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AFRICAN DEVELOPMENT BANK GROUP

PROJECT: **Sustainable Land & Water Resources Management Project (SLWRMP)**

COUNTRY: **Mozambique**

PROJECT APPRAISAL REPORT

Date: July 2012

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CURRENCY AND EQUIVALENTS

(March 2012)

1 UA = USD 1.54
1 UA = 37.62 MZN
1USD= 24.43 MZN

FISCAL YEAR

01 January – 31 December

WEIGHTS AND MEASURES

1metric tonne	=	2204 Pounds (lbs)
1 kilogramme (kg)	=	2.200 lbs
1 metre (m)	=	3.28 feet (ft)
1 millimetre (mm)	=	0.03937 inch (”)
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

ACRONYMS & ABBREVIATIONS

AAP	African Adaptation Programme
AfDB/ADF	African Development Bank/African Development Fund
CC	Climate Change
CCA	Climate Change Adaptation
CIF	Climate Investment Funds
CONDES	Conselho Nacional De Desenvolvimento Sustentāvel (Sustainable Development Council)
CRMU	Climate Risk Management Unit
CSP	Country Strategy Paper
DANIDA	Danish International Development Agency
DFID	Department for International Development
DNA	Direcção Nacional da Águas (National Directorate of Water)
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
FIRR	Financial Internal Rate of Return
GDP	Gross Domestic Product
GoM	Government of Mozambique
GVH	Group Village Headman
IFC	International Financial Corporation
IIAM	Instituto de Investigação Agrária de Moçambique (Agriculture Research Institute)
INGC	Instituto Nacional de Gestão de Calamidades (National Disaster Risk Management Institute)
MICOA	Ministry of Coordination of Environmental Affairs
M&E	Monitoring & Evaluation
NAPA	National Adaptation Program of Action
NGO	Non-Governmental Organization
PARPA	Proactive Action for the Reduction of Absolute Poverty
PCR	Project Completion Report
PMU	Project Management Unit
PPCR	Pilot Programme for Climate Resilience
PY	Project Year
SESA	Strategic Environment and Social Assessment
SLWRMP	Sustainable Land & Water Resources Management Project
SPCR	Strategic Program for Climate Resilience
SCF	Strategic Climate Fund
UA	Unit of Account
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank

LOAN INFORMATION
CLIENT'S INFORMATION

BORROWER: Government of Mozambique
EXECUTING AGENCY: Ministry of Agriculture (MINAG)

Financing plan

Source	Amount (UA million)	Instrument
ADF	02.10[1]	Loan
Strategic Climate Fund	10.32	Grant
GoM	01.46	Counterpart funds
TOTAL COST	**13.88**	

Key financing information

	ADF	SCF
Loan/Grant currency	UA02.10 million	USD 15.75 million
Interest type*	NA	NA
Interest rate spread*	NA	NA
Commitment fee*	0.50% on non-disbursed amount beginning 120 days after signature	NA
Other fees*	NA	NA
Tenor	50 Years	40 Years
Service Charge	0.75% per annum on the amount disbursed and outstanding	0.10% per annum on the amount disbursed and outstanding
Grace period	10 Years	10Years
FIRR, NPV (base case)	20%,	US$14.86 million
EIRR (base case)	18.3%	

Timeframe - Main Milestones (expected)

Concept Note approval	January 2012
Project approval	October 2012
Effectiveness	November 2012
Completion	December 2017
Last Disbursement	December 2018
Last repayment	(month, year)

[1] Resources coming from the cancelable amount from a closed Project

PROJECT SUMMARY

1.1 Mozambique ranks third amongst the most exposed African countries to adverse effects of climate change as a result of frequent occurrence of droughts, floods, and cyclones. Climate change events affect over 58% of the population. Gaza province, located in the south, is one of the most adversely affected provinces in terms of climate change events with frequent occurrence of droughts in the northern parts and floods in the coastal areas of the province. Based on observed trends and its vulnerability to climate change, Mozambique was one of the three African countries selected for the Pilot Program for Climate Resilience (PPCR), which is part of the Strategic Climate Fund (SCF) - a multi-donor Trust Fund within the Climate Investment Funds (CIFs). The Strategic Program for Climate Resilience (SPCR)[2] for Mozambique was approved in June 2011 and it encompasses seven interventions that were to be managed by the Multilateral Development Banks namely: African Development Bank (AfDB); World Bank and the International Finance Corporation. This project, Sustainable Land & Water Resources Management (SLWRMP) is one of the two approved by the CIF for the AfDB to manage, the other one being Baixo Limpopo Irrigation and Climate Resilience Project.

1.2 The project will increase the capacity of communities to address the inter-linked challenges of adverse impacts of climate change, rural poverty, food insecurity and land degradation. The Project will be implemented in the four drought affected districts of Guija Mabalane, Chicualacuala and Massengena with estimated total direct beneficiaries of 20,000 and additional 20,000 indirect beneficiaries. The project activities have been packaged into three components namely: Agriculture Water Infrastructure Development; Restoration of Natural Habitats & Landscapes and Project Management. The total cost is estimated at UA13.88 million comprising ADF UA 2.10 million; Climate Investment Fund/Strategic Climate Fund (CIF/SCF) UA 10.32 million and GoM UA 1.46 million.

1.3. The SLWRMP is much needed as the effects and impacts of climate change are already being felt due to erratic and inadequate rainfall patterns and less on-farm productivity as a result of the severe climatic conditions. This project would, therefore, stem the tide of the climatic hazards in the selected districts; the success of which could replicate in other areas. The project activities evolved through a consultative and participatory process, which builds upon the process that started during the preparation of the SPCR. The field missions involved direct interaction with various stakeholders and through this; the beneficiaries, the activities and their locations were identified. Project implementation has therefore been designed to directly involve communities in landscape management; small agriculture water infrastructure, including small scale irrigation; development and management of the community forests; adoption of improved charcoal production techniques; capacity building, including on farm demonstration and beneficiary training programmes. The project organises the stakeholders into various user groups to maximize benefits.

