ha, at a unit	cost of 10 M	N/cutting																
	Fertilizer (NPK) (MZN/ha)	0	20:10:10, 10 (50	OKg) bags @4	50/bag																	
	herbicide (MZN/ha)	0	glyphosate, 5l/h	na																		
	Insecticide (MZN/ha)	0																				
	lime (MZN/ha)	0	5 (50Kg) bags pe	er ha																		
	Compost (MZN/ha)	1,000	Cost evaluated	as cost of mat	terials used b	y farmer to pi	oduce compo	ost based on o	organic mater	al from his fa	rms (weeds)											
	External Labour (hired, unskilled, daily rate)	171	Based on averag	ge official mo	nthly rural wa	ge, consideri	ng a 21 day w	ork person-da	ays month (Na	ational statist	ics)											
Revenue			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Output (kg)		30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
	Self consumption (calculated as 1% of production)	1%	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Post harvest loss (@20% of production)	20%	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
	Revenue (MZN)		47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400	47,400
Operating	costs																					
	Inputs																					
	Cuttings		400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
	Fertilizers		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	herbicide		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Compost		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Total Inputs		1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Labour																						
	Skilled		_	_	_	_	_	_		_	_		_		_	_	_	_	_	_	_	_
	Tractor: Land preparation (plowing, harrowing, ridging)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unskilled																					
	Land preparation (plowing, harrowing, ridging - non mechanized)	10	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710
	destumping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Planting (person-days/ha)	8	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368
	weeding (person-days/ha)	5	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513
	Application of lime/herbicide/fertilizer/insecticide (person-days)	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	harvesting (person-days/ha)	10	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710
	Family labour (person-days/ha)	10	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710
	Total labour		7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011	7,011
TOTAL COS	STS		8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411	8,411

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Table 41: Cassava farm, 1ha – Financial budget (with project)

Entorneiss	Cossess form the with project																					
Enterprise	Cassava farm 2ha, with project																					
Paramete	rs Plot size (ha)	1																				
	Yield (Kg/ha)	40,000	One production	n cycle per ye	ar		erbicide (MZN					yphosate, 5I/	ha									
	Sale Price at farme gate (MZN/Kg)	2.5					secticide (MZ	N/ha)			4,500											
	Cuttings (MZN/ha)	600	600 cuttings pe			-						(50Kg) bags p										
	Fertilizer (NPK) (MZN/ha)	4,500	20:10:10, 10 (5	0Kg) bags @4	50/bag		ompost (MZN									roduce compo						
	Tractor hire (per day/ha)	2,000				E	ternal Labour	r (hired, unsk	illed, daily rat	e)	171 Ba	ased on avera	ige official mo	nthly rural wa	age, consider	ing a 21 day w	ork person-d	ays month (N	ational statis	tics)		
_		4000																				
Revenue			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Success rate of output		60%	65%	70%	75%	80%	85%	90%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 40,000
	Output - fresh roots (kg)	F0/	24,000	26,000	28,000	30,000	32,000	34,000	36,000	38,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	
	Self consumption (calculated as 5% of production)	5% 10%	1,200	1,300	1,400	1,500	1,600	1,700 3,400	1,800	1,900	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000 4,000	2,000	2,000	2,000
	Post harvest loss (@10% of production) Marketable produce	10%	2,400 20,400	2,600 22,100	<i>2,800</i> 23,800	<i>3,000</i> 25,500	<i>3,200</i> 27,200	28,900	<i>3,600</i> 30,600	<i>3,800</i> 32,300	<i>4,000</i> 34,000	<i>4,000</i> 34,000	4,000 34,000	34,000	4,000 34,000	<i>4,000</i> 34,000	<i>4,000</i> 34,000					
	Revenue (MZN)		51,000	55,250	59,500	63,750	68,000	72,250	76,500	80,750	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000
Operating			51,000	55,250	39,300	03,730	00,000	72,230	70,500	80,750	65,000	85,000	85,000	85,000	85,000	85,000	65,000	65,000	85,000	65,000	85,000	85,000
Operating	Inputs																					
	Cuttings		600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
	Fertilizers		4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
	herbicide		3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
	lime		5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
	Compost		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Sub-total Inputs		8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600
Labour																						
	Skilled																					
	Tractor: Land preparation (plowing, harrowing, ridging)		4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
	Unskilled	#																				
	Land preparation (plowing, harrowing, ridging - non mechanized)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	destumping (person-days/ha)	10	1,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Planting (person-days/ha)	8	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368	1,368
	weeding (person-days/ha)	5	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513	513
	Application of lime/herbicide/fertilizer/insecticide (person-days)	10	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275
	harvesting (person-days)	10	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710
	Family labour (person-days)	15	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565
	Sub-total labour		16,141	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431	14,431
TOTAL CO	Net Revenue BEFORE Financing		24,741 26,259	23,031 32,219	23,031 36,469	23,031 40,719	23,031 44,969	23,031 49,219	23,031 53,469	23,031 57,719	23,031 61,969	23,031 61,969	23,031 61,969	23,031 61,969	23,031 61,969	23,031 61,969						
	Net revenue before rinancing		20,233	32,213	30,403	40,713	44,505	43,213	33,403	37,713	01,505	01,505	01,303	01,505	01,303	01,505	01,505	01,505	01,505	01,303	01,505	01,303
Credit Ana	alvsis																					
Financial i																						
	Disbursement of short term loan/a		18,000																			
	Transfer from previous period (as working capital)		0	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600
	Contribution from own savings		0																			
	Grants (graduation fund, crowding in fund)		0	0																		
	Sub-Total financial inflows		18,000	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600
Financial o	outflows																					
	Short term principal		18,000	0	0	0																
	Short term Interest		4,050	0	0	0	0															
	Transfer to next period (as working capital)		8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600
	Sub-Total financial outflows		30,650	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600	8,600
Net Finan			-12,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	Net Revenue AFTER Financing		13,609	32,219	36,469	40,719	44,969	49,219	53,469	57,719	61,969	61,969	61,969	61,969	61,969	61,969	61,969	61,969	61,969	61,969	61,969	61,969
Increment	tal net revenue AFTER financing		-25,380	-6,770	-2,520	1,730	5,980	10,230	14,480	18,730	22,980	22,980	22,980	22,980	22,980	22,980	22,980	22,980	22,980	22,980	22,980	22,980
	Total financing package	18,000		NPV @		MZN 6,099																
	Loan (Line of Credit)	18,000	IR		25%																	
	Grace period	0 months	В,	/C	2.83																	
	Interest rate (APR)	22.5%																				

Table 42: Cassava farm, 1ha – Economic analysis

F	Cassava farm 1ha, with project																						
Enterprise	Cassava farm 1na. with project SCF	0.88	0	F (costs)			Fr	om financial	to economic	nrices:													
	Unemployment rate	24.50%		assava cutting	s	0.627			exported (for		P= MP*SCF/(1	+VAT+FXPTA	X+VAT*EXPT	AX) = MP*CF									
	SCF = 1			quipment	-	0.700		n - Tradable, r			P = MP/(1+VA			,									
	VAT	17.00%		ertilizers, herb	icides. lime	0.734					,,	,											
	Export tax	0.00%		F (outputs)	,		Ti	- Tradable, ir	nported (inpu	its) E	P = MP*SCF/(1+VAT+IMPT	AX+VAT*IMPT	FAX)=MP*CF									
	Import tax (cassava cuttings)	20.00%		assava roots		0.752		T - Non trada			P = MP/(1+VA			,									
	Import tax (chipping machine, drying station)	7.50%	C	F (labour)		0.755	S۱	W - Shadow V	Vage		W=MW*(1-UI		NTRATE)										
	Import tax (fertilizers, insecticides, herbicides, lime)	2.50%	C	F (non tradabl	le, national)	0.855		IP - Market Pr			dded Tax IN												
							EF	P - Economic I	Price E	KPTAX - Expo	rt Tax E	XPTAX - Expo	rt Tax										
			WOP	WP																			
Revenue			PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Economic benefits (MZN)		35,651	38,359	41,556	44,752	47,949	51,145	54,342	57,538	60,735	63,932	63,932	63,932	63,932	63,932	63,932	63,932	63,932	63,932	63,932	63,932	63,932
Operating	costs																						
	Inputs																						
	Cuttings		251	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
	Fertilizers		0	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302	3,302
	herbicide		0	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568
	lime		0	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669	3,669
	Compost		855	855	855	855	855	855	855	855	855	855	855	855	855	855	855	855	855	855	855	855	855
	Sub-total Inputs		1,105	10,770	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246	6,246
Labour																							
	Skilled																						
	Tractor: Land preparation (plowing, harrowing, ridging)			3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020	3,020
	Unskilled	#																					
	Land preparation (non-mechanized)		1,291																				
	destumping (person-days/ha)	10	0	1,291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Planting (person-days/ha)	8	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033
	weeding (person-days/ha)	5	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387	387
	Application of lime/herbicide/fertilizer/insecticide (person-days)	10	0	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228
	harvesting (person-days)	10 15	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291	1,291
	Family labour (person-days)	15	1,291	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937
T-1-101-	Sub-total labour		5,293	12,186	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895	10,895
Total Costs	mic Benefits		6,399	22,957 15,402	17,142	17,142 27,610	17,142 30,807	17,142 34,003	17,142 37,200	17,142	17,142 43,593	17,142 46,790											
	al Net Economic Benefits		29,253	-13,850	24,414 -4,839	-1,642	1,554	4,751	7,948	40,397 11,144	14,341	17,537	17,537	17,537	17,537	17,537	17,537	17,537	17,537	17,537	17,537	17,537	17,537
increment	at Net Economic Benefits			-13,630	-4,033	-1,042	1,334	4,731	7,540	11,144	14,341	17,337	17,337	17,337	17,337	17,337	17,337	17,337	17,337	17,337	17,337	17,337	17,337
		ENPV @	10% N	MZN 58,827	IRR	30%	B/C	3.0															
	Phasing in of benefits	v	VOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	# of enterprises		17,000	2,000	3,500	4,000	3,500	3,000	1,000														
	1			30,805	48,827	55,221	61,614	68,007	74,400	80,793	87,186	93,580	93,580	93,580	93,580	93,580	93,580	93,580	93,580	93,580	93,580	93,580	93,580
	2				53,909	85,448	96,636	107,824	119,012	130,200	141,388	152,576	163,764	163,764	163,764	163,764	163,764	163,764	163,764	163,764	163,764	163,764	163,764
	3					61,610	97,655	110,441	123,228	136,014	148,800	161,587	174,373	187,159	187,159	187,159	187,159	187,159	187,159	187,159	187,159	187,159	187,159
	4						53,909	85,448	96,636	107,824	119,012	130,200	141,388	152,576	163,764	163,764	163,764	163,764	163,764	163,764	163,764	163,764	163,764
	5							46,207	73,241	82,831	92,421	102,010	111,600	121,190	130,780	140,369	140,369	140,369	140,369	140,369	140,369	140,369	140,369
	6								15,402	24,414	27,610	30,807	34,003	37,200	40,397	43,593	46,790	46,790	46,790	46,790	46,790	46,790	46,790
	Total ('000 MZN)		497,294	30,805	102,736	202,279	309,814	417,928	501,920	562,076	616,418	670,760	718,709	755,470	779,444	792,230	795,427	795,427	795,427	795,427	795,427	795,427	795,427

Table 43: Livestock – Financial budget (without project)

Enterprise	Livestock production, WOP																					
Parametei	s Initial stock cows (nr.)	13			La	bour cost (M	ZN/person-da	v)		171												
	Initial stock bulls (nr.)	1					-day/animal r			8.55												
	Calving period (months)	24			Ve	eterinary cost	(MZN/anima	l per year)	•	15												
	Calves mortality (%)	50%			. ti	ick treatment	(MZN/anima	l per year)		0												
	Cow replacement	2 he	ifers per year		. Ir	nternal parasi	ite control (M	ZN/animal po	er year)	0												
	Live weight at sale - weaner (kg)	220	63% of	cow weight	. V	accines (MZN	l/animal per	year)		15												
	Live weight at sale - heifer (kg)	280	80% of	cow weight	Fe	eding (MZN/	animal per ye	ar) @cow we	eight	0												
	Live weight at sale - cow (kg)	350			W	orking capita	l requirement	: (% of operat	ting costs)	20%												
	Sale price live animals (MZN/kg LW)	47.5 far	rm gate price								2.925											
Stocks (he	ads)		PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Calving rate		60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
	Adults mortality		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
	Calves		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	heifer		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	cows		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	bulls		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sales (hea	•																					
	weaners		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	heifers		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
_	cows		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Revenue																						
	Variation of ideal weight of anima at sale time		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
	Sales of weaners (MZN)		8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360	8,360
	Sales of heifers (MZN)		21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280	21,280
	Sales of cows (MZN) Total		26,600 56,240																			
Operating			50,240	56,240	56,240	50,240	56,240	56,240	56,240	56,240	50,240	56,240	56,240	56,240	56,240	56,240	50,240	56,240	56,240	56,240	56,240	56,240
Operating	Supplementary Feeds		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Veterinary cost		284	284	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283
	Total		284	284	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283
Labour	Total		204	204	203	203	203	203	283	203	203	203	203	203	203	203	203	203	203	203	203	203
Luboui	Hired labour (person-days per animal)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Family labour	o	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770
	Total		2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770
TOTAL COS			3,054	3,054	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053	3,053
NET REVE			53,186	53,186	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187	53,187

Table 44: Livestock – Financial budget (with project)

45,000

7,000

0 months

FIRR

B/C

35%

1.96

Loan (Line of Credit)

Grace period

Interest rate (APR)

Contribution from farmer

Enterprise	Cattle production, WP																					
Parameter	rs Initial stock cows (nr.) Initial stock bulls (nr.) Calving period (months) Calves mortality (%) Cow replacement Live weight at sale - weaner (kg) Live weight at sale - heifer (kg) Live weight at sale - cow (kg) Sale price live animals (MZN/kg LW)	300 400 500	80% of	r f cow weight f cow weight e (healthy ani	La Ve . t . lı . V Fe ex	abour cost (MZN/p bour (person-day, eterinary cost (MZ ick treatment (MZ internal parasite co /accines (MZN/anim c.rate USD/MZN	'animal per y N/animal per N/animal per ontrol (MZN/a mal per year)	year) year) animal per yea	P ir)	171 8.55 286.2 151.2 120 15 3,200												
			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Stocks (he	ads)																					
	Calving rate		60%	65%	70%	75%	80%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
	Adults mortality		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
	Calves		6	8	8	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	heifer		2	5	7	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	cows		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	bulls		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sales (head	ds)																					
	weaners		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	heifers		2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	cows		2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Revenue																						
	Variation of ideal weight of animal at sale time		70%	75%	80%	85%	90%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
	Sales of weaners (MZN)		12,810	13,725	14,640	15,555	16,470	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385	17,385
	Sales of heifers (MZN)		34,160	36,600	58,560	62,220	65,880	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540	69,540
	Sales of cows (MZN)		42,700	45,750	73,200	77,775	82,350	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925	86,925
	Total revenue		89,670	96,075	146,400	155,550	164,700	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850	173,850
Operating	costs																					
	Supplementary Feeds		46,720	54,400	60,470	61,818	63,165	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513	64,513
	Veterinary cost (includes drugs, vaccines, fees)		6,010	7,328	8,174	8,492	8,810	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128	9,128
	Sub-Total		52,730	61,728	68,644	70,310	71,976	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642	73,642
Labour																						
	Hired labour (person-days per animal)	0.5	1,796	2,189	2,442	2,537	2,632	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727
	Family labour		2,001	2,462	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770
	Sub-Total		3,796	4,652	5,212	5,307	5,402	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497	5,497
Total Costs	s		56,526	66,380	73,856	75,617	77,378	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139	79,139
Net revenu	ue before financing		33,144	29,695	72,544	79,933	87,322	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711
Credit Ana			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Financial in			45.005	_		_	-	_	_	-	_		_	_	-	_	_	_	_	-	-	
	Disbursement of short term loan/a		45,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Transfer from previous period		0	24,691	27,458	28,124	28,790	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457
	Contribution from own savings		7,000																			
	Grants (graduation fund, crowding in fund)		0	0																		
<u>.</u>	Sub-Total financial inflows		52,000	24,691	27,458	28,124	28,790	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457
Financial o																						
	Short term principal (@22.5% APR, seasonal)		45,000																			
	Short term Interest		10,125																			
	Transfer to next period		24,691	27,458	28,124	28,790	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457
	Sub-Total financial outflows		79,816	27,458	28,124	28,790	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457	29,457
Net Financ	•		-27,816	-2,766	-666	-666	-666	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ue AFTER financing		5,327	26,929	71,878	79,267	86,656	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711	94,711
Increment	al net revenue AFTER financing		-47,859	-26,257	18,690	26,080	33,469	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524	41,524
	Total financing package	52,000		NPV @	22%	MZN 43,877																

Table 45: Livestock, Economic analysis

Enterprise	Cattle production. WP																					
	SCF		0.88	CF	(costs)			F	rom financial	to economic	prices:											
	Unemployment rate		24.50%	fe	eds (non trada	ble, nationa	0.855	Т	e - Tradable, e	exported (for	outputs) E	P= MP*SCF/(1+VAT+EXPTA	X+VAT*EXPT	AX) = MP*CF							
	SCF = 1			ve	terinary drugs	and chemic	0.752	Т	n - Tradable, i	national	E	P = MP/(1+VA)	AT)=MP*CF									
	VAT		17.00%				0.700															
	Export tax		0.00%	CF	(outputs)			Т	i - Tradable, ir	mported (inpu	uts) E	P = MP*SCF/(1+VAT+IMPT	AX+VAT*IMP	ΓAX)=MP*CF							
	Import tax (veterinary drugs and cher	nicals)	0.00%	liv	e animals		0.752	N	IT - Non trada	ble	E	P = MP/(1+VA	AT)=MP*CF									
	Import tax (feeds)		7.50%	CF	(labour)		0.755	S	W - Shadow V	Vage	S	W=MW*(1-U	NEMPLOYME	NTRATE)								
				CF	(non tradable	, national)	0.855	N	/IP - Market Pi	rice V	AT - Valued A	Added Tax II	MPTAX - impo	rt Tax								
								E	P - Economic	Price E	XPTAX - Expo	rt Tax E	XPTAX - Expo	rt Tax								
		WOP	WP																			
		PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Revenue																						
	Sales of weaners (MZN)	6,288	9,635	10,323	11,011	11,699	12,388	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076	13,076
	Sales of heifers (MZN)	16,005	25,693	27,528	44,045	46,798	49,551	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304	52,304
	Sales of cows (MZN)	20,007	32,116	34,410	55,056	58,497	61,938	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379	65,379
	Total revenue	42,300	67,444	72,262	110,113	116,995	123,877	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759	130,759
Operating	costs																					
	Supplementary Feeds	0	39,932	46,496	51,684	52,836	53,988	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140	55,140
	Veterinary cost	213	4,520	5,512	6,148	6,387	6,627	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866	6,866
	Sub-Total	213	44,452	52,007	57,832	59,223	60,614	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005	62,005
Labour																						
	Hired labour (person-days per animal	,	1,356	1,653	1,844	1,915	1,987	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059	2,059
	Family labour	2,092	1,511	1,859	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092
	Sub-Total	2,092	2,866	3,512	3,935	4,007	4,079	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150
TOTAL COS		2,305	47,318	55,519	61,767	63,230	64,693	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156	66,156
Net econor	nic benefits financing	39,995	20,126	16,742	48,346	53,765	59,184	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603	64,603
Incrementa	l Net Benefits		-19,870	-23,253	8,351	13,770	19,189	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608	24,608
		_						_														
		El	NPV @	10% M	ZN 106,529	EIRR	35%	В	/C ratio	1.84												
Phasin	z in of benefits	WOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	of enterprises	3,900	600	700	900	800	600	300	•	ŭ	•											
	1	0,000	12,076	10,045	29,008	32,259	35,510	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762
	2		,	14.088	11,719	33,842	37,636	41,429	45,222	45,222	45,222	45,222	45,222	45,222	45,222	45,222	45,222	45,222	45,222	45,222	45,222	45,222
	3			,	18,113	15,068	43,511	48,389	53,266	58,143	58,143	58,143	58,143	58,143	58,143	58,143	58,143	58,143	58,143	58,143	58,143	58,143
	4				,	16.101	13.394	38,677	43.012	47,347	51.682	51,682	51,682	51,682	51,682	51,682	51,682	51,682	51,682	51,682	51,682	51,682
	5					,	12,076	10,045	29,008	32,259	35,510	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762	38,762
	6						,0,0	6,038	5,023	14,504	16,130	17,755	19,381	19,381	19.381	19,381	19,381	19,381	19,381	19,381	19,381	19,381
То	tal ('000 MZN)	155,982	12,076	24,133	58,840	97,270	142,127	183,339	214,292	236,237	245,449	250,326	251,952	251,952	251,952	251,952	251,952	251,952	251,952	251,952	251,952	251,952

Net revenue

Table 46: Fishery model – Financial budget (without project)

30,398

Enterprise	Dugout canoe, WOP																					
Parameter	rs	units F	Price (MZN)					units F	rice (MZN)													
	Dugout canoe (5m)	1	10,000	Fis	h price (witho	out ice) (MZN	/kg)	1	35													
	Average trips per year (nr)	140 2 1	times per day	Fo	od per crew n	nember			200													
	Average size of catch per trip (kg)	30		Ha	rdlines (set)			1	5,000													
	Fish caught per year (kg)	4200		Ice	box 50 lt			2	10,000													
	Labour cost (person-day)	150																				
Revenue			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Revenue	Fishing rate		60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
	Main production, without ice (kg)		2.520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520
	Family self consumption, @1% of catch - kg)	1%	25	25	25	25	25	25	2,320	25	25	2,320	25	25	2,320	2,320	2,320	25	25	2,320	25	25
	Post-catch loss (@ 10% of catch - kg)	10%	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252
	Marketable produce (kg)	10/6	2.243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243
	Sub-total revenue		78,498	78.498	78,498	78,498	78,498	78,498	78.498	78.498	78,498	78.498	78,498	78,498	78.498	78.498	78,498	78.498	78,498	78,498	78,498	78,498
Investmen			70,430	70,430	70,430	70,430	70,430	70,430	76,436	70,430	70,430	76,436	70,430	76,436	70,430	70,430	70,430	76,436	76,436	70,430	70,430	70,430
investinen	Dugout canoe		0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,000	0	0	0	0	0
	Hand lines (set)	1	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
	Sub-total investment costs	-	5.000	5.000	5.000	5,000	5.000	5,000	5,000	5.000	5.000	5.000	5,000	5,000	5.000	5,000	15.000	5.000	5,000	5,000	5,000	5,000
Operating			3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	13,000	3,000	3,000	3,000	3,000	3,000
operating.	Canoe Maintenance (@5% of purchase price)		500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
	Food for crew (@2 crew members for 180 person-	180	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600	21,600
Labour	1000 for crew (@2 crew members for 100 person	100	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
20.5001	Family labour (@2 family members)	140	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	Sub-total operating costs	140	43.100	43.100	43,100	43.100	43,100	43,100	43,100	43.100	43,100	43.100	43,100	43,100	43.100	43,100	43.100	43.100	43,100	43,100	43,100	43,100
TOTAL CO			48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48.100	58,100	48,100	48,100	48,100	48,100	48.100
. O IAL CO.	•••		.0,100	.0,100	.0,100	.0,100	.0,100	.0,100	.5,100	.0,100	.0,100	.0,100	.0,100	.0,100	.5,100	.5,100	30,100	.0,100	.0,100	.0,100	.5,100	10,200

20,398

30,398

30,398

Table 47: Fishery model - Financial budget (with project)

Enterprise																						
Parameter			rice (MZN)				uni	ts P	rice (MZN)													
	Planck canoe (7 - 9 m)	1	55,000		ish price (with i				45													
	Average trips per year (nr of person-days)	150			ood per crew m	ember			200													
	Average size of catch per trip (kg/day)	65			lardlines (set)			1	5,000													
	Fish caught per year (kg)	9750		Id	e box 50 lt			2	10,000													
	Labour cost (person-day)	150			utboard motor			1	95,000													
	Fuel (I)	1	55	S	urface gillnet 4"	-5" 200m		1	45,000													
	Ice (industrial) (MZN/kg)		15	h	andlines + net			1	40,000													
_																						
Revenue			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Fishing rate		60%	65%	70%	75%	80%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
	Main production, without ice (kg)		5,850	6,338	6,825	7,313	7,800	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288	8,288
	Family self consumption, @1% of catch (kg)	1%	59	63	68	73	78	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
	Post-catch loss (@ 5% of catch - kg)	5%	293	317	341	366	390	414	414	414	414	414	414	414	414	414	414	414	414	414	414	414
	Marketable produce (with ice - kg)		5,499	5,957	6,416	6,874	7,332	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790	7,790
	Sub-total revenue		247,455	268,076	288,698	309,319	329,940	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561	350,561
Investmen																						
	Planck canoe	1	55,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Outboard motor (15 hp)	1	95,000																			
	Fishiing gear (set)	1	85,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hardlines (set)	1	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
	Ice box	2	20,000	0	0	10,000	0	0	10,000	0	0	10,000	0	0	10,000	0	0	10,000	0	0	10,000	0
	Sub-total investment costs		260,000	5,000	5,000	15,000	5,000	5,000	15,000	5,000	5,000	15,000	5,000	5,000	15,000	5,000	5,000	15,000	5,000	5,000	15,000	5,000
Operating																						
	Canoe Maintenance (@5% of purchase price)	5%	0	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750
	Engine maintenance (@5% of purchase cost)	5%	0	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750	4,750
	Food for crew (@3 crew members + owner for 120 persor	150	72,000	78,000	84,000	90,000	96,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000
	Fuel (40l per 3 fish-day)		66,000	71,500	77,000	82,500	88,000	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500	93,500
	Ice (industrial, weight 60% of catch)	60%	31,590	37,074	42,998	49,359	56,160	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399	63,399
	Sub-total operating costs		169,590	194,074	211,498	229,359	247,660	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399	266,399
Labour																						
	Crew cost (@3 crew members)	150	13.500	14.625	15.750	16.875	18.000	19.125	19,125	19.125	19.125	19,125	19.125	19.125	19,125	19.125	19,125	40 405		19,125	19.125	19,125
		150	13,300	14,023	13,730	10,075	10,000	13,123	13,123	,						13,123	19,125	19,125	19,125	19,125	13,123	
	Family labour (proxy: 1 crew member cost)	130	2,700	3,169	3,675	4,219	4,800	5,419	5,419	5,419	5,419	5,419	5,419	5,419	5,419	5,419	5,419	19,125 5,419	19,125 5,419	5,419	5,419	5,419
	Family labour (proxy: 1 crew member cost) Sub-total labor	130	-,	,	-,	-,	-,	-, -		-, -	-,		5,419 24,544	-,		-, -		-,	-,		-,	5,419 24,544
TOTAL COS	Sub-total labor	150	2,700	3,169	3,675	4,219	4,800	5,419	5,419	5,419	5,419	5,419		5,419	5,419	5,419	5,419	5,419	5,419	5,419	5,419	
	Sub-total labor	130	2,700 16,200	3,169 17,794	3,675 19,425	4,219 21,094	4,800 22,800	5,419 24,544	5,419 24,544	5,419 24,544	5,419 24,544	5,419 24,544	24,544	5,419 24,544	5,419 24,544	5,419 24,544	5,419 24,544	5,419 24,544	5,419 24,544	5,419 24,544	5,419 24,544	24,544
Net reveni	Sub-total labor STS ue BEFORE Financing	130	2,700 16,200 445,790	3,169 17,794 216,868	3,675 19,425 235,923	4,219 21,094 265,453	4,800 22,800 275,460	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943
Net revenu	Sub-total labor STS ue BEFORE Financing slysis	130	2,700 16,200 445,790	3,169 17,794 216,868	3,675 19,425 235,923	4,219 21,094 265,453	4,800 22,800 275,460	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943
Net reveni	Sub-total labor STS ue BEFORE Financing al <u>ysis</u> nflows	130	2,700 16,200 445,790 -198,335	3,169 17,794 216,868	3,675 19,425 235,923	4,219 21,094 265,453	4,800 22,800 275,460	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943
Net revenu	Sub-total labor STS STS BEFFORE Financing Alysis Inflows Disbursement of short term loan/a	130	2,700 16,200 445,790 -198,335	3,169 17,794 216,868 51,208	3,675 19,425 235,923 52,775	4,219 21,094 265,453 43,866	4,800 22,800 275,460 54,480	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618
Net revenu	Sub-total labor STS ue BEFORE Financing slysis nflows Disbursement of short term loan/a Transfer from previous period	250	2,700 16,200 445,790 -198,335	3,169 17,794 216,868	3,675 19,425 235,923	4,219 21,094 265,453	4,800 22,800 275,460	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	5,419 24,544 295,943	5,419 24,544 295,943	5,419 24,544 305,943	24,544 295,943
Net revenu	Sub-total labor STS ue BEFORE Financing slysis filows Disbursement of short term loan/a Transfer from previous period Contribution from own savings	150	2,700 16,200 445,790 -198,335 180,000 0 90,000	3,169 17,794 216,868 51,208	3,675 19,425 235,923 52,775	4,219 21,094 265,453 43,866	4,800 22,800 275,460 54,480	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618
Net revenu	Sub-total labor STS STS STS STS STS STS STS STS STS ST	250	2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000	3,169 17,794 216,868 51,208	3,675 19,425 235,923 52,775	4,219 21,094 265,453 43,866	4,800 22,800 275,460 54,480	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618
Net revenu Credit Ana Financial in	Sub-total labor STS SUBEFORE Financing alvisis Inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows	150	2,700 16,200 445,790 -198,335 180,000 0 90,000	3,169 17,794 216,868 51,208	3,675 19,425 235,923 52,775	4,219 21,094 265,453 43,866	4,800 22,800 275,460 54,480	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618
Net revenu	Sub-total labor STS ue BEFORE Financing slysis inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows outflows	150	2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000 450,000	3,169 17,794 216,868 51,208	3,675 19,425 235,923 52,775 20,000	4,219 21,094 265,453 43,866 20,000	4,800 22,800 275,460 54,480	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618
Net revenu Credit Ana Financial in	Sub-total labor STS STS STS STS STS STS STS STS STS ST	150	2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000 450,000	3,169 17,794 216,868 51,208	3,675 19,425 235,923 52,775 20,000 20,000	4,219 21,094 265,453 43,866 20,000 20,000	4,800 22,800 275,460 54,480	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	5,419 24,544 295,943 54,618	5,419 24,544 295,943 54,618	5,419 24,544 305,943 44,618	24,544 295,943 54,618
Net revenu Credit Ana Financial in	Sub-total labor STS STS SUBEFORE Financing alvisis Inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows butflows Short term principal Short term Interest	250	2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000 450,000 180,000 40,500	3,169 17,794 216,868 51,208 20,000 0 20,000	3,675 19,425 235,923 52,775 20,000 20,000	4,219 21,094 265,453 43,866 20,000 20,000	4,800 22,800 275,460 54,480 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	24,544 295,943 54,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	24,544 295,943 54,618 20,000
Net revenu Credit Ana Financial in	Sub-total labor STS ue BEFORE Financing slysis Inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows sutflows Short term principal Short term Interest Transfer to next period	250	2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000 450,000 180,000 40,500 20,000	3,169 17,794 216,868 51,208 20,000 0 20,000	3,675 19,425 235,923 52,775 20,000 0 0 20,000	4,219 21,094 265,453 43,866 20,000 20,000 0 0 20,000	22,800 275,460 54,480 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 305,943 44,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 305,943 44,618 20,000 20,000	24,544 295,943 54,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 305,943 44,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 305,943 44,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000 20,000	5,419 24,544 305,943 44,618 20,000 20,000	24,544 295,943 54,618 20,000 20,000
Net revent Credit Ana Financial in	Sub-total labor STS STS STS STS STS STS STS STS STS ST	233	2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000 450,000 180,000 40,500 20,000 240,500	3,169 17,794 216,868 51,208 20,000 0 20,000	3,675 19,425 235,923 52,775 20,000 20,000	4,219 21,094 265,453 43,866 20,000 20,000	4,800 22,800 275,460 54,480 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	24,544 295,943 54,618 20,000 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 295,943 54,618 20,000	5,419 24,544 305,943 44,618 20,000	24,544 295,943 54,618 20,000 20,000 20,000 20,000
Net revent Credit Ana Financial in Financial of	Sub-total labor STS STS STS STS STS STS STS STS STS ST	250	2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000 450,000 40,500 20,000 240,500 240,500 29,500	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0	3,675 19,425 235,923 52,775 20,000 20,000 0 20,000 20,000 0	20,000 20,000 20,000 20,000 20,000 20,000 0	22,800 275,460 54,480 20,000 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,544 295,943 54,618 20,000 20,000 20,000 0	24,541 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,541 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,544 295,943 54,618 20,000 20,000 20,000 0
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS SUB BEFORE Financing alvsis Inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows Short term principal Short term interest Transfer to next period Sub-Total financial outflows cing ue AFTER Financing		2,700 16,200 445,790 -198,335 180,000 90,000 180,000 450,000 240,500 240,500 29,500 11,165	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0 51,208	3,675 19,425 235,923 52,775 20,000 20,000 0 20,000 20,000 0 52,775	20,000 20,000 20,000 20,000 20,000 20,000 43,866	20,000 20,000 20,000 20,000 20,000 20,000 20,000 54,480	5,419 24,544 295,943 54,618 20,000 20,000 20,000 20,000 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,541 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS STS STS STS STS STS STS STS STS ST		2,700 16,200 445,790 -198,335 180,000 0 90,000 180,000 450,000 40,500 20,000 240,500 240,500 29,500	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0	3,675 19,425 235,923 52,775 20,000 20,000 0 20,000 20,000 0	20,000 20,000 20,000 20,000 20,000 20,000 0	22,800 275,460 54,480 20,000 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,544 295,943 54,618 20,000 20,000 20,000 0	24,541 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,541 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0	24,544 295,943 54,618 20,000 20,000 20,000 0
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS STS STS STS STS STS STS STS STS ST		2,700 16,200 445,790 -198,335 180,000 90,000 180,000 450,000 240,500 240,500 29,500 11,165	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0 51,208 20,810	3,675 19,425 235,923 52,775 20,000 20,000 0 20,000 0 20,000 0 52,775 22,377	20,000 20,000 20,000 20,000 20,000 43,866	20,000 20,000 20,000 20,000 20,000 20,000 20,000 54,480	5,419 24,544 295,943 54,618 20,000 20,000 20,000 20,000 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,541 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS SUB BEFORE Financing Inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows Disburterm principal Short term interest Transfer to next period Sub-Total financial outflows Sub-Total financial outflows Ling Leaf Financing Leaf Financing Leaf Financing Total financing package	450,000	2,700 16,200 445,790 -198,335 180,000 90,000 180,000 450,000 240,500 240,500 29,500 11,165	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0 51,208 20,810 FNPV @	3,675 19,425 235,923 52,775 20,000 20,000 20,000 20,000 20,000 52,775 22,377	20,000 20,000 20,000 20,000 20,000 20,000 43,866	20,000 20,000 20,000 20,000 20,000 20,000 20,000 54,480	5,419 24,544 295,943 54,618 20,000 20,000 20,000 20,000 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,541 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS STS STS STS STS STS STS STS STS ST	450,000 90,000	2,700 16,200 445,790 -198,335 180,000 90,000 180,000 450,000 240,500 240,500 29,500 11,165	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0 51,208 20,810 FNPV @ FIRR	3,675 19,425 235,923 52,775 20,000 20,000 0 20,000 20,000 20,000 20,000 52,775 22,377 22% 107%	20,000 20,000 20,000 20,000 20,000 43,866	20,000 20,000 20,000 20,000 20,000 20,000 20,000 54,480	5,419 24,544 295,943 54,618 20,000 20,000 20,000 20,000 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,541 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS STS STS STS STS STS STS STS STS ST	450,000 90,000 180,000	2,700 16,200 445,790 -198,335 180,000 90,000 180,000 450,000 240,500 240,500 29,500 11,165	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0 51,208 20,810 FNPV @	3,675 19,425 235,923 52,775 20,000 20,000 20,000 20,000 20,000 52,775 22,377	20,000 20,000 20,000 20,000 20,000 43,866	20,000 20,000 20,000 20,000 20,000 20,000 20,000 54,480	5,419 24,544 295,943 54,618 20,000 20,000 20,000 20,000 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,541 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS STS SUB BEFORE Financing Alvisis Inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows butflows Short term principal Short term principal Short term interest Transfer to next period Sub-Total financial outflows cing ue AFTER Financing an ent revenue AFTER Financing Total financing package Beneficiary contribution (20%) Loan (40%) Grant (crowding-in fund, 40%)	450,000 90,000 180,000 180,000	2,700 16,200 445,790 -198,335 180,000 90,000 180,000 450,000 240,500 240,500 29,500 11,165	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0 51,208 20,810 FNPV @ FIRR	3,675 19,425 235,923 52,775 20,000 20,000 0 20,000 20,000 20,000 20,000 52,775 22,377 22% 107%	20,000 20,000 20,000 20,000 20,000 43,866	20,000 20,000 20,000 20,000 20,000 20,000 20,000 54,480	5,419 24,544 295,943 54,618 20,000 20,000 20,000 20,000 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,541 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618
Net reveni Credit Ana Financial ii Financial o	Sub-total labor STS STS SUB BEFORE Financing Alvisis Inflows Disbursement of short term loan/a Transfer from previous period Contribution from own savings Grants (crowding in fund) Sub-Total financial inflows butflows Short term principal Short term principal Short term interest Transfer to next period Sub-Total financial outflows cing ue AFTER Financing al net revenue AFTER Financing Total financing package Beneficiary contribution (20%) Loan (40%) Grant (crowding-in fund, 40%)	450,000 90,000 180,000	2,700 16,200 445,790 -198,335 180,000 90,000 180,000 450,000 240,500 240,500 29,500 11,165	3,169 17,794 216,868 51,208 20,000 0 20,000 20,000 0 51,208 20,810 FNPV @ FIRR	3,675 19,425 235,923 52,775 20,000 20,000 0 20,000 20,000 20,000 20,000 52,775 22,377 22% 107%	20,000 20,000 20,000 20,000 20,000 43,866	20,000 20,000 20,000 20,000 20,000 20,000 20,000 54,480	5,419 24,544 295,943 54,618 20,000 20,000 20,000 20,000 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,541 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,5419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	5,419 24,544 295,943 54,618 20,000 20,000 20,000 0 54,618	24,5419 24,544 305,943 44,618 20,000 20,000 20,000 0 44,618	24,544 295,943 54,618 20,000 20,000 20,000 0 54,618