1.4 This Project is closely linked to the first objectives of the NAPA and PARP i.e. strengthening the capacities of the farm families and boosting productivity of the agriculture sector through sustainable management of the natural resources. The Project is also in line

[2] *http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Mozambique_SPCR__Final_November.pdf*

with the *Bank's Action Plan on Climate Change* which emphasizes increased support for capacity building to tackle climate risks and meets the requirements of the second pillar of the CSP through the envisaged increased agriculture productivity.

3.1 The project is in line with the Bank's Climate Change Action Plan (2011-2015)[3]. The Bank has a lot of experience in Mozambique, having implemented many projects in the country, particularly in the Gaza province. The lessons learnt have been incorporated into the design and development of this project.

4.1. This project integrates climate adaptation measures involving land and water management and improved drought tolerant seeds suited for the Gaza Province. The project would also undertake special studies in livelihood diversification efforts which when evaluated at completion can be replicated in other districts of Gaza and beyond.

[3] http://www.afdb.org/en/topics-and-sectors/sectors/climate-change/2011-2015-afdb-action-plan-on-climate-change/

African Development Bank – RESULTS LOGICAL FRAMEWORK

Country and Project Name: ***Mozambique - Sustainable Land and Water Resources Management Project (SLWRMP)***
Purpose of the Project: ***To strengthen capacity of communities to address inter-linked challenges of adverse impacts of climate change, rural poverty, food insecurity and land degradation***

RESULTS CHAIN		PERFORMANCE INDICATORS			Means of Verification	RISKS / MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
IMP	Poverty Reduction and Livelihood Diversification	National Poverty Rate	54.7% (2009)	42% (2014)	MPD Reports	**Assumptions** 1 Government commitment, social and political consensus and macroeconomic stability 2 No restriction imposed on water extraction for irrigation. 3 No restrictions on private sector/ NGO participation in water harvesting infrastructure and setting up of non-ruminatnt livestock. ***Risks*/Mitigations:** 4 *Sparse nature of human settlement in the*
OUTCOMES	1. Enhanced Water Storage and Increased Food Production in selected Drought Prone Communities. 2. Improved Resilience to Climate Change through Diversification of Livelihoods 3. Natural Habitats and Landscapes Restored.	(i). Increased Annual Yields; (ii). Areas of Forest Restored (iii). Reduction in Forest Fires (iv). N° of Climate Smart Infrastructure in support livelihood diversification	(i). Average yields of 1.5-2.0 ton/ha major arable crops (maize, rice). (ii) 350ha (iii). 10.000 ha forest fires yearly. (iv). Zero (0)	(i). Increase in yield to 2.5-4.0 ton/ha. (ii).1500 ha of Restored forest (iii). Forest fires reduced by 75% (iv). 20	-MoF statistics -ARA-Sul reports -WFP -M&E Reports	

OUTPUTS	**A: Agriculture Water Infrastructure Development** i Establishment of Small Community Irrigation Schemes ii Water Harvesting Infrastructure ○ Small Earth Dams ○ Water Troughs for Livestock ○ Multifunction Boreholes **B: Restoration of Natural Habitats & Landscapes** i Landscape Management ○ Sustainable Land Management Investment framework ○ Land use/ management Framework and Planning ○ Conservation Agriculture ○ Re-forestation ○ Forest fire prevention ○ Improved charcoal production ○ Improved cooking stoves. ○ Economic valuation of land studies (EVL) ○ Incentive and Market Based Mechanisms (IMBMs) ii Livelihood Diversification ○ Community Nurseries of Indigenous Agro-forestry species ○ Non-ruminant Livestock	• Area developed under community Irrigation • No of small earth dams • No of Water Troughs • No of boreholes • Investment framework in place • No of Land use planning management framework • Area under conservation Agric. • Area reforested • Number of fire occurrences • No charcoal units supplied • No cooking stoves units supplied • EVL conducted in the Gaza • No of IMBMs identified and implementation . • No of community Nurseries established • No of new livestock facilities	• 250ha in districts in 2011 • 10 in selected districts in 2011 • 30 in selected districts in 2011 • 10 in districts in 2012 • Zero in 2011 • Zero in 2011 • Zero in districts in 2011 • Zero ha reforested in 2011 • 15 in 2011 • 10 in improved types 2011 • 100 units in 2011 • Zero in 2011 • Zero in 2011 3Community nurseries established 0 modern non-ruminant livestock facilities in 2011	• 550ha by year 2016 • 28 by year 2016 • 68 by the year 2016 • 20 in year 2016 • 1 • 3 • 500ha by 2016 • 500ha by2016 • 2 p.a. in 2016 • 40 in 2016 • 1,500 in 2016 • 1 • 3 types of IMBMs under implementation by 2016 • 16 Community(including /Cashew Clonal nurseries) • 13 Modern livestock facilities including abattoir)	Project M&E reports ARA-Sul Min of Statistics MINAG INGC CERNACARTA Dept. of Forestry IIAM ‘ ‘ ‘ ‘ ‘ ‘	*districts.* Best choice location and size leading to optimal use. 5 *Lack of integration of the Strategic Land use plan with the Existing Land use plan:* Promoting stakeholders participation and engagement and integration with the national/provincial/district land management. 6 *Adaptability of selected specie:* Research & demonstrative activities, extension and capacity building. 7 *Farmers more interested in crops rather than trees (reforestation; Time required to achieve results. Vulnerability of seedling nurseries to climate change before transplanting/maturity* *Willingness of communities to adopt new tools.:* • Promotion of the value of reforestation and Social incentives. • Training in the collection & use of local climatic and weather information. • The enacting of local laws on bush fires. • Awareness and capacity building. • Close technical assistance; • Incentives to new economic and industry activities; • Identification and integration of the most desirable livelihood strategy of the communities