Table 48: Fishery model – Economic analysis

Enterprise																						
	SCF	0.88		CF (costs)							From financia		•									
	Unemployment rate	24.50%		fishing boat		0.716					Te - Tradable,				/(1+VAT+EXPTA	AX+VAT*EXPT	AX) = MP*CF					
	VAT	17.00%	1	Equipment		0.700					Tn - Tradable,	national	E	P = MP/(1+	VAT)=MP*CF							
	Export tax (fish)	0.00%		outboard motor		0.700																
	Import tax (fuel)	20.00%	1	fuel		0.627					Ti - Tradable,	imported (inp	uts) E	P = MP*SCF	F/(1+VAT+IMPT	AX+VAT*IMP	TAX)=MP*CF					
	Import tax (outboard motor)	7.50%		CF (outputs)							NT - Non trad	able	E	P = MP/(1+	VAT)=MP*CF							
	Import tax (fishing boats)	5.00%	1	fresh fish		0.752					SW - Shadow	Wage	S	SW=MW*(1-	-UNEMPLOYME	NTRATE)						
	Import tax (equipment*)	7.50%		CF (labour)		0.755					MP - Market F	Price \	/AT - Valued A	Added Tax	IMPTAX - impo	ort Tax						
	*fishing gear, ice box, hardlines		•	CF (non tradable,	national)	0.855					EP - Economic	Price E	EXPTAX - Expo	ort Tax	EXPTAX - Expo	rt Tax						
		WOP	WP																			
Revenue		PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
ı	Marketable produce (fresh fish, with ice - kg) 59,041	186,120	201,630	217,140	232,650	248,160	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670
	Sub-total revenue	59,041	186,120	201,630	217,140	232,650	248,160	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670	263,670
Investment		,	,	,		,	,										,					
	Planck canoe	0	39,398	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Outboard motor (15 hp)	0	66,468	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
i	Fishiing gear (set)	0	59,471	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hardlines (set)	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498	3,498
	Ice box	0	13,993	0	0	6,997	0	0	6,997	0	0	6,997	0	0	6,997	0	0	6,997	0	0	6,997	0
ı	Sub-total investment costs	3,498	182,828	3,498	3,498	10,495	3,498	3,498	10,495	3,498	3,498	10,495	3,498	3,498	10,495	3,498	3,498	10,495	3,498	3,498	10,495	3,498
Operating of	costs																					-
	Canoe Maintenance (@5% of purchase price	9) 358	0	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970
	Engine maintenance (@5% of purchase cost)) 0	0	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323	3,323
	Food for crew	18,462	61,538	66,667	71,795	76,923	82,051	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179	87,179
	Fuel (40l per 3 fish-day)	-, -	41,368	44,815	48,262	51,709	55,157	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604	58,604
	Ice (industrial, weight 60% of catch)	0	27,000	31,688	36,750	42,188	48,000	54,188	54,188	54,188	54,188	54,188	54,188	54,188		54,188	54,188	54,188	54,188	54,188	54,188	54,188
	Sub-total operating costs	18,820	129,906	148.462	162,100	176,113	190,501	205,264	205,264	205,264	205,264	205,264	205,264	205,264		205,264	205,264	205,264	205,264	205,264	205,264	205,264
Labour			,	,				,		,		,	,				,	,	,			,
	Crew cost (@3 crew members)	0	10,193	11,042	11,891	12.741	13,590	14,439	14,439	14,439	14,439	14,439	14,439	14,439	14,439	14.439	14,439	14,439	14,439	14,439	14,439	14,439
	Family labour (proxy: 1 crew member cost)	15,855	2,039	2,392	2,775	3,185	3,624	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091
	Sub-total labor	15,855	12,231	13,434	14,666	15,926	17,214	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531	18,531
TOTAL COS		38,173	324,965	165,395	180,264	202,534	211,214	227,293	234,290	227,293	227,293	234,290	227,293	227,293	234,290	227,293	227,293	234,290	227,293	227,293	234,290	227,293
	nic Benefits	20,868	-138,845	36,235	36,876	30,116	36,946	36,377	29,380	36,377	36,377	29,380	36,377	36,377	29,380	36,377	36,377	29,380	36.377	36,377	29,380	36,377
	Il Net Economic Benefits	20,000	-159,714	15,367	16,007	9,248	16,078	15,509	8,512	15,509	15,509	8,512	15,509	15,509	-,	15,509	15,509	8,512	15,509	15,509	8,512	15,509
		ENPV @	10%	-MZN 41,905	IRR	5%	B/C ratio	1.31														
Phasing in	of henefits	WOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
# of enterp		270	30	40	50	50	50	50	•	·	,	20			13			-0		20	-3	
# 01 CITTET P	11363	270	-4,165	1,087	1,106	903	1,108	1,091	881	1,091	1,091	881	1,091	1,091	881	1,091	1,091	881	1,091	1,091	881	1,091
2			7,103	-5,554	1,449	1,475	1,205	1,478	1,455	1,175	1,455	1,455	1,175	1,455		1,175	1,455	1,455	1,175	1,455	1,455	1,175
2				-5,554	-6.942	1,473	1,844	1,506	1,847	1,173	1,455	1,819	1,175	1,455		1,175	1,469	1,455	1,175	1,455	1,819	1,819
1					-0,342	-6.942	1,812	1,844	1,506	1,847	1,469	1,469	1,819	1,469		1,819	1,819	1,469	1,819	1,819	1,469	1,819
-						-0,942	-6.942	1,844	1,844	1,847	1,819	1,469	1,819	1,819		1,819	1,819	1,469	1,819	1,819	1,819	1,819
c							-0,942	-6,942	1,844	1,844	1,847	1,819	1,469	1,819		1,469	1,819	1,819	1,469	1,819	1,819	1,469
T-4-1 (1000	8.4781)	0.700	4.155	4.467	4 207	2.752	071				-	-		-		-						
Total ('000	MZN)	9,783	-4,165	-4,467	-4,387	-2,752	-974	788	9,345	9,282	9,187	9,291	9,192	9,122	9,262	9,192	9,122	9,262	9,192	9,122	9,262	9,192

Table 49: Naval carpenter - Financial budget

Enterprise	Naval carpenter																							
Parameter	•		Cost (MZN)																					
· urumeter	Planck canoe (9 m)		60,000	la	abour (MZN/pe	erson-days)	171																	
	low quality canoe (7m)		45,000			,,,																		
	Reduction in labour per boat		22%																					
											V	Vith Project												
		Unit	Unit price (MZN)	WOP																				
Main servi	ce			PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
	Boat construction (9m)	unit		5	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Inputs																								
	Electrical tools	set	60,000		1																			
Operating					_	_	_			_	_	_	_	_	_			_	_	_		_	_	_
	Wood planks	lumpsum	20,000	5	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Paint, vernish, glue	lumpsum	3,000	5 5	6	7 7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Equipment (fastners, hinges, sprir		2,000	5	6	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Labour	Electricity	MZN/mor	nth 1,500		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Labour	Hired labour	person-da	N/C	210	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8
	nired labour	person-ua	iys	210	105.6	103.6	103.8	103.6	105.6	103.0	103.0	103.0	103.6	103.0	103.0	105.6	105.6	103.6	105.6	103.0	105.6	103.6	103.0	103.6
Revenue																								
nevenue	Output buildup				80%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Boat construction 9m			225,000	288,000	336,000	432,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000
Costs																								
	Electrical tools (partially replaced	every 2 years	s @ 10% of cost)		60,000			6,000			6,000			6,000			6,000			6,000			6,000	
	Wood planks			100,000	96,000	112,000	144,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000
	paint, vernish, glue			15,000	14,400	16,800	21,600	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
	Equipment (fastners, hinges, sprir	ngs, etc)		10,000	9,600	11,200	14,400	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
	Electricity				14,400	14,400	16,200	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
	Labour			35,910	22,408	22,408	25,209	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010	28,010
	O&M on tools (5% of investment)	!	5%	0	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Total Costs				160,910	219,808	179,808	224,409	255,010	249,010	249,010	255,010	249,010	249,010	255,010	249,010	249,010	255,010	249,010	249,010	255,010	249,010	249,010	255,010	249,010
	e BEFORE Financing			64,090	68,192	156,192	207,591	224,990	230,990	230,990	224,990	230,990	230,990	224,990	230,990	230,990	224,990	230,990	230,990	224,990	230,990	230,990	224,990	230,990
	family labor			6	13	15	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Financial in																								
	Disbursement of short term loan/	a			60,000											0								
	Transfer from previous period				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Contribution from own savings	a in fund)			30,000 0	0																		
	Grants (graduation fund, crowdin Sub-Total financial inflows	g III Iuliu)			90,000	0	0	0	0	٥	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financial o					90,000	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
i ilialiciai o	Short term principal				60,000		0	0																
	Short term Interest				13.500		U	0																
	Transfer to next period				13,300			Ü																
	Sub-Total financial outflows				73,500	Ö	0	0	0	Ö	Ö	0	0	Ö	0	0	0	0	0	Ö	0	0	0	0
Net Financ					16,500	Ö	0	0	0	Ö	Ö	0	0	Ö	0	0	0	0	0	Ö	0	0	0	0
Net income	e AFTER financing			64,090	84,692	156.192	207,591	224,990	230,990	230,990	224,990	230,990	230,990	224.990	230.990	230,990	224,990	230,990	230,990	224,990	230,990	230.990	224.990	230,990

 Total financing package
 60,000
 FNPV @
 22% MZN 555,503

 Loan (Line of Credit)
 60,000
 FIRR
 NA

 Contribution from armer
 0
 B/C ratio
 1.80

 Grace period
 0 months

 Interest rate (APR)
 22.5%

20,602

143,501

160,900 166,900

Incremetal Net Income

166,900 160,900

166,900 166,900

160,900

166,900

166,900

160,900

166,900

166,900

160,900 166,900

166,900 160,900

Table 50: Naval carpenter – Economic analysis

Enterprise	Naval carpenter																					
	SCF	0.88	c	F (costs)				1	From financia	l to economi	prices:											
	Unemployment rate	24.50%	E	lectric tools (Ti)			0.716		Te - Tradable.	exported (for	outputs)	EP= MP*SCF/	(1+VAT+EXPT	AX+VAT*EXP	TAX) = MP*CF							
	VAT	17.00%		ood planks, ot		nt (Ti)	0.700		Tn - Tradable.			EP = MP/(1+V			,							
	Export tax (all commodities)	0.00%		aint, vernish, et		. ,	0.627					, ,	,									
	Import tax (electric tools)	5.00%		lectricity (Tn)	,		0.752		Ti - Tradable.	imported (inp	uts)	EP = MP*SCF/	/(1+VAT+IMP	AX+VAT*IMI	PTAX)=MP*CF							
	Import tax (wood planks, other equipme	7.50%		F (outputs)					NT - Non trad			EP = MP/(1+V	•		,							
	Import tax (paint, vernish, glue, etc)	20.00%		ishing boat			0.752	:	SW - Shadow	Wage		SW=MW*(1-L	JNEMPLOYMI	ENTRATE)								
			c	F (labour)			0.755	1	MP - Market I	Price \	VAT - Valued	Added Tax	IMPTAX - imp	ort Tax								
				,				1	EP - Economic	Price I	EXPTAX - Expo	ort Tax	EXPTAX - Expo	ort Tax								
											•		-									
		WOP					WP															
		PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Economic l	benefits																					
	Boat construction (9 m)	169,231	216,615	252,718	324,923	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026	361,026
Costs	Electrical tools	0	42,979	0	0	4.298	0	0	4,298	0	0	4,298	0	0	4.298	0	0	4,298	0	0	4,298	0
	Wood planks	69,966	67,168	78,362	100,751	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946	111,946
	paint, vernish, glue	9,402	9,026	10,530	13,538	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043
	Equipment (fastners, hinges, springs, etc	6,997	6,717	7,836	10,075	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195	11,195
	Electricity	0,557	10,831	10,831	12,185	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538	13,538
	Labour	27.112	16,918	16,918	19,033	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147	21,147
	O&M on tool 5%	0	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149	2,149
Total Costs		113,477	155,787	126,626	157,731	179,316	175,018	175,018	179,316	175,018	175,018	179,316	175,018	175,018	179,316	175,018	175,018	179,316	175,018	175,018	179,316	175,018
Net Econor	mic Benefits	55,754	60,829	126,092	167,192	181,710	186,008	186,008	181,710	186,008	186,008	181,710	186,008	186,008	181,710	186,008	186,008	181,710	186,008	186,008	181,710	186,008
Incrementa	al Net Economic Benefits		5,074	70,338	111,438	125,955	130,253	130,253	125,955	130,253	130,253	125,955	130,253	130,253	125,955	130,253	130,253	125,955	130,253	130,253	125,955	130,253
						_																
			ENPV @	10% M	IZN 921,787	EIRR	#NUM!	B/C ratio	1.98													
Phasing in	of benefits	WOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
# of enterp		10,200	2,000	2,200	2,000	2,000	1,500	500	•	·	•											
1		,	121.657	252,184	334,384	363,419	372,015	372,015	363,419	372,015	372.015	363,419	372.015	372,015	363.419	372,015	372,015	363,419	372,015	372,015	363,419	372,015
2			,	133,823	277,402	367,822	399,761	409,217	409,217	399,761	409,217	409,217	399,761	409,217	409,217	399,761	409,217	409,217	399,761	409,217	409,217	399,761
3				,	121,657	252,184	334,384	363,419	372,015	372,015	363,419	372,015	372,015	363,419	372,015	372,015	363,419	372,015	372,015	363,419	372,015	372,015
4					,	121,657	252,184	334,384	363,419	372,015	372,015	363,419	372,015	372,015	363,419	372,015	372,015	363,419	372,015	372,015	363,419	372,015
5						,	91,243	189,138	250,788	272,564	279,011	279,011	272,564	279,011	279,011	272,564	279,011	279,011	272,564	279,011	279,011	272,564
6								30,414	63,046	83,596	90,855	93,004	93,004	90,855	93,004	93,004	90,855	93,004	93,004	90,855	93,004	93,004
Total ('000	MZN)	568,693	121,657	386,007	733,443	1,105,083	1,449,587	1,698,587	1,821,904	1,871,967	1,886,532	1,880,085	1,881,375	1,886,532	1,880,085	1,881,375	1,886,532	1,880,085	1,881,375	1,886,532	1,880,085	1,881,375

Table 51: Aquaculture - Production model

enterprise semi-commercial pond

Parameter	S	WOP	٧	VP						
	Pond size (m2)		150	300		Fish feed neede	d per m2 (g)			200
	Fish produced per cycle, tilapia 100 g (number)		300	600		Weight at sale f	ull-grown (O.r	nossambic	us) (kg)	1
	Fish fingerling survival rate			90%						
	Months per cycle		10	10						
	Cycles per year (including down time)		1	1						
						quantities				
			V	WOP		WP				
	Item	Unit	P	Y1-20	PY1	PY2	PY3	PY4	PY5-PY20	
Inflows										
	Productivity rate (due to works)				80%	85%	90%	95%	90%	
	Fish fingerling survival rate				70%	75%	80%	85%	90%	
	Fresh full-grown fish sales (tilapia)	kg		270	336	383	432	485	486	
	Total Inflows									
Outflows										
	self consumption (@ 10%)	kg		27	34	38	43	48	49	
Investment	t									
	Construction equipment hire	day			20					
	Harvest equipment hire	day		1	3	3	3	3	3	
Recurrent										
	Fingerling purchase (tilapia, Oreochromis mossambicus)/a	numbe	r	300	600	600	600	600	600	
	Purchased fish feed/b	kg		0	60	60	60	60	60	
	Self-made fish feed/c	kg		100						
	kitchen waste etc. used as feish feed	kg		50						
	Lime	kg			20	20	20	20	20	
Labour										
	Hired labor for pond enlargement	2 perso	n-day		30					
	Family labour (feeding, pond cleaning, harvesting)/d	person	-day	10	18	18	18	18	18	

/a two fingerlings per m2

/b includes transport to farm gate

/c for self made fish feed: maize bran and farmyard manure fro one adult cattle or 20 goats

/d approximately 1 hour per day

Table 52: Aquaculture – Financial budget

Payment frequency

Interest rate (APR)

annual

22.5%

enterprise	semi-commercial pond																						
Parameters			WOP	WP																			
Parameters	Pond size (m2)		150		Fis	h feed neede	d ner m2 (ø)		200														
	Fish produced per cycle, tilapia 100 g (number)		300				a pc: (8)		200														
	Fish fingerling survival rate		50%																				
	. isi iii.getiii.g sarviva rate		50%	0070																			
			Unit cost	WOP				WP															
	Financial budget	Unit	(MZN)	PY1-20	PY1	PY2	PY3	PY4	PY5 PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Revenue	5 1 1151 1 611 1																						
	Fresh small fish sales (tilapia)	kg		47.550	24.040	24.052	20.000	24 402	24 500 24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 500	24 507
	Fresh medium fish sales (tilapia)	kg	65		21,840	24,863	28,080	31,493	31,590 31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590	31,590
	self consumption (@ 10%)	kg		1,755	2,184	2,486	2,808	3,149	3,159 3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159
	Sub-total revenue			15,795	19,656	22,376	25,272	28,343	28,431 28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431	28,431
Costs																							
Investment			400		2.000										0								
	Construction equipment hire	day	100		2,000				0	0	0	0	0	0	U	0	0	0	0	0	0	0	0
	Harvest equipment	set	250	250	750				750	_	_	_		750			_	_	750	_	_	_	_
Recurrent (_						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Fingerling purchase (tilapia)	number	6	-,	3,300	3,300	3,300	3,300	3,300 3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300
	Purchased fish feed	kg	22		1,320	1,320	1,320	1,320	1,320 1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320
	Self-made fish feed	kg	4						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	kitchen waste etc. used as feish feed	kg	1	50					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lime	kg	25		500	500	500	500	500 500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Labour	Hired labor for pond enlargement	person-day	171		10,260				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Family labour (fooding pand classing baryosting	al norson day	171	1,710	3,078	3,078	3,078	3,078	3,078 3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078	3,078
Total costs	Family labour (feeding, pond cleaning, harvesting	g) person-uay	1/1	4,010	21,208	8,198	8,198	8,198	8,198 8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198	8,198
	ue BEFORE Financing			11,785	632	16,665	19,882	23,295	23,392 23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392	23,392
Credit Anal	vsis																						
Financial in																							
	Disbursement of short term loan/a				18,000																		
	Transfer from previous period (as working capita	il)			0	0	0	0	0 0	0	0	Ö	0	Ö	0	0	0	0	0	Ö	0	0	0
	Contribution from own savings	,			4,500																		
	Grants (graduation fund, crowding in fund)				0	0																	
	Sub-Total financial inflows				22,500	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financial o					22,500	Ü	Ü	ŭ	0 0	Ü	Ü	·	·	·	·		·	Ü	Ü		ŭ	Ü	Ü
	Short term principal				18,000	0	0	0															
	Short term Interest				4,050	0	0	0	0														
	Transfer to next period (as working capital)				0																		
	Sub-Total financial outflows				22,050	0	0	0	0 0	0	0	0	0	Ö	0	0	0	0	0	0	0	0	0
Net Financi					450	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Net Revenue AFTER Financing				1.082	16.665	19.882	23.295	23.392 23.392	23.392	23.392	23.392	23.392	23.392	23.392	23.392	23.392	23,392	23.392	23.392	23.392	23.392	23,392
Incrementa	Il net revenue AFTER financing				-10,703	4,880	8,097	11,510	11,607 11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607	11,607
	Total financing package	18,00																					
	Loan (Line of credit)	18,00	0		FN	IPV @	22%	MZN 26,986															

74%

2.41

B/C

Table 53: Aquaculture – Economic Analysis

enterprise	semi-subsistence pond																						
	SCF		0.88	,	F (costs)					rom financial	to economic	nricos:											
	Unemployment rate		24.50%		ngerlings (tila)	nin Til		0.627		e - Tradable,			ED- MD*CCE/	(1+VAT+EXPTA	V+1/AT*EVDT	AV) - MD*CE							
	VAT		17.0%		sh feed (Ti)	Jia, III		0.627		'n - Tradable, i			EP = MP/(1+V		ATVAL LAFT	-xx) - IVIF CF							
	Export tax (all commodities)		0.0%		arvest equipm	ont (Ti)		0.700		ii iiadabic,	ilational		LI - WII / (1 · V	AT)-IVII CI									
	Import tax (fingerlings, tilapia)		20.0%		me (Ti)	ieni (11)		0.734	т	i - Tradable, ii	mnorted (inn	utc)	ED - MD*SCE/	(1+VAT+IMPT)	ΛΥ±\/ΔΤ*ΙΝ/DΤ	ΓΔΥ)-MD*CE							
	Import tax (fingerings, triapia)		20.0%		F (outputs)			0.734		NT - Non trada			EP = MP/(1+V	•	AATVAI IIVIF	IANJ-IVIF CF							
	Import tax (harveset equipment)		7.5%		ilapia (Te)			0.752		W - Shadow V			, ,	JNEMPLOYME	NITDATE)								
	Import tax (lime)		2.50%		F (labour)			0.755		ли - знацом v лР - Market P				IMPTAX - impo	,								
	import tax (iiiie)		2.30%		F (non tradab	le)		0.855		P - Economic		XPTAX - Exp		EXPTAX - Expo									
			WOP				v	VP															
			Unit cost																				
	Economic budget	Unit	(MZN) PY1-20	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Economic																							
	Sales of tilapia		11,880	14,784	16,830	19,008	21,318	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384	21,384
Costs																							
Investmen																							
	Construction equipment hire	day		1,709																			
	Harvest equipment	set	175	525	0	0	0	0	525	0	0	0	0	525 0	0	0	0	0	525	0	0	0	0
Recurrent			4.004		2.000		2.000	2.000	0	0	•	0	0	Ü	0	0	0	U	0	0	0	0	0
	Fingerling purchase (tilapia)	number	1,034	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068	2,068
	Purchased fish feed	kg	0	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827
	Self-made fish feed	kg	299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	kitchen waste etc. used as feish feed	kg	50	-	-	427	427	-	0	-	427	0 427	-	-	0 427	-	-	0 427	427	-	427	-	0 427
Labour	Lime	kg	U	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427
Labour	Hired labor for pond enlargement	person-day	0	7,746	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Family labour (feeding, pond cleaning, harvesting	g) nerson-day	1,291	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324
Total costs	, , , , , , , , , , , , , , , , , , , ,	, person da,	2,849	15,627	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647	5,647
Net Econo	mic Benefits		9,031	-843	11,183	13,361	15,671	15,737		15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737
Increment	al Net Economic Benefits		-,	-9,874	2,152	4,330	6,640	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706	6,706
			ENPV @	10% [MZN 36,428	EIRR	48%	B/C ratio	2.98														
	Phasing in of benefits		WOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	# of enterprises		15,000	2,000	3,000	4,000	3,000	2,000	1,000	•	·	,				25					20		20
	1		_5,000	-1.687	22,366	26,722	31,342	31,474		31,474	31,474	31,474	31,474	31.474	31.474	31,474	31,474	31,474	31,474	31.474	31,474	31,474	31,474
	2				-2,530	33,549	40,083	47,013	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211
	3					-3,374	44,732	53,444		62,948	62,948	62,948	62,948	62,948	62,948	62,948	62,948	62,948	62,948	62,948	62,948	62,948	62,948
	4					,-	-2,530	33,549		47,013	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211	47,211
	5							-1,687	22,366	26,722	31,342	31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474	31,474
	6								-843	11,183	13,361	15,671	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737	15,737
	Total ('000 MZN)		135,461	-1,687	19,836	56,898	113,627	163,794	202,975	226,551	233,547	235,989	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055	236,055

Loan (Line of credit)

Payment frequency

Interest rate (APR)

Table 54: Small barbershop - Financial budget

enterprise	: small barbershop																					
		WOP	WP				nr	MZN/unit	total (MZN)													
Parameter	s number of customers per month (haircut)	100	250	In	vestment																	
	number of customers per month (shaving)	100	250	ele	ectric shaver	kit	2	1,450	2,900													
	number of customers per month (haircut+shaving)	50	125	sti	aight razor		2	3,391	6,781													
	cost of haircut (MZN/person)	200	200	br	ush kit		2	737	1,474													
	cost for shaving (MZN/person)	250	250	pl	astic chairs		2	700	1,400													
	cost for haircut+shaving	300	300	m	scellaneous (combs, broon	n, water bucke	et)	5,000													
	Electricity (MZN/month)	500	1,250	To	tal investmer	nt			17,556	292.592												
	Water (MZN/month)	300	750																			
	Miscellaneous (lotions, soaps, after shave)	800	2,000																			
	, , , , , ,		-																			
		WOP	WP																			
		PY1-20	PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	rate of customer increase		60%	70%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Revenue	· · · · · · · · · · · · · · · · · · ·																					
nevenue	haircuts	20,000	30,000	35,000	40,000	45,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
	shaving	25,000	37,500	43,750	50,000	56,250	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500	62,500
	haircut + shaving	15,000	22,500	26,250	30,000	33,750	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500
	Total revenue	60,000	90,000	105,000	120,000	135,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Investmen		00,000	30,000	103,000	120,000	133,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	150,000	130,000	150,000	130,000	150,000	130,000	130,000	150,000	130,000
ilivestilleli	electric shavers (at least one replaced every 3 years)		2,900			1,450			1,450			1,450			1,450			1,450			1,450	
	straight razors (at least one replaced every 5 years)		6,781			1,430		3,391	1,430			1,430	3,391		1,430			3,391			1,430	
	brush kit		1,474		737		737	3,331	737		737		737		737		737	3,331	737		737	
					700		700				700				737		737		737		700	
	chairs (at least one replaced every 2 years)		1,400 5,000	500	500	500	500	500	700 500	500	500	500	700 500	500	500	500	500	500	500	500	500	500
	miscellaneous (partially replaced - 10% - every year)		5,000	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Operation		5 000	0.000	40.500	42.000	42.500	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000	45.000
	Electricity	6,000	9,000	10,500	12,000	13,500	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
	Water	3,600	5,400	6,300	7,200	8,100	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
	Lotion and soaps	9,600	14,400	16,800	19,200	21,600	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
	rent of shop (10 m2 floor area)		6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Labour																						
	Hired labour (MZN/month)		18,000	18,000	18,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000
	Family labour	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Total Costs		37,200	88,356	76,100	82,337	105,150	109,937	111,891	111,387	108,500	109,937	109,950	113,328	108,500	111,387	108,500	109,937	113,341	109,937	108,500	111,387	108,500
	ue BEFORE Financing	22,800	1,644	28,900	37,663	29,850	40,063	38,109	38,613	41,500	40,063	40,050	36,672	41,500	38,613	41,500	40,063	36,659	40,063	41,500	38,613	41,500
	al Net Revenue		-21,156	6,100	14,863	7,050	17,263	15,309	15,813	18,700	17,263	17,250	13,872	18,700	15,813	18,700	17,263	13,859	17,263	18,700	15,813	18,700
Returns to	family labour	3.33	5.00	5.83	6.67	7.50	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33
Financial in																						
	Disbursement of short term loan/a		18,000																			
	Transfer from previous period			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Contribution from own savings		5,000																			
	Grants (graduation fund, crowding in fund)					0																
	Sub-Total financial inflows		23,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financial o	outflows																					
	Short term principal		18,000				0	0														
	Short term Interest		2,932					0														
	Transfer to next period			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-Total financial outflows		20,932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Financ	cing		2,068	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Reven	ue AFTER financing		3,712	28,900	37,663	29,850	40,063	38,109	38,613	41,500	40,063	40,050	36,672	41,500	38,613	41,500	40,063	36,659	40,063	41,500	38,613	41,500
Incremetal	l Net Revenue		-19,088	6,100	14,863	7,050	17,263	15,309	15,813	18,700	17,263	17,250	13,872	18,700	15,813	18,700	17,263	13,859	17,263	18,700	15,813	18,700
	Total financing package	18,000		FN	IPV @	22.5%	MZN 31,440															
	Loan (Line of credit)	19 000		EII	OD.	57 5%																

FIRR

B/C

18,000

22.5%

semi-annual

57.5%

1.31

Table 55: Small barbershop - Economic Analysis

enterprise	enterprise: small barbershop SCF 0.88 CF (costs) From financial to economic prices:																					
	Unemployment rate								0.700 0.627 0.627 0.755 0.855	T T T N S	rom financial e - Tradable, i n - Tradable, i i - Tradable, ii IT - Non trada W - Shadow V MP - Market P P - Economic	exported (for national mported (inpuble Vage rice V	outputs) [EP= MP*SCF/(: EP = MP/(1+V# EP = MP*SCF/(: EP = MP/(1+V# SW=MW*(1-U Added Tax II rrt Tax E	AT)=MP*CF 1+VAT+IMPT/ AT)=MP*CF NEMPLOYME	AX+VAT*IMP1 NTRATE) ort Tax	•					
				2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Revenue																						
	haircuts	17,094	25,641	29,915	34,188	38,462	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735	42,735
	shaving	21,368	32,051	37,393	42,735	48,077	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419	53,419
	haircut + shaving	12,821	19,231	22,436	25,641	28,846	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051	32,051
	Total	51,282	76,923	89,744	102,564	115,385	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205	128,205
Investmen																						
	electric shavers (at least one replaced every 3 year	•	2,029	0	0	1,015	0	0	1,015	0	0	1,015	0	0	1,015	0	0	1,015	0	0	1,015	0
	straight razors (at least one replaced every 5 years)	4,745	0	0	0	0	2,372	0	0	0	0	2,372	0	0	0	0	2,372	0	0	0	0
	chairs (at least replaced every 2 years)		877	0	439	0	439	0	439	0	439	0	439	0	439	0	439	0	439	0	439	0
	miscellaneous (partially replaced - 10% - every yea	r)	3,134	313	313	313	313	313	313	313	313	313	313	313	313	313	313	313	313	313	313	313
Operation																						
	Electricity	5,128	7,692	8,974	10,256	11,538	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821	12,821
	Water	3,077	4,615	5,385	6,154	6,923	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692
	Lotion and soaps	6,017 0	9,026	10,530	12,034	13,538	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043	15,043
Labour	rent of shop (10 m2 floor area)	U	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128	5,128
Labour	Hired labour (MZN/month)	0	13.590	13,590	13,590	27,180	27,180	27,180	27.180	27,180	27,180	27,180	27,180	27.180	27,180	27,180	27,180	27,180	27.180	27.180	27,180	27,180
	Family labour	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590	13,590
	Tanning labour	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330	13,330
Total Costs	5	27,812	64,427	57,510	61,505	79,226	82,206	84,139	83,220	81,767	82,206	82,782	84,578	81,767	83,220	81,767	82,206	85,154	82,206	81,767	83,220	81,767
Net Reven	ue	23,470	12,496	32,233	41,059	36,159	45,999	44,066	44,985	46,438	45,999	45,423	43,627	46,438	44,985	46,438	45,999	43,051	45,999	46,438	44,985	46,438
Increment	Net Revenue		-10,973	8,763	17,589	12,689	22,529	20,596	21,515	22,968	22,529	21,954	20,157	22,968	21,515	22,968	22,529	19,581	22,529	22,968	21,515	22,968
		ENPV @	10.0% N	IZN 136,376	E	RR	115.9%	В	/c	1.52												
Phasing in	of benefits	WOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
# of enterp		16.000	2,000	3,000	3,000	3,000	3,000	2,000	•	ŭ	•											
1	31.503	10,000	24,993	64,466	82,119	72,317	91,998	88,131	89,969	92,876	91,998	90,847	87,254	92,876	89,969	92,876	91,998	86,102	91,998	92,876	89,969	92,876
2			2.,555	37,489	96,699	123,178	108.476	137,998	132,197	134.954	139,314	137,998	136,270	130,881	139,314	134,954	139,314	137,998	129,153	137,998	139,314	134,954
3				,	37,489	96,699	123,178	108,476	137,998	132,197	134,954	139,314	137,998	136,270	130,881	139,314	134,954	139,314	137,998	129,153	137,998	139,314
4					- ,	37,489	96,699	123,178	108,476	137,998	132,197	134,954	139,314	137,998	136,270	130,881	139,314	134,954	139,314	137,998	129,153	137,998
5						- ,	37,489	96,699	123,178	108,476	137,998	132,197	134,954	139,314	137,998	136,270	130,881	139,314	134,954	139,314	137,998	129,153
6							- ,	24,993	64,466	82,119	72,317	91,998	88,131	89,969	92,876	91,998	90,847	87,254	92,876	89,969	92,876	91,998
Total ('000	O MZN)	375,517	24,993	101,956	216,307	329,684	457,841	579,475	656,284	688,619	708,778	727,308	723,921	727,308	727,308	726,294	727,308	724,936	726,294	727,308	727,308	726,294
,	•	•	•		•	•	•		•							•			•	•		•