	C: Project Management i Capacity Building of Communities in Sustainable Water Resources & Forest Management Techniques ii Enhanced capacity of PMU in Monitoring & Evaluation	• No of communities representatives trained SWRM and SFM No of PMU staff coordinating the project trained in M&E	• Zero community groups trained in SWRM and SFM	• 12 community trained in 2016 (Including 50% women) • 24 community trained in 2016		

	COMPONENT	INPUTS	FUNDING
KEY ACTIVITIES	**A: Agriculture Water Infrastructure Development** Small Irrigation and Drainage schemes Small Earth Dams Watering Points and Troughs Boreholes	Demographic data including gender statistics Drainage Maps Meteorological and hydrological data Geophysical and hydrogeological information	**UA7.34 Million (USD 11.39 Million)**
	B: Restoration of Natural Habitats & Landscapes **Sub-comp 1: Landscape Management:** Sustainable Land Management Framework and Land Use Planning Conservation Agriculture/micro basin Reforestation and Fire Control Improved Charcoal Production Improved Cooking Stoves	Existing Land Use Inventory maps, land use plans and development plans Community forest management schemes IIAM research on indigenous trees IIAM soil fertility and nutrient management research Existing pilot farm in improved farming techniques Scaling up on existing projects in improved charcoal production and cooking stove technology	**UA 2.96 Million (USD 4.59 Million)**
	Sub-comp 2: Livelihood Diversification: Agro-forestry Improved Management of Non-ruminant Livestock	Seeds of selected Agro-forestry species Replication of successful existing piggery and poultry Secondary use of agro-forestry and livestock products	**UA2.12 Million (USD 3.28 Million)**
	C: Project Management: Capacity Building Monitoring and Evaluation Financial Management Development	Trainers from field and research institutes. Established guidelines and Policy, official statistics and baseline info Technical guidance and best practice Monitoring tools Cashflow projections	**UA1.46 Million (USD 2.26 Million)**

PRGRAMME TIME FRAME

s/n	Task NAME	2010				2011				2012				2013				2014				2015				2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	**PROJECT IDENTIFIICATION**																																
1.1	Joint Missions1 (AfDB + WB)																																
1.1	Joint Missions2 (AfDB + WB)																																
1.1	Joint Missions3 (AfDB + WB)																																
1.1	Joint Missions4 (AfDB + WB)																																
2	**PROJECT PREPARATION**																																
2.1	Preparation Mission																																
2.1	Project Concept Note																																
3	**PROJECT APPRAISAL**																																
3.1	Appraisal Mission																																
3.2	Consultancy Services																																
3.3	ESIA																																
3.4	Appraisal Report																																
4	**AfDB BOARD PRESENTATION, DISTRIBUTION & APPROVAL**																																
4.1	Signature																																
5	**PROJECT IMPLEMENTATION**																																
5.1	**Procurement**																																
5.1.1	Procurement of Water Infrastucture Contractors																																
5.1.2	Procurement of Livelihood Diversification Contractors																																
5.1.3	Procurement of Land Use Management Plan Contractor																																
5.1.4	Project Implementation Systems																																
5.2	**Project Supervision**																																
5.2.1	Supervision Mission 1 to 10																																
5.2.2	Annual Review by AfDB																																
5.3	**Monitoring and Evaluation**																																
5.3.1	Monitoring by PIU																																
6	**PROJECT COMPLETION**																																
6.1	Project Review																																
6.2	Project Completion Report																																

REPORT AND RECOMMENDATION OF THE MANAGEMENT OF THE ADB GROUP TO THE BOARD OF DIRECTORS ON A PROPOSED LOAN/GRANT TO MOZAMBIQUE FOR THE SUSTAINABLE LAND & WATER RESOURCES MANAGEMENT PROJECT (SLWRMP)

Management submits the following Report and Recommendation on a proposed grant of UA 10.32 million from the CIF and a loan of UA 2.10 million from the ADF for the financing requirement of the Sustainable Land & Water Resources Management Project (SLWRMP) in Mozambique.

I – STRATEGIC THRUST & RATIONALE

In Mozambique, tackling climate change and variability is a national priority. Thus the National Adaptation Program of Action (NAPA-2007) identifies drought, flood and cyclones as the major areas of concern and action. Furthermore, GoM's approved medium-term Action Plan for Reducing Poverty (PARP 2011-2014) aims to promote rapid, inclusive and broad-based growth, based on three objectives: i) increased agricultural and fisheries production and productivity; ii) employment promotion; and iii) social and human development. PARP sets out as a key priority, the sustainable management of natural resources (land, water, fisheries and forests) in order to realise the first objective i.e. increased productivity in the agriculture and natural resources sector.

This Project is closely linked to the first objectives of the NAPA and PARP i.e. strengthening the capacities of the farm families and boosting productivity of the agriculture sector through sustainable management of the natural resources. The Project is also in line with the *Bank's Action Plan on Climate Change* which emphasizes increased support for capacity building to tackle climate risks and meets the requirements of the second pillar of the CSP through the envisaged increased agriculture productivity as a result of the *improved water and land management activities*. The SLWRMP through the water infrastructure development for agriculture productivity and restoration of natural habitat activities is also aligned with the Bank's Agriculture Sector Strategy pillars of agricultural infrastructure development and renewable natural resource management. The project aims to promote *inclusive growth* through assistance to communities in adapting to the vagaries of climate variability and change thus helping to sustain increased productivity of the agricultural sector in the selected districts, whilst at the same time promoting livelihood diversification.

1.2. Rationale for Bank's involvement

Mozambique ranks third amongst the African countries most vulnerable to risks from multiple climate related hazards. Droughts, floods and cyclones are the most prominent extreme climate events in Mozambique. The SLWRMP is being mainly financed by the Strategic Climate Fund (SCF), one of the Climate Investment Funds in particular, the Pilot Program for Climate Resilience (PPCR). This project is on adaptation to climate

change and thus resonates the emphasis of Africa in addressing climate change impacts and vulnerability. The Bank is one of the selected Multilateral Development Banks (MDBs) charged with the responsibilities of assisting the selected PPCR countries (one of which is Mozambique). This opportunity will help the Bank to strategically position itself to manage other climate funds in the near future. Furthermore, the Bank has implemented several projects in the agriculture and natural resources sectors in Mozambique and the lessons learnt from these interventions (especially from the recently completed ones) have informed the design of the SLWRMP to enhance better results in implementation. The climate smart infrastructure in the Bank financed Family Farm Income Enhancement Project is and the management of the poultry infrastructure by women cooperative groups are good lesson worthy of replication under this project.