Table 56: Beans crop model

Beans Crop Model

Yields	and	Inputs
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	Yields and Inputs							
	(Per ha)		WOP	_	_	WP _		
		Years	1 to 20	1	2	3	4	5 to 20
		Unit						
	Yields	Kg	400	500	600	700	800	800
	Post-harvest loss (10%@ WOP, 5% @ WP)	Kg	80	100	102	105	96	80
	Self consumption (5% of production)	Kg	20	25	30	35	40	40
	Total marketable production	kg	300	375	468	560	664	680
Operatin	g							
	Inputs							
	Unimproved-seeds	Kg	15	0	0	0	0	0
	Improved seeds	Kg	0	10	10	10	10	10
	NPK (Basal application)	Kg	0	30	30	30	30	30
	AN	Kg	0	30	30	30	30	30
	Fungicides (epoxiconazole)	Litre	0	1	1	1	1	1
Labor								
	Land clearing	person-days	3	3	3	3	3	3
	Ploughing	person-days	3	3	3	3	3	3
	Discing/Harrowing	person-days	2	3	3	3	3	3
	Planting	person-days	2	2	2	2	3	3
	First weeding	person-days	1	2	2	2	2	2
	Second weeding	person-days	0	2	2	2	2	2
	Fertilizing	person-days	0	2	3	4	4	4
	Harvesting	person-days	2	2	2	3	4	5
	Drying	person-days	0	0	0	0	0	0
	Threshing/hand	person-days	2	2	2	2	2	3
	Threshing/Mechanised	person-days	0	1	1	1	1	1
	Transport field to house	person-days	1	1	1	1	2	2
	Total Labor							
	Family labour	person-days	16	23	24	26	29	31

Table 57: Maize crop model

Maize Crop Model YIELDS AND INPUTS		Without					
(Per ha)		Project		W	ith project		
(Years Unit	1 to 20	1	2	3	4	5 to 20
Yields	Kg	1,000	1,400	1,500	1,600	1,700	1,800
Post-harvest loss (10% @WOP, 5% @ WP)	Kg	100	70	75	80	85	90
Self consumption (1% of production)	Kg	50	70	75	80	85	90
Total marketable production	kg	850	1,260	1,350	1,440	1,530	1,620
Operating							
Inputs							
Hybrid maize seeds	Kg	0	25	25	25	25	25
Unimproved seeds(OPVS)-Maize	Kg	35	0	0	0	0	0
NPK (Basal application)	Kg	0	20	20	20	20	20
AN	Kg	0	20	20	20	20	20
Herbicides	Litres	0	0	0	0	0	0
Packaging (50Kg)	Bags	17	25	27	29	31	32
Labor							
Land clearing	person-days	2	3	3	3	3	3
Ploughing	person-days	2	3	3	3	3	3
Discing/Harrowing	person-days	2	2	2	2	2	2
Planting	person-days	2	2	3	4	4	4
First weeding	person-days	1	2	2	2	2	3
Second weeding	person-days	0	2	2	2	2	3
Fertilizing	person-days	0	2	2	2	2	3
Harvesting	person-days	2	2	3	4	4	5
Drying	person-days	0	0	0	0	0	0
Threshing/hand	person-days	2	3	4	5	5	6
Transport field to house	person-days	2	1	1	1	2	2
Total Labor							
Family labour	person-days	15	22	25	28	29	34

Table 58: Crop pattern - maize and beans farm

CROPPING	PATTERNS

(in Units)		WOP			WP		
	Years Unit	1 to 20	1	2	3	4	5 to 20
Cropping Intensity	Percent	33	40	47	53	60	67
Cropping Pattern							
Existing Technology							
Maize	ha	0.6	-	-	-	-	-
Beans	ha	0.4	-	-	-	-	-
Sub-total Existing Technology	ha	1.0	-	-	-	-	-
New Technology							
Maize	ha	-	0.7	0.8	0.9	1.0	1.1
Beans	ha	-	0.5	0.6	0.7	0.8	0.9
Sub-total New Technology	ha	-	1.2	1.4	1.6	1.8	2.0
Total Cropped Area		1.0	1.2	1.4	1.6	1.8	2.0

Table 59: Maize and beans farm - Financial budget

Farm mode Parameter	el: <u>maize and beans, 2ha</u> s																					
	Maize	MZN				MZN																
	.farm gate price (kg)	11.46	Bea	ans																		
	.unimproved seed (kg)	41	.fa	arm gate price	(kg)	12																
	.improved seed (kg)	100	.ui	nimproved se	ed (kg)	65																
	NPK (kg)	35	.in	nproved seed	(kg)	55																
	AN (kg)	26	Fun	gicides (It)		650																
	Labor (unskilled, person-day)	171	Bag	gs (each)		20																
	Financial Budget																					
	(in MZN)	WOP			WP																	
		1 to 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Prod	uction																					
	Maize	5,845	10,108	12,377	14,852	17,534	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422	20,422
	Beans	1,440	2,250	3,370	4,704	6,374	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344	7,344
	Sub-total Main Production	7,285	12,358	15,746	19,556	23,908	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766
Operating	costs																					
	Inputs																					
	Unimproved seeds																					
	maize	861	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	beans	390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Improved seeds							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	maize	0	1,750	2,000	2,250	2,500	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750
	beans	0	275	330	385	440	495	495	495	495	495	495	495	495	495	495	495	495	495	495	495	495
	NPK (Basal application)	0	1,015	1,190	1,365	1,540	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715
	AN	0	754	884	1,014	1,144	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274
	Fungicides	0	325	390	455	520	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585
	Packaging	204	353	432	518	612	713	713	713	713	713	713	713	713	713	713	713	713	713	713	713	713
	Sub-total purchased inputs	1,455	4,472	5,226	5,987	6,756	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532	7,532
Labor								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Family labour	2,599	4,600	5,882	7,421	8,926	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166
	Sub-total labor	2,599	4,600	5,882	7,421	8,926	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166	11,166
	uction Costs	4,054	9,072	11,108	13,409	15,682	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698	18,698
	ue BEFORE Financing	3,230	3,286	4,638	6,147	8,226	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068	9,068
Increment	al Net Revenue		56	1,408	2,917	4,996	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837	5,837
			FNPV @		MZN 16,332																	
			FIRR	NA																		
			B/C	1.46																		

Table 60: Maize and beans farm - Economic Analysis

Enterprise	farm 1: maize and beans																					
	SCF	0.88		F (costs)							rom financial	l to oconom	ic prices:									
	Unemployment rate	24.50%		naize, beans - im	nroved seeds	(Ti)	0.734				e - Tradable,		•	FP= MP*SCF	/(1+VAT+EXPTA	Y+\/AT*FYDT	ΔΧ) = MP*CE					
	VAT	17.00%		ertilizers, fungici		('')	0.734				n - Tradable,				·VAT)=MP*CF	X.VAI EXIII	AN) - IVII CI					
	Export tax (all commodities)	0.00%		ackaging (Ti)	acs, (11)		0.734				ii iidaabic,	national		Li - Wii /(1.	VATI-IVII CI							
	Import tax (maize, beans seeds)	2.50%		nimproved seed	s (Tn)		0.752			Т	i - Tradable, i	mported (in	nuts)	FP = MP*SC	F/(1+VAT+IMPT	AX+VAT*IMP	TAX)=MP*CF					
	Import tax (fertilizers, fungicides)			F (outputs)	- (,						T - Non trada				-VAT)=MP*CF		,					
	Import tax (packaging)	2.50%		naize, beans (Te)			0.752				W - Shadow \				-UNEMPLOYME	NTRATE)						
	, (p			F (labour)			0.755				1P - Market P				IMPTAX - impo	,						
										E	P - Economic	Price	EXPTAX - Exp	ort Tax	EXPTAX - Expo	rt Tax						
	Economic budget																					
	(in MZN)	WOP	_	_	WP																	
		1 to 20	1	2	3	4	5	6	7	8	9	10	11	12	! 13	14	15	16	17	18	19	20
Main Prod	uction																					
	Maize	4,289	7,417	9,082	10,898	12,866	14,985	14,985	14,985	14,985	14,985	14,985	14,985	14,985		14,985	14,985	14,985	14,985	14,985	14,985	14,985
	Beans	1,057	1,651	2,473	3,452	4,677	5,389	5,389	5,389	5,389	5,389	5,389	5,389	5,389	-,	5,389	5,389	5,389	5,389	5,389	5,389	5,389
	Sub-total Main Production	5,345	9,068	11,555	14,350	17,544	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374	20,374
Operating																						
	Inputs																					
	Unimproved seeds																					
	maize	648 293																				
	beans	293																				
	Improved seeds maize		1.284	1,468	1,651	1.834	2.018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018	2,018
	beans		202	242	283	323	363	363	363	363	363	363	363	363		363	363	363	363	363	363	363
	NPK (Basal application)		745	873	1,002	1,130	1,258	1,258	1,258	1,258	1,258	1,258		1,258		1,258	1,258	1,258	1,258	1,258	1,258	1,258
	AN		553	649	744	839	935	935	935	935	935	935		935		935	935	935	935	935	935	935
	Fungicides	_	238	286	334	382	429	429	429	429	429	429		429		429	429	429	429	429	429	429
	Packaging	150	259	317	380	449	523	523	523	523	523	523	523	523		523	523	523	523	523	523	523
	Sub-total purchased inputs	1,091	3,281	3,835	4,394	4,957	5,527	5,527	5,527	5,527	5,527	5,527	5,527	5,527		5,527	5,527	5,527	5,527	5,527	5,527	5,527
Labor																						
	Family labour	1,962	3,473	4,441	5,603	6,739	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431
	Sub-total labor	1,962	3,473	4,441	5,603	6,739	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431	8,431
	Total costs	3,053	6,754	8,276	9,997	11,697	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957	13,957
Net Econor	nic benefits	2,292	2,314	3,279	4,353	5,847	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417
Increment	al net revenue AFTER Financing		21	986	2,061	3,554	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125	4,125
Returns to	family labour																					
		ENPV @	10%	MZN 26,851	EI	RR N	IA	В	/C	1.45												
Phasing in	of benefits	WOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
# of benefi	ciaries	39,150	7,000	8,000	8,000	6,150	5,000	5,000														
1			16,196	22,950	30,474	40,928	44,919	44,919	44,919	44,919	44,919	44,919		44,919		44,919	44,919	44,919	44,919	44,919	44,919	44,919
2				18,510	26,229	34,828	46,775	51,335	51,335	51,335	51,335	51,335		51,335		51,335	51,335	51,335	51,335	51,335	51,335	51,335
3					18,510	26,229	34,828	46,775	51,335	51,335	51,335	51,335		51,335		51,335	51,335	51,335	51,335	51,335	51,335	51,335
4						14,229	20,163	26,774	35,958	39,464	39,464	39,464	39,464	39,464		39,464	39,464	39,464	39,464	39,464	39,464	39,464
5							11,569	16,393	21,767	29,234	32,085	32,085	32,085	32,085		32,085	32,085	32,085	32,085	32,085	32,085	32,085
6		00.744	46.406	44.460	75.240	446 24 :	450.252	11,569	16,393	21,767	29,234	32,085	32,085	32,085		32,085	32,085	32,085	32,085	32,085	32,085	32,085
Total ('000	MZN)	89,746	16,196	41,460	75,213	116,214	158,253	197,764	221,708	238,055	248,373	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223	251,223

Table 61: Soya beans crop model

Soya bean crop model

YIELDS AND INPUTS		WOP			WP		
(Per ha)	Years	1 to 20	1	2	3	4	5 to 20
	Unit						
Yields	Kg	400	800	850	950	1,100	1,300
Post-harvest loss (10% @ WOP)	Kg	40	80	85	95	110	130
Total marketable production	Kg	360	720	765	855	990	1,170
Operating							
Inputs							
Unimproved seeds	Kg	30.0	-	-	-	-	-
Improved seeds	Kg	-	20.0	20.0	20.0	20.0	20.0
NPK (Basal application)	Kg	-	15.0	15.0	15.0	15.0	15.0
AN	Kg	-	15.0	15.0	15.0	15.0	15.0
Herbicides	Litres	-	-	-	-	-	-
Packing 50 Kg (bags)	number	7	14	15	17	20	23
Labour							
Land clearing	person-days	2.0	2.0	2.0	2.0	2.0	2.0
Ploughing	person-days	1.0	0.5	0.5	0.5	0.5	0.5
Discing/Harrowing	person-days	1.0	0.5	0.5	0.5	0.5	0.5
Planting	person-days	2.0	1.0	1.0	1.0	1.0	1.0
Direct seeding	person-days	1.0	1.0	1.0	1.0	1.0	1.0
First weeding	person-days	2.0	2.0	2.0	2.0	2.0	2.0
Second weeding	person-days	2.0	2.0	2.0	2.0	2.0	2.0
Fertilizing	person-days	-	2.0	2.0	2.0	2.0	2.0
Harvesting	person-days	2.0	2.0	2.0	3.0	3.0	4.0
Threshing/hand	person-days	2.0	2.0	2.0	3.0	3.0	3.0
Drying	person-days	-	-	-	-	-	-
Transport field to house	person-days	1.0	1.0	1.5	1.5	2.0	2.0
Total Labor							
Famiily labour	person-days	16.0	16.0	16.5	18.5	19.0	20.0

Table 62: Sesame crop model

Sesame crop model

	YIELDS AND INPUTS		WOP	_	_	WP _		
	(Per ha)	PY	1 to 20	1	2	3	4	5 to 20
		Unit						
	Yields	Kg	200.0	300.0	400.0	450.0	550.0	700.0
	Post-harvest loss (@ 10% of production)	Kg	20.0	30.0	40.0	45.0	55.0	70.0
	Self consumption (@ 5% of production)	Kg	10.0	15.0	20.0	22.5	27.5	35.0
	Total marketable produce	Kg	170.0	255.0	340.0	382.5	467.5	595.0
(Operating							
	Inputs							
	Unimproved seeds	Kg	3.0	-	-	-	-	-
	Improved seeds	Kg	-	2.0	2.0	2.0	2.0	2.0
	NPK (Basal application)	Kg	-	10.0	10.0	10.0	10.0	10.0
	AN (kg)	Kg	-	10.0	10.0	10.0	10.0	10.0
	Pesticide	lt	-	1.0	1.0	1.0	1.0	1.0
	Packing (50Kg bags)	number	3	5	7	8	9	12
L	abor							
	Land clearing	person-days	2.0	2.0	2.0	2.0	2.0	2.0
	Ploughing	person-days	2.0	1.0	1.0	1.0	1.0	1.0
	Discing/Harrowing	person-days	2.0	2.0	1.0	1.0	1.0	1.0
	Planting	person-days	2.0	2.0	2.0	2.0	2.0	2.0
	First Pesticide application	person-days	-	0.5	0.5	0.5	0.5	0.5
	Second Pesticide application	person-days	-	0.5	0.5	0.5	0.5	0.5
	First weeding	person-days	2.0	2.0	2.0	2.0	2.0	3.0
	Second weeding	person-days	1.0	1.0	1.0	1.0	1.0	1.0
	Fertilizing	person-days	-	1.0	1.0	1.0	1.0	1.0
	Harvesting	person-days	2.0	2.0	2.0	2.0	2.5	2.5
	Treshing	person-days	2.0	2.0	2.0	2.0	2.5	2.5
	Transport field to house	person-days	2.0	2.0	2.0	2.0	2.5	2.5
1	Total Labor							
	Family labour	person-days	17.0	16.0	15.0	15.0	16.5	17.5

Table 63: Sesame and soya crop pattern

Sesame + soya bean farm

CROPPING PATTERNS

(in Units)			WOP		W			
	Years	Unit	1 to 20	1	2	3	4	5 to 20
Cropping Intensity		Percent*	33	40	47	60	87	100
Cropping Pattern								
Existing Technology								
Sesame		ha	0.5	-	-	-	-	-
Soya Bean		ha	0.5	-	-	-	-	-
Sub-total Existing Technology		ha	1.0	-	-	-	-	-
New Technology								
Sesame		ha	-	0.6	0.8	1.0	1.4	1.5
Soya Bean		ha	-	0.6	0.6	0.8	1.2	1.5
Sub-total New Technology		ha	-	1.2	1.4	1.8	2.6	3.0
Total Cropped Area			1.0	1.2	1.4	1.8	2.6	3.0

Table 64: Sesame and soya beans farm - Financial budget

Farm mode Parameters	el: <u>sesame + soya beans, 3ha</u> s																					
	Sesame	MZN	So	ya bean		MZN																
	.farm gate price (kg)	45	.f	farm gate price (F	kg)	30																
	.unimproved seed (kg)	40		unimproved seed	i (kg)	60																
	.improved seed (kg)	100	.i	mproved seed (k	(g)	60																
	NPK (kg)	35	Fu	ngicides (It)		650																
	AN (kg)	26		gs (each)		20																
	Labor (unskilled, person-day)	171	La	bour (skilled)		2325																
	Financial Budget																					
	(in MZN)	WOP			WP																	
		1 to 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Produ	uction																					
	Sesame	3,825	5,738	7,650	8,606	10,519	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388	13,388
	Soya beans	5,400	10,800	11,475	12,825	14,850	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550	17,550
	Sub-total Main Production	9,225	16,538	19,125	21,431	25,369	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938
Operating	costs																					
	Inputs																					
	Unimproved seeds																					
	Sesame	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Soya beans	900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Improved seeds							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sesame	0	120	160	200	280	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Soya beans	0	720	720	960	1,440	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
	NPK (Basal application)	0	525	595	770	1,120	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313
	AN	0	390	442	572	832	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975
	Fungicides	0	390	520	650	910	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975
	Packaging	188	349	384	429	500	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597
Labor								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Family labour	2,822	3,283	3,745	5,096	7,849	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619	9,619
Total Produ	uction Costs	3,970	5,777	6,566	8,676	12,930	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578
Net revenu	ue	5,256	10,760	12,559	12,755	12,438	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359	15,359
Increment	al Net Revenue		5,505	7,304	7,499	7,183	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104
			FNPV @	22%	36,662																	
			FIRR	NA																		
			B/C ratio	2.19																		