1.3. *Donors Coordination*

Sector	Size		
	GDP	Export	Labor
[Agriculture/CC]	23%	20%	80%
Players - Public Annual Expenditure (average)**			
Organization	**% contribution out of a total of Total 80 million UA/ Year**		
USAID	**25%**		
EC	**13.40%**		
AfDB	**8.40%**		
Existence of Thematic Working Groups	[Y]		
Existence of SWAPs or Integrated Sector Approaches	[N]		
ADB's Involvement in donors coordination***	[M]		

* as most appropriate ** Years [yy1 to yy2] *** for this sector or sub-sector
**** L: leader, M: member but not leader, none: no involvement

1.4 *Comments on Donor Coordination*

The MDBs involved in Mozambique PPCR are the AfDB, the WB and IFC, who have undertaken four joint missions over the past two years leading to the preparation of the approved SPCR for Mozambique by the PPCR sub-committee in June 2011 (the designated approving authority of Strategic Climate Fund). The selection of sectors and areas of intervention were agreed first with Government of Mozambique and also amongst the three MDBs, based on their comparative advantages. The Donor working group on the Environment in Mozambique was an entry point for the PPCR interventions. The group consists of the Bank, DANIDA, AFD, Norway, Denmark, GTZ, UNDP, World Bank, DFID, Netherlands, Switzerland, Japan and UNEP. Most of these are providing support to minimize the impacts of climate change and disaster risks in Mozambique. This Project as a PPCR initiative, will serve as a focal program/project for coordination amongst partners, to help streamline Climate Change (CC) funding amongst

the different stakeholders and partners within the Ministry of Planning and Development thus helping to achieve one of the cardinal aims of the PPCR i.e. mainstreaming CC issues into the governments development planning.

There is also an active thematic donors' group for the agriculture sector named the Agriculture and Rural Economic Development Group led by the World Bank that replaced the past ProAgric group. This group is composed of agencies such as IFAD, USAID, Canada, Sweden, Switzerland/SDC, JICA, Ireland, Austria, Italy, Denmark, Finland, AfDB, France, Germany, Netherlands, UK/DFID and Finland. The major framework of the group is the Sector Wide Approach, (SWAp termed ProAgric II) that is coming to an end soon. The donors were supporting the implementation of the program of the Ministry of Agriculture aimed at developing the sector through a basket fund. The group meets regularly on a monthly basis to review their activities and update each other on new developments from their respective head offices that has implications on the sector. The donors also meet as a group with the relevant key officials of the Ministry of Agriculture and National Department of Water Resources to intermittently review the progress of the activities being funded. The Bank is an active member of this thematic group and members were widely consulted especially during the joint PPCR Missions by the Bank, World Bank and IFC. A series of workshops were held during the appraisal mission to present the project to the members of the donors group and other stakeholders. Their comments were considered and reflected in this appraisal document.

II – PROJECT DESCRIPTION

2.1. Project Components

The SLWRMP is an integrated project to strengthen the capacity of the rural communities to address the inter-linked challenges of climate change, rural poverty, food insecurity and land degradation through the provision of water harvesting infrastructure, restoration of natural habitats and landscapes as well as capacity building for the affected communities. This project consists of three components as provided in the table 2.1 below.

Table 2.1 Project Components

Item	Component	Costs (UA/USD mill)	Description
I	**Agriculture Water Infrastructure Development**	**7.34 (11.39)**	This will include the development of 300ha of small (drip) irrigation schemes in the (four) districts; construction and installation of water harvesting structures such as 18 small earth dams, 38 watering points for livestock as well as 10 boreholes to enhance efficient water use for climate resilience. Fifty percent of drip irrigation beneficiaries would be women farmers who will be cultivating high value vegetables and horticulture produce.
II	**Restoration of Natural Habitats & Landscapes**	**5.08 (7.87)**	Consists of two main subcomponents: **1**. **Landscape Management:** This will include the development of a sustainable land management and investment framework as well as participatory land use planning and a study of the economic valuation of land. The outcome will enhance sustainable use of land resources in order to cope with climate change. It will also promote conservation agriculture on 500ha

			(through promotion of composting for soil nutrient enrichment, minimum/zero tillage, appropriate crop sequencing and rotation mechanisms) reforestation and fire control on 500ha and provision of 25 improved charcoal production units and 1,500 units of improved cooking stoves as coping mechanism to CC. **2. Livelihood Diversification:** This will target sustainable livelihood enhancements particularly for the women such as the promotion of Agro-forestry including a cashew colony, community forestry nurseries and the promotion and improved management of facilities for non-ruminant livestock (poultry, apiculture and aquaculture).
III	**Project Management**	**1.46 (2.26)**	Includes capacity building in climate change management, community development and training, monitoring and evaluation, financial management and development of a communication strategy. It will also cover project management activities including audit and M&E. Deliberate effort would be made to include qualified women in Project Management team
	Total	**13.88 (21.52)**	

2.2. Technical solution retained and other alternatives explored

An evaluation of climate change impact on livelihoods led to the selection of Chicualacuala Mabalane, Massengena and Guija districts as these were considered the most susceptible to climate change in Gaza province in terms of drought. To address the CC related problems identified, the technical solutions proposed above were considered along with the following other options outlined in Table 2.2.

Table 2.2: Project Alternatives Considered and Reasons for Rejection

Alternative name	Brief description	Reasons for rejection
Ground water exploitation	Solving the water management problems with the sole aim of tapping on the ground water aquifer	▪ Salinity makes the water unsuitable for animal/agriculture and human use ▪ The water table at some locations is very deep and in some locations the yield is extremely low making costs highly prohibitive and thus economically not viable,
Large dams/ Reservoirs	Construction of large dams /reservoirs to store water	▪ Rates of evaporation/ infiltration are very high ▪ Cost considerations high ▪ Requires complex management and continuous monitoring
Tree Plantations	Introduction of exotic tree species to combat deforestation	▪ Risks of Non adaptability to the environment; ▪ Biodiversity losses ▪ High water demand

2.3. Project Type

The project is a stand-alone investment operation with an innovative source of funding mainly coming from the Climate Investment Fund under the Strategic Climate Fund for the Pilot Program on Climate Resilience blended with ADF financing. The Project

is one of the seven approved under the Mozambique Strategic Program for Climate Resilience.

2.4. Project Cost and Financing Arrangements

2.4.1 The total cost of the project is estimated at UA 13.88 million (net of taxes and duties) of which UA 11.71 million (85%) is in foreign currency and UA 2.17 million (15%) in local costs. The cost by component is summarized in Table 2.3 below. The cost estimates are derived from bills of quantities prepared based on designs as part of the pre-feasibility assessment and which were updated during the project appraisal mission. The estimates include physical and price contingencies of 9% and 5%.

2.4.2 The bulk of the project financing would be from the CIF/SCF for the PPCR in the amount of UA10.32 million (USD15.75 million or 74.35% of the total cost) in grants while co-financing would be from ADF loan the amounting to UA2.10 million or 15.13% of the total cost) and GoM's counterpart contributions of UA1.46 million or 10.52% of the total cost). The CIF/PPCR will be administered by the Bank. The GoM's contribution will mainly be in terms of staff salaries, office space and some administrative costs. The ADF and CIF/PPCR resources will cover the entire foreign exchange costs and part of the local costs. Indicative breakdown of the funds by category and schedule of expenditure are summarized in Tables 2.5 and 2.6.

Table 2.3: Project Cost Estimates by Component

Project Costs Estimates by Component								
		USD Million			UA Million			
S/N	**Component**	**FE.**	**Local**	**Total**	**FE**	**Local**	**Total**	**%Base**
	Water Infrastructure Development	9.02	0.68	9.70	5.82	0.44	6.26	45%
	Restoration of Natural Habitats/Landscape	6.21	0.61	6.81	4.00	0.39	4.39	32%
	Project Management	0.49	1.47	1.96	0.32	0.95	1.26	9%
	Total Base Costs	**15.72**	**2.76**	**18.48**	**10.14**	**1.78**	**11.92**	**86%**
	Physical Contingencies	1.57	0.28	1.85	1.01	0.18	1.19	9%
	Price Contingencies	1.02	0.18	1.20	0.56	0.10	0.77	5%
	TOTAL COSTS	**18.31**	**3.21**	**21.52**	**11.71**	**2.17**	**13.88**	**100%**
		85%	**15%**	**100%**	**85%**	**15%**	**100%**	

Table 2.4: Sources of Financing (UA)

	SOURCE	F.E	%	L.C	%	TOTAL	%Base
	ADF	1.26	60	0.84	40	2.10	15.13
	CIF/PPCR	6.19	60	4.13	40	10.32	74.35
	GOVERNMENT	0.00	0	1.46	100	1.46	10.52
	TOTAL	**7.45**		**6.43**		**13.88**	**100**

Table 2.5: Project cost by category of expenditure [amounts in million UA equivalents]

	USD million			UA million			%
CATEGORY	**F.E.**	**L.C.**	**Total**	**F.E.**	**L.C.**	**Total**	**of Tot**
Goods	1.78	0.02	1.79	1.15	0.01	1.16	8%
Works	11.34	0.72	12.07	7.31	0.47	7.78	56%
Services	2.74	0.52	3.26	1.77	0.34	2.10	15%
Operating Costs	0.11	1.25	1.36	0.07	0.80	0.87	6%
Base Costs	**15.97**	**2.51**	**18.48**	**10.30**	**1.62**	**11.92**	**86%**
Physical Contingencies	1.78	0.24	2.02	1.15	0.04	1.19	9%
Price Contingencies	0.83	0.19	1.02	0.54	0.13	0.77	5%
TOTAL COSTS	**18.57**	**2.95**	**21.52**	**11.98**	**1.90**	**13.88**	**100%**

Table 2.6: Expenditure schedule by component [amounts in million UA equivalents]

		2013	2014	2015	2016	2017	TOTAL	% of
	COMPONENTS							**Total**
1	**Water Infrastructure Development**	0.50	1.38	1.58	1.54	1.25	6.26	45%
2	**Restoration of Natural Habitats/Land**	0.60	1.04	1.13	1.08	0.53	4.39	32%
3	**Project Management**	0.14	0.29	0.34	0.32	0.16	1.26	9%
	BASE COSTS	**1.25**	**2.72**	**3.05**	**2.95**	**1.94**	**11.92**	**86%**
	Physical Contingencies	0.13	0.25	0.32	0.28	0.21	1.19	9%
	Price Contingencies	0.05	0.15	0.25	0.22	0.10	0.77	5%
	TOTAL COSTS	**1.42**	**3.16**	**3.54**	**3.47**	**2.27**	**13.88**	**100%**

2.5. Project's Target area and Population

The project will be implemented in the Gaza province, which is the most prone to adverse climate variability with frequent droughts and floods recorded over the recent past. Based on field assessment, and a participatory process involving national, provincial and district authorities as well as local communities, the districts of Mabalane, Chicualacuala,

Massengena and Guija were selected within the Gaza Province. The Project is expected to directly benefit about 20,000 farmers of which 50% are women.