Appendix 10: Economic and Financial Analysis

Table 65: Sesame and soya beans farm - Economic Analysis

.																						
Enterprise	farm 2: sesame + soya beans SCF	0.88	,	CF (costs)							rom financial	l to econom	nic nrices:									
	Unemployment rate	24.50%		. ,	improved see	de (Ti)	0.734				e - Tradable,			EP= MP*SCF/	/1+\/AT+FYDT/	\Υ±\/ΔΤ*FYDT	ΔΥ) = MD*CE					
	VAT	17.00%		ertilizers, fun		-05 (11)	0.734				n - Tradable,		or outputs,	EP = MP/(1+\		D. 1711 E711 1	700, 1011 01					
	Export tax (all commodities)	0.00%		ackaging (Ti)	5101003, (11)		0.734				madabic,	- Indicional		/(2	,, c.							
	Import tax (maize, beans seeds			inimproved se	eeds (Tn)		0.752			1	i - Tradable, i	mported (ir	nputs)	EP = MP*SCF	/(1+VAT+IMPT	AX+VAT*IMP	TAX)=MP*CF					
	Import tax (fertilizers, fungicide	2.50%	(CF (outputs)	. ,					1	NT - Non trada	able		EP = MP/(1+\	AT)=MP*CF		,					
	Import tax (packaging)	2.50%	r	naize, beans (Te)		0.752				W - Shadow \			SW=MW*(1-	JNEMPLOYME	NTRATE)						
			(CF (labour)			0.755			1	ИР - Market P	rice	VAT - Valued	Added Tax	IMPTAX - impo	ort Tax						
										E	P - Economic	Price	EXPTAX - Exp	oort Tax	EXPTAX - Expo	ort Tax						
	Economic budget																					
	(in MZN)	WOP	_	_	WP _																	
		1 to 20	1 "	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Prod																						
	Sesame	2,877	4,315	5,754	6,473	7,912	10,069	10,069	10,069	10,069	10,069	10,069			10,069	10,069	10,069	10,069	10,069	10,069	10,069	10,069
	Soya beans	4,062	8,123	8,631	9,646	11,169	13,200	13,200	13,200	13,200	13,200	13,200	-		13,200	13,200	13,200	13,200	13,200	13,200	13,200	13,200
	Sub-total Main Production	6,938	12,438	14,385	16,119	19,081	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269	23,269
Operating																						
	Inputs																					
	Unimproved seeds																					
	Sesame	45																				
	Soya beans Improved seeds	677																				
	Sesame		88	117	147	205	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
	Soya beans		528	528	704	1,057	1,321	1,321	1,321	1,321	1,321	1,321			1,321	1,321	1,321	1,321	1,321	1,321	1,321	1,321
	NPK (Basal application)	_	385	437	565	822	963	963	963	963	963	963			963	963	963	963	963	963	963	963
	AN	-	286	324	420	611	715	715	715	715	715	715			715	715	715	715	715	715	715	715
	Fungicides	_	286	382	477	668	715	715	715	715	715	715			715	715	715	715	715	715	715	715
	Packaging	138	256	282	314	367	438	438	438	438	438	438			438	438	438	438	438	438	438	438
Labor																						
	Unskilled	2,130	2,479	2,827	3,847	5,926	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262	7,262
	Total costs	2,990	4,309	4,897	6,475	9,655	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635	11,635
Net Econor	mic Benefits	3,948	8,130	9,487	9,645	9,426	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634	11,634
Incrementa	al Net Economic Benefits		4,181	5,539	5,696	5,478	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686	7,686
		ENPV @	10% N	MZN 57,471	EIRR	NA	B/C ratio	2.25														
				_	_		_	_	_	_	_											
		WOP: PY1-20	WP: PY1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
# of benefi	ciaries	39,150	7,000 56.907	8,000	8,000	6,150	5,000	5,000	04 420	81.438	04.420	04.430	04 430	04 430	04 420	04.420	04 430	04.420	04.430	04.430	04.430	04 430
1 2			56,907	66,410	67,512	65,983	81,438	81,438	81,438		81,438	81,438			81,438	81,438	81,438	81,438	81,438	81,438	81,438	81,438
3				65,037	75,898 65,037	77,156 75,898	75,409 77,156	93,072 75,409	93,072 93,072	93,072 93,072	93,072 93,072	93,072 93,072			93,072 93,072							
3 4					05,05/	75,898 49,997	58,346	75,409 59,314	57,970	71,549	71,549	71,549			71,549	71,549	71,549	71,549	71,549	71,549	71,549	71,549
5						40,001	40,648	47,436	48,223	47,130	58,170	58,170			58,170	58,170	58,170	58,170	58,170	58,170	58,170	58,170
6							40,040	40,648	47,436	48,223	47,130	58,170	-		58,170	58,170	58,170	58,170	58,170	58,170	58,170	58,170
Total ('000) MZN)	154.573	56,907	131,447	208,446	269,033	332,998	397,317	421,212	434,486	444,433	455,473			455,473	455,473	455,473	455,473	455,473	455,473	455,473	455,473
, 000	,	,-,-	,,	,,			,0	,	,	,	, .55	, ., .	, ., .	,.,.	,	,	,	,	,	,	,	,

Republic of Mozambique
Rural Enterprise Financing Project (REFP)
Detailed design report
Appendix 11: Draft project implementation manual

Appendix 11: Draft project implementation manual

Main elements are on file and partly included in appendix 4. The complete PIM will be added after QA.

Appendix 12: Compliance with IFAD policies

Policy

Alignment with IFAD Policy

IFAD Strategic Framework 2016-2025: « Enabling Inclusive and Sustainable Rural Transformation » IFAD's fifth Strategic Framework covers the period 2016-2025, serving as an overarching policy guideline to provide direction to IFAD's work, and as a key instrument for consolidating IFAD's development effectiveness. It responds to the new global environment and positions IFAD to play a crucial role within it — by enabling the transformation of rural areas in a manner that is both more inclusive and sustainable. The framework has three strategic objectives:

- SO1: Increase poor rural people's productive capacities investing in rural
 people to enhance their access to and control over assets and resources. REFP
 supports this SO by aiming to increase people's access and use of appropriate
 and sustainable financial services in rural areas.
- 2. SO2: Increase poor rural people's benefits from market participation improving the engagement of poor rural people in markets for goods, services and wage labour. REFP aims to improve rural household livelihoods through Subcomponent 2.2: "Support to business plan validation and market linkages" by facilitating and validating business plans and identifying viable market outlets and linking rural enterprises to the markets.
- 3. SO3: Strengthen the environmental sustainability and climate resilience of poor rural people's economic activities. REFP recognizes the key importance of environmental sustainability to ensure continued profits and improved livelihoods. The integration of capacity building activities on climate change adaptation and the environmental sustainability of REFP is further described in the SECAP Review Note.

Country level policy engagement

IFAD promotes policy engagement in projects in order to reach two main objectives: (i) help create an enabling environment for implementation and achieving the project's impact, and (ii) help create the conditions for a large number of rural population to move out of poverty. It is a key element of the scaling up agenda. IFAD's role is not intended to advocate for specific policy outcomes; it is rather to assist Governments to use the experience gained in innovative and change oriented IFAD supported projects in the design or reform of policies, and to facilitate dialogue among national stakeholders on key policy issues. **REFP** recognizes the importance of harmonization with existing structures and places emphasis on utilising relevant systems, where adequate, that are already in place.

Rural finance policy

IFAD's Rural Finance Policy (2009) has six guiding principles to be applied at the micro, meso and macro levels: (i) support access to a variety of financial services; (ii) promote a wide range of financial institutions, models and delivery channels; (iii) support demand driven and innovative approaches; (iv) encourage – in collaboration with private sector partners – market-based approaches that strengthen rural financial markets, avoid distortions in the financial sector and leverage IFAD's resources; (v) develop and support long-term strategies focusing on sustainability and poverty outreach; and (vi) participate in policy dialogues that promote an enabling environment for rural finance.

Consistent with the goals of IFAD's rural finance policy and technical guidance, **REFP** will support a number of demand-driven and innovative approaches to rural financial services: including i) developing and validating basic business plans, financial literacy and community-based microfinance; ii) technical assistance to selected financial service providers to strengthen their capacity to service smallholder farmers as well as technical assistance directly to smallholders In line with the IFAD Rural Finance Policy that permits the use of lines of credit in specific and well defined circumstances and sector environments, REFP will also be engaged in the refinancing of union and retail financial intermediaries.

IFAD's policy on targeting defines its priority target group as the poorest rural people with productive potential. REFP will apply a strong pro-poor social inclusion strategy for the

Compliance with IFAD's Targeting Policy – Reaching the Poor (2010)

disadvantaged categories (in particular women, women headed households and youths, as well as HIV affected entrepreneurs jto enable them to participate in and benefit from capacity building initiatives and access loans that will empower them to establish viable rural on and off farm MSEs. The project will further target 5000 youths (50% male and 50% female) to build their capacity in entrepreneurial and business skills, provide them with seed capital for the youths to engage in micro to small scale enterprises, and provide mentorship to graduated youths. Youth beneficiaries will account for 20% of the target.

The goal of IFAD's ENRM policy is to enable poor rural people to escape from and remain out of poverty through more productive and resilient livelihoods and ecosystems. REFP follows these principles by aiming to render the rural enterprise activities more sustainable and resilient to climate shocks. This is done through increased capacity on climate adaptive practices and risk management, and by conducting regular due diligence on the compliance with ENRM regulations by the financial service providers. The project will place attention to both land access and land management, both for communities and individual farmers, as these are key to successful agricultural development. This will furthermore align REFP to the ongoing *Terra Segura* project and the strategic objectives of other international donors.

Environment and Natural Resource Management Policy

Climate Change Strategy

IFAD's Climate Change Strategy notes that IFAD's goal is to maximize the fund's impact on rural poverty in a changing climate. Climate change has been actively considered in the design of REFP, more specifically within the SECAP Review Note. REFP will aim to increase smallholders' climate resilience by encouraging the diversification of income streams and promoting climate adaptive practices. Where possible, the project will explore compliance with the ongoing Local Plans of Adaptation which are an integral part of the National Climate Change Adaptation Management Strategy implemented by the Ministry of Land, Environment, and Rural Development (MITADER).

Knowledge management

The Knowledge Management strategy suggests that projects should have baseline studies and should have dedicated frameworks for knowledge management in order to "learn systematically and collectively from its own projects and projects, and from the experience of its partners, particularly poor rural people, in order to deliver high-quality services and to enable its development partners to find innovative ways to overcome poverty, and to use the knowledge acquired to foster pro-poor policy reforms."

The REFP M&E system will form the foundation of the knowledge management and learning system and will thus be a primary instrument of information capture and storage, based on the indicators detailed in the results framework. Tools such as case studies, stakeholder interviews and surveys will be used to deepen understanding of factors contributing to successes and failures, and to enable full documentation of impacts from the field and beneficiaries. Particular attention will be given to documenting, innovative models, information sharing with stakeholders, and Learning Routes.

Scaling-up

The definition adopted by IFAD for scaling-up is: "expanding, adapting and supporting successful policies, projects and knowledge, so that they can leverage resources and partners to deliver larger results for a greater number of rural poor in a sustainable way". Scaling up results does not mean transforming small IFAD projects into larger projects. **REFP** aims to leverage greater impact through partnerships with already existing financial service providers and replicating the approaches that have been proven successful.

Appendix 13:Social, Environmental and Climate Assessment Procedures (SECAP)

Major landscape characteristics and issues Socio-cultural context

- 1. Mozambique sits on the southeast coast of Africa, with a population of 24,5 million 977,863 people. The country has experienced a rapid economic expansion over the past decades but this has had only a moderate impact on poverty reduction. The 2015 Human Development Index placed Mozambique as 180th out of the 188 countries and territories. Mozambique faces a number of socio-cultural challenges, such as chronic food insecurity (34% of the population 140), low life expectancy (50.3 years), high death rates caused by malaria (29% for the general population), and high HIV rates (11.5%) 141.
- 2. As of 2015, the agricultural sector contributed to about 25% of GDP and represented over 20% of exports. Smallholder farmers represent almost 90% of the in-country productivity. Over half of the cultivated land is dedicated to the production of maize, rice, and cassava. Agriculture remains the main source of income for more than 80% of the population and provides employment for approximately 80% of the total workforce. Agricultural output has been greatly affected by weather events, such as severe droughts and flooding in the south, and erratic rainfall in the north.
- 3. Since the elections in 2014, there has been ongoing political tension and armed conflict was reported in parts of the centre and north of the country. A ceasefire was declared in December 2016.

Natural Resources

4. Mozambique has a 2470km coastline with coastal plains below 200m covering around 40% of the country¹⁴². The Zambezi is the largest of about 25 main rivers flowing to the Indian Ocean, most of which are transnational¹⁴³.

- 5. Terrestrial ecosystems are composed of woodlands, grasslands, wooded savannas and bushlands. 99% of total cultivated land is distributed amongst 4.2million smallholdings, 28% of which are headed by women¹⁴⁴. Nationwide, over 82% of jobs depend on Mozambique's natural resources and it is estimated that the natural capital contributes up to 50% of GDP¹⁴⁵. Agricultural encroachment and unsustainable production of bio-energies (i.e. firewood) are leading to deforestation and soil degradation and further threats to the environment include illegal mining, logging including its illegal practice, hunting, poaching, and overfishing.
- 6. **Wetland and freshwater ecosystems** are extensive, varied and are comprised of rivers and lakes (natural and artificial). Inland waters cover 13,000km².
- 7. **Marine ecosystems** include seagrass beds (490km²) and coral reefs (1,890km²). Major challenges in marine NRM remain including coastal erosion, marine habitat degradation, overfishing by unlicensed operators, encroachment by industrial fishing vessels, and a shortage of human resources and infrastructure for implementation of fisheries laws and regulations. The fishery and aquaculture sector in Mozambique is characterised by semi- and industrial fleets whose catches (shrimp mainly) are directly exported. Small-scale/artisanal fishing (vessels <10m, canoes mostly), provides the bulk of catches (91%), which are not closely monitored. The catch from artisanal fisheries plays an important role in domestic consumption and food security in both coastal and inland areas. In 2014, about 334,000 people, (1.4 % of the population), was estimated to depend directly or indirectly on artisanal fisheries. The contribution of the sector to the national GDP is estimated to be in the range of 2- 3% 146.

199

World Bank country overview: http://www.worldbank.org/en/country/mozambique/overview

143 Silici et al. 2015

¹⁴⁰ WFP 2016

¹⁴² USAID 2013

¹⁴⁴ MASA 2015

¹⁴⁵ MICOA and PEI, Environmental Economic Analysis of Natural Resource Management, Mozambique, 2012

¹⁴⁶ CSPE IFAD 2017

8. Mozambique is also rich in mineral resources, with the mining sector contributing 1.7% of the GDP in 2012. Over 12,000 people are involved in artisanal gold mining¹⁴⁷. All land in Mozambique is the property of the State, with use and benefit rights granted to land users.

Current climate, historical trends and projections

- 9. According to the Koppen-Geiger climate classification, most of Mozambique has a Tropical semiarid climate. The seasonal rainfall pattern coincides with the position of the Intertropical Convergence Zone (ITCZ) which brings about 150-300mm of rain/month in the north and 50-150mm rain/month in the south. El Nino Southern Oscillation (ENSO) causes drier than average conditions during the rainy season in its warm phase (El Nino) and relatively cold and wet conditions in its cold phase (La Nina).
- 10. Mozambique is one of Africa's most vulnerable countries to climate change. Frequent extreme weather events combined with poverty and weak institutional development render the country especially vulnerable. The occurrence of climate related hazards such as droughts, floods and cyclones are increasing, resulting in devastating impacts. Central Mozambique experiences frequent agricultural losses due to droughts, floods, and uncontrolled bush fires while the densely populated coastal lowlands suffer from severe erosion, saltwater intrusion, loss of vital infrastructure and the spread of diseases such as malaria, cholera, and influenza 148. Erratic rainfall patterns result in low ground water resources.
- 11. According to the ND-GAIN index (2013)¹⁴⁹, which summarizes a country's vulnerability level, Mozambique ranks 142 out of 178 countries. The country is categorised as 36th on vulnerability and 144th on readiness.
- 12. Mozambique is frequently affected by tropical cyclones occurring during the hot and humid season. In January 2012, cyclone Leon-Eline affected 4.5 million of its population⁹ and in 2016, cyclone Dineo affected 650,000 people. The country is simultaneously experiencing an increase in the mean annual temperatures and a decrease in annual rainfall (at a rate of 3.1% per decade between 1960 and 2006)⁹. The south has become hotter and dryer and suffers from more frequent persistent droughts, while the coastal regions face more frequent episodic floods.
- 13. Climate projections show a significant average temperature rise (ranging from a minimum increase of 1.0°C for 2010-2100 to a maximum increase of 4.6°C for 2010-2090)⁹. Rainfall projections show no significant change in total annual rainfall on the national level, but the regional and seasonal changes are substantial. Climate models project a considerable increase in the proportion of total rainfall that will fall during heavy rain events, coupled with elongated dry spells.
- 14. Climate change will affect water availability and food security in Mozambique in numerous ways, especially through i.) decreased yields, ii.) increased risks of crop failure, iii.) low groundwater tables, iv.) empty wells, v.) a lack of water for consumption and irrigation and vi.) an increased risk of severe floods and droughts.
- 15. The Mozambican population is not only vulnerable to climate change due to its physical situation, but also due to the socioeconomic issues that aggravate negative climate change effects and decrease the population's adaptive capacity. Climate change is expected to cause a drop in GDP of 4-14% or costs of up to USD 7.6 billion dollars by 2050¹⁵⁰. The country's poor infrastructure (6% of highways are paved) will limit mobility in case of extreme events. Population growth (2.5%/year) increases pressure on natural resources. Moreover, there will be a disproportionate effect of climate change on women and girls, since they are more dependent on natural resources for household and agricultural tasks¹⁵¹.