2.6. Participatory Process for Project Identification, Design and Implementation

The development of the SPCR involved extensive consultations with various stakeholders at all levels including the Stakeholders' consultation workshops at Xai-Xai and Maputo. All the proposed activities are the direct result of consultation at national, provincial and district levels as well as field verification of success cases and interactions with local communities. The outcomes of the consultations showed that critical climate related issues include: a) reduction of river water levels; b) low precipitation; c) uncontrolled bush fires; d) indiscriminate felling of trees for charcoal, firewood and building materials (timber, stakes, etc.). The project activities took cognizance of these outcomes. Further, refined discussions with focal groups were held during the Appraisal mission.

2.6.1 Project Identification:

The proposed SLWRMP project has been developed based on the findings of four joint missions initiated by the MDBs (AfDB, IFC and WB) that have been selected to implement the PPCR. The first joint mission of the PPCR (November 2009) was mainly a scoping and consultative process involving discussions with a range of Government entities, civil society organizations, the private sector, and development partners. The second joint mission involved field visits and highlighted the key climate change risks of droughts, floods, cyclones, coastal erosion and sea water level rise. The third mission presented a draft of the SPCR for review through consultative process with the government stakeholders and international, civil society and private sector groups at central, provincial and municipal level in May 2011. The SPCR was approved in June 2011 by PPCR Sub Committee.

2.6.2 Project Design:

The fourth joint mission involved the preparation of the different interventions under the PPCR. The MDBs worked individually on their assigned project as contained in the approved SPCR, during this mission but with frequent de-briefing meetings and a number of joint consultations. This stage involved an extensive participatory process. Key elements of this process included numerous interactions/consultations at the national, provincial and district levels, site visits/survey to the selected districts, mini workshops and consultations with government, non-government and private organizations as well as community representatives near and within some of the targeted communities. The project design was being fine-tuned with each consultative meeting and culminated in the approval by the GoM. The Project Appraisal builds on the findings of the preparation and some additional field and desk study which further refined the actual location of the individual interventions with the assistance of the beneficiary communities.

2.6.3 Project Implementation:

The proposed SLWRMP is based fully on a participatory approach. The approach to Outcome 2 (Diversification of Livelihood) is fundamentally participatory, with all activities based on community leadership and ownership. The approach to Outcome 3 is also participatory, involving the target groups in the conservation and restoration of their natural habitats, reduction in forest fires, use of improved techniques for making charcoal and the use of efficient cooking utensils. The project also involves the capacity training of members of the community and substantial training through demonstrative processes. The community members will thus develop the capacity to maintain the community infrastructure to be installed with support from the Water and Agriculture Departments.

2.7. Bank Group Experience, Lessons Reflected in Project Design

2.7.1 Lessons from previous implementation experience that have shaped the design of this project include: i) improved design process following a participatory approach and anchoring the project within an operational national institution (Provincial Directorate of Agriculture) as the project implementation unit (PIU); ii) provisions for building capacity of the project team in project management, procurement, financial management and disbursement including following up more closely on the implementation of audit recommendations and timely submission of justifications for advances made to the Special Account; iii) better project preparation by undertaking feasibility studies leading to bills of quantities (BoQ) for civil works and cost estimates for other works as well as using climate resilient infrastructure; iv) limited stipulated conditions for project disbursement effectiveness and to reduce implementation delays; vii) strong participation and training (awareness and capacity building) of stakeholders in order to guarantee sustainability and enhance project supervision in particular M&E. The effective management by women cooperatives of the facilities by the Bank financed Family Farm Income Enhancement Project is another good lesson that would be replicated under this project.

2.8. Key Performance Indicators

The key performance indicators for the project have been outlined in the Result Based Logical Framework and these will include: i) increased agricultural productivity mt/ha; (ii) increased level of income of the beneficiary communities; (iii) increased level of climate resilience through agricultural and conservation agriculture practices (hectares practising conservation agriculture; (iv) restoration of forests and reduction in forest fires; (v) increased climate resilience of communities through livelihood diversification; and, (vi) increased number of communities and beneficiaries implementing climate change adaptation actions in the target districts.

III – PROJECT FEASIBILITY

3.1. Economic and financial performance

Table C.1: key economic and financial figures

FIRR 20%	NPV @12% cost of capital	(USD14.86million)
EIRR 18.3%		

NB: detailed calculations are available in Annex B6

- The rehabilitation of the earth dams and the development of the irrigation scheme will *inter alia* facilitate the efficient distribution of water which in itself will boost farmers productivity;
- Crop and enterprise budgets were developed for the main tradable crops that the project will support including maize the import parity prices of maize, vegetables and rice were used in the calculation of the returns on investment;
- Shadow prices of traded goods are not significantly different from market prices as the difference between the official and parallel markets for foreign exchange in Mozambique is insignificant;
- Market price per kg of output have been considered as revenue and all variable costs, including seed, chemical fertilizers, mulch, irrigation water, and labor were deducted from the total revenue in the net farm income
- Average incomes of smallholder farmers will increase as a result of increased rice and vegetable production in the area and increased participation
- Without prejudice to the official policy on farm inputs (such as seeds, power tillers, agrochemicals and fertilizers) imported into Mozambique, market prices paid by producers for these inputs are in most cases not significantly different from the international prices probably due to the cancelling effects of low tariffs and subsidies;
- For the purpose of this analysis, the economic analysis treats tax and subsidies as transfer payments;
- This analysis assumes there was no phasing in the entry point among beneficiaries as all accruable benefits were presumed to start in PY4;
- The streams of benefits were netted out for over 20 years.
- Net financial benefits, obtained after deducting investment cost and recurrent costs from net incremental value obtained from cultivation of selected crops would generate an FIRR of *20%* and a net present value (NPV) of USD 14.8 million. The rate is adequate and establishes project viability.
- The assessment of the contribution of the project to the national economy is based on the following assumptions:
- the evaluation of the net project benefits is estimated over a period of 20 years;
- the expenses comprise capital costs, infrastructure maintenance and operating costs, equipment renewal cost and variable additional operating costs used;
- and the capital cost, equipment renewal and the prices crop products used are at constant prices (excluding taxes and customs duties). In terms of return, the project shows an economic rate of return (ERR) of about 18.3%, which is higher than opportunity cost of capital 12%;
- In addition to the quantifiable benefits, the project will generate substantial positive externalities including increase in the value of land and provision of a conducive environment for rural development.

3.2. Environmental and Social Impacts

The project was environmentally classified under category 2, August 2011 by ORQR which implies that an ESMP will be implemented during the project. This classification was obtained considering the nature of the interventions, which are expected to generate evident positive environmental and social impacts. An integrated approach of institutional development, research and transfer of technology, reforestation (conservation), water management and livelihood diversification will bring environmental good practices in Gaza Province's sustainable development.

Conservation and restoration of natural habitats, prevention of forest fires, introduction of more efficient practices of using natural resources, together with the diversification of activities will result in increased resilience in the natural and social systems. No significant adverse and irreversible negative environmental impacts are expected to be induced by the physical infrastructures and/or activities of the project. Potential negative environmental impacts such as noise and air pollution during construction activities will be localised and would over time be reversible and consequently will be mitigated by the Project's Environmental and Social Management Framework. The other potential negative impacts expected from increased use of fertilisers and pesticides in the irrigated areas will be minimal as a result of the promotion of conservation agriculture.

Climate Change

The major climate threats in the project area are drought and desertification. The SLWRMP is aimed at promoting climate resilient infrastructure and livelihoods through community-based watershed/landscape management approaches, thus enabling resource poor communities to reverse their declining land productivity occasioned by climate change and variability. It will also establish a sustainable community-based water-harvesting program in the arid and semi-arid areas of the Gaza Province and enhance crop productivity through introduction of drought tolerant varieties and early maturing species as well providing diverse livelihoods as coping mechanism for climate variability. It will encourage conservation of natural habitats through reforestation, agro-forestry and fire prevention. The increased vegetation cover and soil conservation will contribute to climate change mitigation.

Gender

Women comprise 51 % of Mozambique's population and about 85% of them live in the rural areas. They represent 60% of the rural labor force, carry out 80% of the total family farm work and contribute 68% of staple food production. They are mostly involved in agriculture production as well as firewood collection. Areas of major concern with respect to women include excessive workloads, low literacy rates, poor health and nutritional status. The incidence of women headed households in Mozambique is 20-25% but it is considerably higher in the project area due to male migration; probably as high as

30 per cent on average. Women have not had equal access to natural resources, credit or extension support in the past, although there are many women trading charcoal. They hold little control over the charcoal benefits and family assets. Traditionally, male family members have always been given preference in inheritance.

Considering the importance of the traditional participation of Mozambican women in agriculture and natural resource management, the project will support initiatives aiming to improve agricultural productivity and sustainable management of forest resources. In line with the Government of Mozambique's approved action plan on Gender, Environment and Climate Change Strategy (2010), over 70% of the targeted population for the project are women who are often the most vulnerable in cases of flood and drought occurrences given their key role in producing staple foods and crops for household consumption. The project would also encourage the participation of women in the capacity building activities at least 50% of the community members trained will be women

Social

The project will provide water harvesting infrastructures that support small holder farming and small-scale irrigation thereby creating jobs and wealth. The project will also promote livestock through the provision of water troughs for animals. Potable water will be provided through boreholes, which will have positive health impacts. Natural habitats and forest restoration will mitigate the effects of climate change as well as provide sources of income. Livelihood diversification through agro-forestry and livestock will provide complementary sources of employment and income, especially for women. Consequently, the project as a whole impacts positively on the socio-economics of the communities, on their health, on their resilience to climate change and thus encourages community cohesion. The project will also alleviate environmental and ecosystem degradation, reduction in the vulnerability/exposure to water borne diseases.

Involuntary resettlement

No resettlements are expected to be originated by the project.

IV – IMPLEMENTATION

4.1. Implementation arrangements

4.1.1 The project's Executing Agency is the National Directorate of Agrarian Services (DNSA) of the Ministry of Agriculture (MINAG). The field level implementation will be undertaken by the *existing staff* from the Provincial Directorate of Agriculture Services (DPA) in Gaza province. A core team of experts in the field of Water Engineering, Land Management and Planning, Forestry, Agriculture Extension, Social Development, Gender and Community Mobilization would be responsible for the day to day running of the project. In addition, experts in environment, procurement, financial management and monitoring & evaluation will be competitively recruited to support the project team.

4.1.2 There is an existing Sustainable Development Council - *Conselho Nacional de Desenvolvimento Sustentáve*l (CONDES), which meets twice a year and brings together key line ministries and agencies at ministerial level chaired by the Prime Minister and it coordinates high-level policy and planning on climate change. However, for effective Project delivery, the Technical Council of CONDES (i.e. *Conselho Técnico do CONDES*) will serve as the *Project Steering Committee*. This Technical Council is chaired by the Vice Minister of MICOA. The *Steering Committee* will provide overall policy implementation direction to the Project especially ensuring the integration of climate change issues on the distinct sectoral interventions for the Project.

4.1.3 *Procurement arrangements:*

The national procurement Laws and Regulation governing public procurement in Mozambique have been reviewed and determined to be inadequate in the context of current project implementation framework. The outcomes of the 2008 Country Procurement Assessment Report (CPAR) showed some improvements in certain areas (Pillar I & III)4, while there was little or no significant progress with regard to the rest (Pillar II & IV)5. The country procurement risk assessment has been assessed as substantial at national level and high at subnational (provincial and district) levels. This has been corroborated by the outcome of the just concluded National Competitive Bidding Assessment conducted in the country by the African Development Bank in 2011. Accordingly, the current implementation framework, under the proposed project with the use of country systems does not provide adequate fiduciary assurances consistent with the Bank Group mandate. Subsequently, the Bank seeks to minimize these risks by the use of its rules and procedures while also maintaining the need for transparency and level playing field by using international competitive bidding (ICB), where appropriate.