Key Issues

16. Taking into account the rural finance and enterprise drive of REFP, the key relevant issues are:

¹⁴⁷ Mozambican Ministry for the Coordination of Environmental Affairs, 2014.

¹⁴⁸ Netherlands Commission for Environmental Assessment, 2015.

¹⁴⁹ GAIN index summarizes a country's vulnerability to climate change and other global challenges in combination with readiness to improve resilience. http://index.gain.org/country/mozambique

¹⁵¹ Midgley, S.; Dejene, A. Mattick, A. (2012); Mucavele, S. (2010): Gender and Climate Change in Mozambique.

- 17. **High natural resource dependency and vulnerability**. Mozambican smallholders are primary dependents of the availability and quality of natural resources, such as good soils for cultivation, grazing lands, water supply, and fish supply. Without any buffers or alternative income streams, smallholder farmers and fishermen are highly vulnerable to climatic shocks. 50% of the country's protein per capita comes from fish. Fishermen form part of the poorest communities in the country and if action is not taken, their situation is likely to worsen. Fishermen have reported that some species no longer show up in their nets, and the overall catch is declining. It is estimated that the overall artisanal catch has declined by almost 30% in the last 25 years. This decline in fish supply, coupled with a growing human population can result in a 70% decrease in protein availability by 2030 as compared to 1995 152. Climate change is expected to worsen this issue, as Mozambique's coastline is highly vulnerable to cyclones, storm surges and flooding.
- 18. **Degrading natural resource base**. The availability and quality of Mozambique's natural resources is continuously declining. This process is largely due to poor natural resource management. Increasing investments in good agricultural practices and buffers for difficult periods can reverse this trend.
- 19. **Increase in extreme events.** The increasing occurrence of intense rainfall events and droughts means an increasing number of shocks to smallholders, with increasing severity.
- 20. Integration of good environmental and social practices into the policies and procedures of financial institutions. Financial institutions can play a major role in promoting and financing only good environmental and social practices, yet their in-house capacity to assess this is often limited.

Lessons learned from IFAD projects and programmes in Mozambique

- 21. Mozambique is the seventh largest portfolio among IFAD-supported operations in the East and Southern Africa region. The 2017 Country Strategy and Programme Evaluation 153 found that the national resources management and environmental dimension of the portfolio was weak overall. This partly contributed to undermining potential positive impacts and sustainability of the projects with respect to food security and production, considering the high dependency of producers' livelihoods, including the economically active poor, on natural resources. The CSPE recommends that "IFAD-supported projects in Mozambique should include among their principles full attention to sustainable natural resources management and to strengthening climate-change resilience Moreover, natural resources management and climate change adaptation and mitigation should be mainstreamed in all project activities, including capacity development and technology transfer."
- 22. It was also noted that too little attention was paid to IFADs Climate Change Strategy in the design of the projects. However, the PROSUL project included a grant component funded by the multi-donor IFAD-based Adaptation for Smallholder Agriculture Programme, which enabled climate-change adaptation measures to be integrated across the project's three value-chains. Some of these were proving to be beneficial for different groups of rural poor.

Assessment of social and environmental legislative frameworks in Mozambique

- 23. REFP will be in compliance with the following Mozambican laws and regulations. The descriptions are not a comprehensive review of environmental legislation in Mozambique, but rather a summary of the regulatory 'drivers'.
- 24. Since the World Summit on Sustainable Development held in Rio de Janeiro in 1992, Mozambique has established institutions to address the need of protecting biodiversity and tropical forests. The Ministry for Land, Environment, and Rural Development (MITADER) is charged with preparing environmental and climate policies and coordinating their implementation. MITADER is the Government of Mozambique's focal point for all international 48 Mozambique Environmental Threats and Opportunities Assessment conventions related to biodiversity conservation (e.g., CBD, CITES), and it coordinates Mozambique's REDD+ preparations and the climate change adaptation strategy. MITADER is represented at provincial level by the Provincial Directorate for the Coordination of Environmental Affairs (DPCAA).
- 25. In Mozambique, an Environmental Impact Assessment (EIA) process is a legal requirement under the Environmental Law (Law no. 20/97) for any activities which may have direct or indirect

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¹⁵² https://www.rare.org/mozambique

¹⁵³ Draft CPE, IFAD 2017

impacts on the environment. The Environmental Law requires that activities (whether by their nature, location or dimensions) which are likely to cause significant environmental impacts need to be licensed by MITADER, based on the outcomes of the EIA process. In 1998 the first **Regulation on an Environmental Impact Assessment (EIA)** was established (Decree 76/98). The latest regulation was established in 2015 (Decree 54/2015)¹⁵⁴ 155.

- 26. Article 8 of the Environmental Law requires that the Government create adequate mechanisms so as to involve the various sectors of civil society, local communities and environmental protection organizations in the preparation of policies and legislation for the management of the country's natural resources.
- 27. Article 9 prohibits the production and deposit of any toxic and polluting substances on soils, subsoils, water or atmosphere as well as the conduct of activities that will tend to accelerate erosion and desertification, deforestation or any other form of environmental degradation beyond the limits established by law. Although REFP activities will not cause significant environmental impacts, it is recommended that the ESMP includes direct consultations with MITADER to create adequate mechanisms relevant to MFIs, as articulated in Article 8.
- 28. The **National Environmental Policy (Resolution no. 5/1995)** was established to manage natural and environmental resources so as to maintain their functional and productive capacity for current and future generations.
- 29. The **Regulation regarding the Environmental Auditing Process (Decree no. 25/2011)** was established to regulate supervisory and auditing activities related to compliance with environmental protection standards at the national level.
- 30. Appendix 1 of the SECAP Review Note outlines the international treaties related to environmental protection to which Mozambique is a signatory.
- 31. Mozambique has made progress in establishing institutions whose mandates contribute to environmental protection, biodiversity conservation and forest management ¹⁵⁶. However, it appears that there remain some weaknesses in institutional capacity, organization and coordination. The various responsibilities concerning environmental protection are dispersed among several ministries. This renders the concentration of human and financial resources and equipment for the protection of the environment difficult. At the same time, the limits of responsibilities among institutions are not clear, which, when coupled with weak coordination, can result in the duplication or absence of efforts among institutions.
- 32. Despite the existing national regulations as outlined in section V., the traditional use of rigorous environmental audits and impact assessments to screen and rank loan applicants is not relevant to the majority of microenterprise projects in Mozambique. Indeed, the small size of loans demanded counteracts the applicability of traditional environmental impact assessments. Moreover, it appears that no justice system exists which prosecutes environmental violations and no single provision that squarely imposes environmental liability on lenders could be found.

The nexus between microenterprise development and environmental degradation

- 33. Microenterprises make up a large portion of the business firms in developing countries. As such, micro-lending programmes have often been viewed as a means of developing the microenterprise sector and alleviating poverty. Given the customarily informal nature of the microenterprise sector, its size, and the high incidence of poverty involved, it is important to consider the nexus between microenterprise development and cumulative environmental degradation.
- 34. REFPs SECAP Review Note aims to promote improved environmental management and occupational safety by recommending that the issues in the sector are confronted directly through a combination of private and public actions. The microfinance institutions supported by REFP should engage in the **promotion of environmental awareness** and eco efficiency among clients while simultaneously limiting their exposure to lending risks caused by social, environmental, and climate issues. The rationale being that it is best to prevent environmental degradation and avoid social risks rather than to remediate them after the damage has occurred.

156 USAID (2013)

54

¹⁵⁴Netherlands Commission for environmental assessments (2017)

¹⁵⁵ Anadarka (2014)

- 35. The challenge remains in how to mitigate environmental and social impacts that could be generated by REFP supported activities. Traditional existing measures¹⁵⁷ include i.) the "command-and-control", ii.) economic incentives, and iii.) increased lender liability.
- 36. Due to a lack in enforcement capability in the rural sector combined and unavailable legislative frameworks, the **command-and-control approach** would not be appropriate in regards to REFP given the anticipated heavy burden on government enforcement agencies that this will cause.
- 37. The **economic incentive approach**, involving "tradable emission permits" and subsidies for the adoption of "clean technologies," for example, could be valuable to REFP supported activities, but the implementation of these measures requires a pre-existing base of extensive scientific field data, and the ability to model financial and pollution interactions accurately so as to design permit and subsidy programs, make available affordable technological solutions, and identify the resources necessary to bear the fiscal costs of the subsidies.
- 38. The third approach, **increasing lender liability**, is recommended. This involves using financial intermediaries to support environmental and social protection agencies in enforcing relevant regulations. The financial institutions supported by REFP interact closely with the small businesses and should provide opportunities to positively influence their clients' environmental and social performance by engaging in active environmental and social screening. It is important, however, to note the shift in the administrative and enforcement burden from the government to the financial institutions.
- 39. One possibility is to **formalize the enterprises** to ensure compliance with existing government regulations governing business registration, taxes, zoning, minimum wage and social security provisions, and environmental protection.

Potential programme social, environmental and climate change impacts and risks Key Potential impacts

40. REFP's main expected positive impacts are:

- Increased income and savings for rural male and female entrepreneurs in the programme area
- Enhanced efficiency and effectiveness of private and public institutions supported by REFP
- Rural households empowered with entrepreneurial skills
- Increased financial inclusion
- · Creation and diversification of income generating opportunities
- Increased awareness of sustainable environmental and natural resource management
- 41. The combined effect of these benefits will be reduced poverty, improved food security, improved livelihoods and enhanced resilience of rural households.
- 42. REFPS's main potential negative impacts are:
 - Elite capture. It is possible that the majority of benefits will flow to high income beneficiaries. Focusing on institutions with explicit and measurable intentions of creating substantial benefits to low income populations can avoid unnecessary elite capture. With appropriate processes, a strong targeting strategy, and financial inclusion, the risk of elite capture can be largely be avoided.
 - Environmental impact of small-scale infrastructure developed by institutions financed by REFP. This includes, for example, small bank branches, storage facilities, roads or market sheds. Negative effects could include clearance of vegetation, loss of habitat, water run off disruption, noise of construction, improper

Wenner, M., Wright, N., & Lal, A. (2004). Environmental protection and microenterprise development in the developing world. A model based on Latin American experience. Journal of Micro- finance, 6(1), 95–122.

waste management and increased competition over freshwater resources. The potential negative impacts of each intervention are expected to be minor, and only the accumulation of negative impacts will pose a significant risk.

- Increased exposure of a vulnerable population. A possible negative impact of interventions stimulating rural enterprise development is loan acquisition and situations of indebtedness. Project activities should include loan risk assessments for both formal and informal financial services supported.
- Occupational safety. The enterprise development supported by REFP may lead to increased employment. While this is a positive result, it is important that measures are taken to avoid occupational risks (such as working with chemicals) and ensure social protection (such as the prevention of child labour).
- **Gender**. Household duties and childcare can impede women from engaging in entrepreneurial activities. Attention must be paid to ensure that women are not left with a heavier burden of household and farm chores and the inability to engage in entrepreneurship.
- Increased school dropout. A greater demand for labour may arise from increased enterprise activities. Social assessments must be carried out to ensure that children are not taken out of school to be placed in the labour force. The highest dropout rates are found amongst girls and as such, gender equality is also at risk.
- Climate risks. Destructive climate related events could affect beneficiaries' potential to pay back loans. REFP will emphasize planning for long term financial service provision. Proposed financial service innovations/ outreach mechanisms will be rigorously tested and business models/ pro forma estimates will be purposely modest to accommodate climate driven or macro-economic impacts. REFP should, in the short run, increase households' resilience by increasing financial buffers. Over time, increased savings and incomes driven by investments will reduce exposure to extreme weather events.

Climate change and adaptation

- 43. As described in section I, the direct effects of climate change include increasing temperatures and increasing frequency and intensity of extreme events. Unfortunately, definite information on the expected impact of these changes on specific agricultural commodities or value chains is difficult to obtain.
- 44. Climate change adaptation is not a key component of REFP, but it is an important means for farmers to capitalize on their entrepreneurial activities and protect their investments. While increased access to finance and exposure to technologies will generate autonomous adaptation, REFP should encourage capacity building in climate change adaptation. The SECAP Review Note suggests that a Senior Environmental and Social consultant is hired on a retainer contract, to conduct capacity building exercises as well as biannual social and environmental assessments. The TORs for this position are outlined in Appendix 2.
- 45. Some elements under REFP do promote climate resilience, such as the promotion of alternative income-generating activities. The more a household has the ability to diversify income streams, the more likely it will be resilient to climatic shocks.
- 46. For crop related entrepreneurial activities, REFP will encourage the production of crops that are adapted to the changing climate.

Environmental and social category

47. REFP has been classified as **Category B**. The project may generate some minor adverse social and environmental impacts. These impacts are limited by the size of the entrepreneurial activities envisaged and can remedied by appropriate preventative actions outlined in the Environmental and Social Management Plan (ESMP). While the cumulative effect of these adverse impacts may be consequent, and less easily mitigated by the project, their severity will be limited.

Climate risk classification

48. Based on available information about historical climate hazard occurrences, current climate trends and future climate scenarios, REFP has been classified as a **Moderate Risk** project. Beneficiaries of REFP, especially those engaged in the agribusiness, are highly sensitive to climate risks. Climatic shocks may disrupt the planned trajectory of entrepreneurial activities and delay the repayment of loans. That said, climate issues have been taken into consideration in the design and adjustments have been integrated (such as capacity building initiatives on climate change adaptation, the promotion of green technologies, and policy dialogue to improve agricultural sector strategies) to capitalize on local risk management capacities. Given that some impacts are uncertain, precautionary principles will be applied, such as specific environmental and social assessments during project implementation.

Recommended features of project design and implementation Mitigation Measures

- 49. REFP will include the following measures aimed at mitigating the potential negative impacts identified in section VI:
 - An Environmental and Social Management Framework (ESMP) should be developed to detail a.) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social impacts, or to reduce them to an acceptable level; an b.) the action needed and institutional responsibilities to implement these measures. The ESMP will also make explicit reference to the IFC Exclusion List¹⁵⁸ outlining investments not eligible for project support.
 - The recruitment of a Senior **Environmental and Social Consultant** on a retainer contract. Further outlined in Appendix 2, the expert will be responsible for:
 - i. The incorporation of capacity building initiatives on sustainable ENRM and climate change adaptation in the projects activities. This includes trainings on good agricultural practices for entrepreneurs in the agribusiness sector, the promotion of green technologies, etc. and the capitalization of climate risk management capacities.
 - **ii.** Capacity building of officers from the Ministry of Land, Environment and Rural Development (MITADER) at the provincial levels to conduct regular assessments of due diligence of FSPs in terms of their environmental and social policies and procedures, and their capacity to implement them.
 - iii. The increase in dialogue with climate risk institutions (red cross, etc) and policy dialogue to improve agricultural strategies.
 - iv. Conduct regular social and environmental impact assessments of REFP supported activities.
 - v. Conduct due diligence on the FSPs supported by REFP and their portfolios to assess their existing environmental and social policies and procedures, their capacity to implement them, and the environmental and social issues associated with the existing and future activities. If gaps exist, the expert will design an operational plan to address these.
 - Monitoring on the implementation of the ESMP as part of the overall M&E system;
- 50. It is important to note that while environmental assessments may identify a number of issues, the lack of effective infrastructure and accessible alternative technologies in Mozambique will limit its operational value. Therefore, it is recommended that REFP increases the environmental awareness of microcredit clients and promotes voluntary compliance rather than enforcement. Profit, health benefits, and sustainability of their resource inputs are examples of the main incentives for clients of microfinance institutions.

http://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/ifc+projects+database/projects/aips+added+value/ifc_project_exclusion_list

¹⁵⁸ See IFCs Project Exclusion List

51. As regards risk management, it is recommended that the microfinance institutions use simplified environmental and social assessment tools to identify a businesses' environmental impact, and choose a mitigation strategy for those businesses at risk from climatic events. The first step is to develop a list of entrepreneurial activities in the ESMP that are known unequivocally to pose serious environmental and social risks. The ESMP should also make explicit reference to the IFC Exclusion List¹⁵⁹ outlining investments not eligible for project support.

Incentives for good practices

- 52. The following measures could generate positive impacts:
 - Combine asset transfer with appropriate training on environmental management, e.g. grazing and manure management for livestock provision, water-efficient irrigation management for irrigation equipment provision, etc. The E&S consultant will be responsible for this.
 - Incentivize service providers to mainstream environmental and social issues in their approach.
 - Incentivize the development of products that specifically address financial risks related to weather variability and extreme events. This should be encouraged in the ESMP.

Monitoring and Evaluation

Guidance for monitoring and evaluation of the project's environmental and social performance should be detailed in the Environmental and Social Management Plan. The project M&E and KM officers should work in close collaboration with the Environmental and Social consultant to assess the performance of service providers.

¹⁵⁹ See IFCs Project Exclusion List

Annex 1: International Conventions and Regional Protocols Ratified by Mozambique to Protect the Environment

Mozambique has ratified the following international conventions and protocols with direct relevance to the management of natural resources, conservation of biodiversity, and protection of the environment.

Convention or Protocol	Year of Ratification
Convention or Protocol Year of Ratification Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES) 1981	1981
Vienna Convention for the Protection of the Ozone 1993	1993
Montreal Convention on Ozone Destroying Substances 1993	1993
Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movements of Hazardous Wastes within Africa 1996	1996
United Nations Framework Convention on Climate Change 1994	1994
United Nations Convention on Biological Diversity 1994	1994
United Nations Convention to Combat Desertification in countries affected by severe drought or desertification, particularly in Africa 1996	1996
Basel Convention on the Control of Across-Border Movement and Elimination of Dangerous Residues 1996	1996
Cartagena Protocol on Biosafety 2001	2001
Kyoto Protocol 2005	2005
Convention for the Protection of the World Cultural and Natural Heritage 1982	1982
Convention on Wetlands of International Importance (Ramsar Convention) 2003	2003
Convention on the International Trade in Hazardous Chemicals (Rotterdam Convention)	
Convention on Persistent Organic Pollutants (POPs) 2004	2004
Convention on Migratory Species (CMS)	
Memorandum of Agreement in the Indian Ocean and South East Asia for the marine turtles	
African Convention on the Conservation of Nature and Natural Resources 1981	1981
SADC Protocol on Wildlife Conservation and Law Enforcement 1999	1999
The Monitoring of Illegal Killing of Elephants (MIKE) in the SADC region 1997	1997
International Treaty on the Establishment of the Greater Limpopo Transfrontier Conservation Area 2002	2002
Protocol on Shared Watercourse Systems in the Southern Africa Development Community (SADC) 2000	2000
Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System 1987	1987
The Convention on Protection, Management and Development of the Marine and Coastal Environment in the Eastern Africa Region (1985) 1996	1996
Protocol for Tourism Development in the SADC region (1998) 2001	2001

Annex 2: Terms of reference of an Environment and social consultant

The Rural Enterprise Finance Project (REFP) is a national Project that will be implemented in Mozambique. Mozambique has made progress in establishing institutions whose mandates contribute to environmental protection, biodiversity conservation and forest management designing environmental and social regulations. However, it appears that there remain some weaknesses in institutional capacity, organization and coordination on the enforcement of such regulations. The various responsibilities concerning environmental protection are dispersed among several ministries. This renders the concentration of human and financial resources and equipment for the protection of the environment difficult. Furthermore, no single provision that squarely imposes environmental liability on lenders could be found.

Given the customarily informal nature of the microenterprise sector, its size, and the high incidence of poverty involved, it is important to consider the nexus between microenterprise development and cumulative environmental degradation.

During the design mission conducted in June-July 2017, it was observed that environmental and social procedures are not consistently and satisfactorily implemented by all Financial Service Providers (FSPs). Some management plans do exist, but they only briefly describe potential impacts, not all the major issues, and mitigation measures are not clearly described. The approval of loans to REFP beneficiaries should adhere to adequate social and environmental norms.

The implementation of capacity building on climate and environmental aspects of REFP, and the monitoring of social and environmental compliance will be carried out by a senior consultant on a retained contract for 110 days/year.

Responsibilities of the consultant:

- Capacity building of officers from the Ministry of Land, Environment and Rural Development (MITADER) at the provincial level to conduct regular assessments of due diligence of FSPs in terms of their environmental and social policies and procedures, and their capacity to implement them.
- Adequate incorporation of capacity building initiatives on sustainable ENRM and climate change adaptation in the projects activities. This includes trainings on good agricultural practices for entrepreneurs in the agribusiness sector, the promotion of green technologies, etc. and the capitalization of climate risk management capacities.
- 3. Planning and implementing environmental awareness activities for beneficiaries and FSPs. This can be done through the capacity building activities where potential environmental issues and good environmental management practices are presented.
- 4. The contracting and procurement of services and supplies involved in the implementation of capacity building activities within component 2.1 of REFP (and with prior approval by the PMU).
- 5. Initiate dialogue with climate risk institutions (red cross, etc) and policy dialogue to improve agricultural strategies.
- 6. Review existing project documentation, in particular all documentation related to safeguard implementation (project manual, ESMP, etc.). In this review determine whether the coverage is comprehensive, the depth of the analysis is adequate and that various requirements are consistent with IFADs safeguard policies.
- 7. Produce a bi-annual environmental and social report which includes:
 - a. An appraisal of the inclusion of environmental and social provisions in the approval of loans by FSPs. In case of absence or inadequacy of these policies, an operational plan should be developed.
 - b. An assessment on whether all Mozambican legislative requirements have been met by REFP activities.
 - c. An examination of the monitoring mechanisms for environmental and social components of the project.

d. Proposals of remedial action measures that are commensurate to the nature, scale and potential of the project's environment and social impacts. This must include budget, timing and overarching schedule as well as responsibilities and institutional arrangements.

Duration:

110 days within one year, during which the consultant must deliver results. Upon assessment of performance, the contract may be renewed or terminated.

90 days of training (6 batches of 15)

10 days for 1st annual social and environmental report

10 days for 2nd annual social and environmental report

The exact duration and development of the contract will be adapted to the specificities of performance, in accordance with the progressive phasing in the target districts of REFP. Detailed activities to be implemented by the LSP will be outlined in the ESMP.

Estimated budget: USD38,500/year

Fee/day: USD350

Republic of Mozambique
Rural Enterprise Financing Project (REFP)
Detailed design report
Appendix 13: Social, Environmental and Climate Assessment Procedures (SECAP)

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Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report Appendix 14: Contents of the Project Life File

Appendix 14: Contents of the Project Life File

To be updated after QE.

Appendix 15: Financial Management Assessment Questionnaire (FMAQ)

Project: Mozambique – REFP (Rural Enterprise Finance Project)	Date : 07/09/2017
Implementing Entity: Banco Nacional de Investimento,	
S.A./National Bank for Development and Investment (BNI) as	
delegated by the Ministry of Finance and Economy	
Assessment completed by: Richard Batamanye	Date : 07/09/2017
Review completed by:	Date :

Overview

- 1. Banco Nacional de Investimento, S.A. was incorporated on June 14, 2010. The Bank is 100% owned by the Mozambican State through Instituto de Gesttão das Participações do Estado (IGEPE), with a share capital of MT 2,240 million as at 31 December 2016;
- 2. Under the statute, BNI is mandated to operate as a financial institution focusing on development financing and investments;
- 3. Under the development financing mandate, BNI finances projects in manufacturing, value chains, agriculture, and SMEs;
- 4. The investment mandate is covered under advisory and research (strategy, MBO, acquisitions, fundraising and fund management); capital markets; and intermediation between buyers and sellers of financial instruments;
- 5. BNI is governed by a Board of Directors composed of the President, 2 Executive Directors and 2 Non-Executive Directors. There are also committees responsible for various functions key among others being Internal Audit, Risk and Compliance Committee and a Remuneration Committee.
- 6. In addition to the independent Audit Department, there are business and support departments including the following: (a) Credit and Market; (b) Advisory and Financial Strategy; (c) Information Systems; (d) Human Resources Management; (e) Financial Reporting; and the Back Office;
- BNI does not have experience with managing IFAD financed projects but has some experience with other donor/development partner financing like the Islamic Development Bank and the Dutch financed Zambezia Valley project (Agro business and Entrepreneur financing);
- 8. BNI accounting is done under banking software for entire operations guided by a financial and procedures manual except for the Zambezia Valley Project, where a stand-alone accounting software is implemented and a separate financial manual was developed:
- Audit of BNI is done by a private audit firms. The current auditor of BNI is Deloitte and the previous one has been PwC.
- 10. The Zambezia Valley Project is audited by a private auditor appointed by BNI. It is proposed that RFEP will be audited by a private audit firm acceptable to IFAD and GoM.

Appendix 14: Contents of the Project Life File

Risk Assessment and Mitigation Measures

Risk Assessment and Mitigation Measures Risk	Ris	Risk Mitigating Measures	Residu
	k	incorporated into Project Design	al FM Risk
Inherent Risk Control Risk	H	TI perception index for 2016 shows Mozambique scored 27 (down from 31 in 2015) on the 1 – 100 scale with a rank of 142 out of 176 Countries assessed. This ranking puts Mozambique in the high risk category. The last PEFA assessment of Mozambique was in 2015. Compared to the previous one carried out in 2010, 71% Mozambique's indicators either improved or remained the same. Key among areas of deficiency is procurement practices which continue to lag behind international best practices The Country has suffered liquidity problems and there has been very high depreciation of the MZN. This will limit GoM's ability to make counterpart contribution to the project.	H
 Organisation & Staffing BNI, the proposed LIA is a share company, an Investment and Development Bank 100% owned by the Government of Mozambique. It has a management structure, Operations departments, and support departments which include financial management and reporting, IT and Human Resources. BNI has separate internal audit department and a separate compliance and risk department. The current set up of the BNI is such that the project management is responsibility of separately set up PMUs. Staff from the LPA are assigned to oversee/monitor specific aspects of the project but are not part of day to day management; PMU staff are competitively hired on fixed term contracts. The existing cadre of staff does not provide assurance of availability of a well-qualified and experienced staff to be fully dedicated to the project. Some BNI staff that may be assigned to 	Н	 Stand-alone PMU will be established with BNI as a supervising entity. Three Sub Units/Provincial Project Management Units (PPMUs) will be set up to facilitate access of the implementing partners and beneficiaries to Project Management and to ease monitoring of activities. The Project Coordinator, Finance Manager, M&E Officer, Rural Finance Specialist, among others will be recruited. Staff will be competitively hired with BNI/MEF providing oversight. The Project Coordinator will report to the CEO of BNI or his designate. The Umbrella Fund will be separate from the PMU, hosted at the Advisory and Research Division of BNI. 	Н

Risk	Ris	Risk Mitigating Measures	Residu
	k	incorporated into Project	al FM
		Design	Risk
oversee operations of REFP may not have experience with IFAD procedures		The fund will be responsible to the PMU. BNI current staff at the Advisory and Research Division will be responsible for the Umbrella Fund. During implementation however, should staff needs arise, this will be the responsibility of BNI to recruit the required staff with the recruitment costs, salaries and related costs charged within the management fee Recruited staff will be exposed in IFAD specific procures at start up and during implementation PMU to be separated from Umbrella fund to facilitate professional management of the funds	
 BNI budget preparation starts by establishing the macroeconomic and banking as well as sectoral assumption which are likely to impact the bank's performance. The preparation involves all the Bank's Sectors by providing the inputs needed such as the projected activities taking into account the Medium Term Strategy. The coordination and mandate for elaborating the Budget is made the Department of Planning and Reporting whose role is to collect, collate and analyse budget inputs from other sectors and then carryout financial modeling. For Zambezia Valley Project, budgets are done under a separate arrangement, with the PMU leading the preparation and consolidation. BNI only offers oversight and approval through the Credit Committee that is the governing body of the project. Risks in this area have been identified as failure to meet budget deadlines for the submission of the AWPB's, non-availability of clear planning schedules and lack of clarity of REFP requirements at both the higher and lower levels. The bank is required by its shareholders to report the Budget execution monthly and semi-annually. 	M	 BNI budget calendar will be followed. This will require proactive follow up by the Project Coordinator of the agreed budget calendar. As a decision has been made that BNI will use TOMPRO for accounting for REFP, budget input into the accounting software will be a requirement as this will facilitate review of trends and budget control. Budgeting should involve the Project finance team, technical staff, procurement officer and an officer responsible for M & E. This should ensure that the expenditures categories are well aligned and the logframe is considered at budgeting time. It should also realistically inform the procurement plan as procurement action timelines will be clearly attended Implementing partners should be included in the budgeting process 	M

Risk	Ris k	Risk Mitigating Measures incorporated into Project Design	Residu al FM Risk
 Funds flows and disbursement The foreign currency bank accounts are held in Bank of New York Mellon (New York), Bank of New York Mellon (Frankfurt), Caixa Geral de Deposito (Lisbon), and First Rand Bank (Johanesburg). The local currency bank accounts are held at Banco de Moçambique (Central Bank of Mozambique) and Banco Comercial e de Investimento, S.A. The accounts are managed by the Operations Director under the supervision of the Chief Finance Officer. The decision to open and the location of bank accounts rests with the Banks Executive Committee. Projects may have individual bank accounts depending on the requirements of the funding partner. The key risk is that there are diverse partners with a number of funds and different locations for project implementation where funds may not be properly used for the purposes for which they are meant. 	M	 BNI, with the authority of MEF will open a designated account in USD in the Central Bank (Bank of Mozambique) designated in USD. An operating account designated MZN will be opened in a commercial bank acceptable to both GoM and IFAD. The Umbrella Fund will have a separate account opened specifically to hold and manage the fund financial resources MEF will communicate the authorised signatories of all bank accounts to IFAD. Funds to PPMUs will be on the basis of planned activities/activity based advances. PPMUs will have Sub-Operating accounts for this purpose. Subsequent transfers will be after justification of previous advances FARE has been preidentified as an implementing partner at design. Accordingly, for its related activities, a specific bank account will be opened, managed by FARE for purposes of proper monitoring and reporting on project funds. Funds flow to other partners will be specified in the individual service agreements or MOUs as shall be defined at time of their procurement 	M

Risk	Ris k	Risk Mitigating Measures incorporated into Project	Residu al FM
	"	Design	Risk
 Internal Controls BNI has internal controls policies and procedures that are in place. These procedures and policies include the risk recognition, assessment and management through among others, assets insurance, colateral for credit risk, activities control and segregation of duties by implementing a governance structure that assures independence of the directors, implementation of an information system that guarantees that only authorized staff has access to specific information; BNI also has an external independent auditor. There is an Independent Internal Audit Department reporting directly to the Internal Audit, Risk and Compliance Committee. These are all documented in the policies and procedures under use by the bank. The key risk here is the complexity of the products under the projects particularly under the Umbrella Fund where each product require own controls. 	Н	 BNI will enforce opening of the specific bank accounts required and ensure there is regular bank reconciliations. BNI will ensure that there is proper segregation of duties, which should be enhanced through clearly defining the role of NPMU and the Umbrella Fund management. Ensure that an off the shelf accounting software – TOMPRO is implemented. Implementation of the budget module of TOMPRO will ensure budget control while the other key control aspects will be provided for in the PIM Segregation of duties at project level will be ensured through job descriptions of project specific assigned/recruited staff who will be supervised within BNI 	M
 Accounting Systems, Policies & Procedures BNI as a business concern and bank has implemented an accounting software that has been developed in-house for its accounting needs. This system is not suitable for project accounting as the chart of accounts may be inadequate to reflect the project Components, sub-components, and expenditure categories up to individual activity level. Use of the software would require separate use of MS Excel for data manipulation to report by category and component by financier is time consuming and prone to errors. BNI current financial management manual is based on the core business operations and the in-house accounting system, this is not suitable for REFP. 	M	 An off the shelf accounting software will be implemented by REFP. For purposes of knowledge transfer and reduced shared costs such as the cost of training, TOMPRO which is currently being used by other projects has been recommended. The software will be properly coded to address the needs of the project and should be capable of capturing and reporting by category in addition to sub-component and financier. This will be used for REFP and will be expected to continue throughout project implementation. Specific guidelines will be included in the REFP manual. 	M
Reporting & monitoring Being a regulated financial institution, BNI reporting is guided by industrial and legal requirements. The monthly report contains financial		The reporting arrangements under BNI are regular and would be adequate under REFP. There need to ensure that this is fitted in the project	

Risk	Ris	Risk Mitigating Measures	Residu
	k	incorporated into Project	al FM Risk
information of the month. The report		Design environment.	RISK
compares the current year's month performance with its homologous period performance. This report is approved by Board Members. The semiannual report includes financial information regarding the current year's semester compared to the budget and its previous year's homologous period. This report is published in the media and is submitted to the Central Bank for consideration. This report is approved by Board of Directors. The annual report is audited and approved by General Assembly and is published in the media. This report must be submitted to the Central Bank and to the Ministry of economy and Finance for approval. The key risk under the project is obtaining and consolidating all information in a timely and required format. There is also a risk that reporting could adversely affect withdrawal applications.		 Draft financial statements for audit will be availed to the auditor not later than three months following end of the fiscal year to facilitate early start of the audit; Quarterly reporting should be encouraged. This should ease access to reports and will form part of a more comprehensive interim financial reporting as quarterly reports will be updated to produce semi-annual reports BNI will also have to ensure that appropriate levels of reporting are established to manage possible conflict relating to Junior/Senior traditional set of reporting set up in the bank 	
 Internal audit Internal Audit Department of BNI is responsible for provision of internal audit services. It is an independent Department reporting to the Audit, Risk and Compliance Committee of the Board. It operates on the basis of audit plans that are approved by the Audit, Risk and Compliance Committee of the Board. It is currently adequately staffed and management of BNI have indicated that the department will have responsibility to provide internal audit services to REFP. 	M	 Need to make internal audit arrangements for REFP, to have it included in the internal audit plan at least once in a year for NPMU but with regular coverage of the Umbrella Fund. It will be a requirement that internal audit reports or at least their recommendations and an action plan for implementation of the same are shared with IFAD. 	M
 Statutory Audit The statutory audit of BNI is conducted by private audit firms with the current one being Deloitte; The audit for the FYE 31 December, 2016 was concluded 17 March, 2017, two and half months following the end of the fiscal year; Audit quality may be compromised as a consequence of failure to follow audit guidelines and TOR. The financial statements are only submitted for the external Stakeholders such as the Central Bank, Ministry of Finance and the Shareholders after being audited and approved by the General 	M	 REFP external audits will be carried out by private audit firms; BNI will ensure that the draft financial statements are approved by the end March and availed to the auditor well in time to facilitate early completion of the audit; and Terms of Reference for audit to clearly specify IFAD audit requirements, including the timing for submission of audit reports. 	M

Republic of Mozambique Rural Enterprise Financing Project (REFP) Detailed design report
Appendix 12: Compliance with IFAD policies

Risk	Ris k	Risk Mitigating Measures incorporated into Project Design	Residu al FM Risk
Assembly at most until March, 31.			
Overall FM Risk	Н		М

¹ Women (heads of households, wives and young women) will account for at least 50% of the target. The youth will also account for at least 20% of the target.

ii An individual is likely to be trained in more than one topic Average size of ASCA is 10 members