All procurement of goods and acquisition of consulting services financed by the Bank will be in accordance with the Bank's Rules and Procedure for Procurement of Goods and Works or, as appropriate, Rules and Procedure for the Use of Consultants, using the relevant Bank Standard Bidding Documents. Table below shows the summary of the projects procurement arrangement. Further details are in the annexes

[4] Pillar I - Legislative and Regulatory Framework, & Pillar III - Procurement Operations and Market Practices

[5] Pillar II – Institutional Framework and Management Capacity, & Pillar IV – Integrity and Transparency of the Public Procurement System

Summary of Procurement Table (UA'000)

	Project Components/Categories	ICB	NCB	Others	Short List	NBF	Total
1	GOODS						
1.1	Equipment						
	1.1.1 Laboratory Equipment for IIAM		289.23(0)				289.23(0)
	1.1.2 Office Specialized Equipment			132.56 (0)			132.56 (0)
1.2	Vehicles						
	1.2.1 Four WD Utility Vehicles		321.36 (0)				321.34 (0)
	1.2.2 Seven Truck 7ton capacity (1 refrigerated/1 non-refrigerated)		110.54 (0)				110.54 (0)
1.3	Motorcycles		187.46 (0)				187.46 (0)
1.4	Divers Goods	564.22 (314.22)	193.45 (193.45)	117.55 (32.60)			875.22 (540.27)
2	CIVIL WORKS						
2.1	1.0 Irrigation/Small Earth Dam Management	6,276.31 (768.22)					6276.31 (768.22)
2.2	Boreholes & Water troughs		515.26 (0.00)				515.26 (0)
2.3	Agroforestry related civil works		172.72 (0.00)	65.64 (0)			238.36 (0)
2.4	Poultry related civil works	655.47 (405.47)	199.49 (199.49)				854.96 (604.96)
2.5	Landscape Management		482.59 (0.00)				482.59 (482.59)
3	CONSULTING SERVICES & TRAINING						
3.1	Consulting Services				1547.13 (103.64)		1547.13 (103.64)
3.2	Training/Studies/capacity building				1024.97 (82.91)		1024.97 (82.91)
4	OPERATING COSTS (Management, Monitoring & Supervision)						
4.1	Project Staff Salaries/ DSA ?Per Diem					519.55 (0)	519,55(0)
4.2	Operation & Maintenance						
4.3	Office Space , Utilities & Communications					503.48(0)	503.48(0)
	TOTAL	7,496.00 (1,487.91)	2,472.08 (392.94)	315.75 (32.60)	2,572.07 (186.55)	1,023.03 (0.00)	13,878.96 (2,100.00)

Note: Figures in "parenthesis" are ADF contributions (excluding CIF); "Others" denote; Limited International Bidding, Shopping, Direct Negotiations, etc;

NBF denotes – None Bank Financed Activities. It is applicable to resources "that would not necessitate the compulsory use of the Bank's rules of procedures'

4.1.4 *Financial Management, Disbursement and Auditing Arrangement*: The Financial Management (FM) assessment conducted by the Bank concluded that the proposed arrangements put in place meets the Bank's minimum requirements. The PCU will ensure that adequate internal control systems are in place at all times and the accounting system is in accordance with internationally accepted accounting principles and the Bank guidelines. The Bank's four disbursement methods will be available to be used during project implementation. The PCU will open a Special Account denominated in United States Dollars (USD) into which the Bank will advance project funds in line with the disbursement

guidelines. The Project will also open local currency denominated bank accounts in districts at commercial banks, under terms and conditions acceptable to the Bank.

The PCU will submit on regular basis to the Bank within 30 days after the end of each calendar quarter, a consolidated quarterly IFR that includes all transactions of the project including those processed on project sites. The Project will be audited by the *Tribunal Administrativo*, who is charged with the responsibility for auditing all government accounts. Where necessary, the *Tribunal Administrativo* will engage the services of a private independent auditor to undertake the audit of the project on terms and conditions acceptable to the Bank; and submit the audit report to the Bank not later than six (6) months after the end of each financial year. The cost of such audit will be borne by the Project. In line with the recent World Bank Financing parameters for Mozambique, the CIF/ADF funds in this Project will not be used to finance any form of taxes and duties. Detailed FM, disbursement and auditing arrangements are included as Annex B4.

4.2. Governance

GoM has been implementing a number of reforms to enhance governance, transparency and accountability. There have been major structural and functional reforms with emphasis on policy and institutional actions including public financial management system, decentralization and capacity building all in an effort to ensure accountability and transparency in Government operations. The Project would be utilizing qualified staff to ensure economy and efficiency of project procurement and financial management process. Furthermore, the governance structure of the project provides for a statutory body like *Conselho Técnico do CONDES* (Technical Council of CONDES) as the steering committee, which gives oversight policy direction for the implementation of the project. The sustainable development council assures that all stakeholders will have a voice in the review of project implementation The Bank will follow up on governance through regular field supervision missions, audit reports, Annual Workplan and Budget (AWPB), progress reports and procurement plans. The Bank is effectively on the ground with the Country Office (MZFO) in Maputo and thus close interaction and follow up will be undertaken at the Country level to ensure that implementation of Project activities are on course. The MZFO Sector Experts will give a quarterly schedule of implementation progress to the Resident Representative and Manager OSAN.4

4.3. Monitoring

Table 4.1 highlights details of the monitoring process for the Project. For day to day operations of the Project, the Monitoring and Evaluation Officer will keep Management informed on the progress of implementation of various activities, through the rendition of a bimonthly report and such report will flag issues where the progress its likely to be adversely affected and propose to Management how to tackle such issues. The Monitoring &Evaluation Officer will also keep regular updates on Project's performance indicators. The Environmental and Social Management Plan will also be adequately implemented by the various agencies earmarked in the plan and the Environmental Officer will ensure that all parties play their roles in safeguard.

Table 4.1 Monitoring Process

s/n	Timeframe	Milestones	Monitoring Process/Feedback Loop
	Procurement		
1	Q1	Procurement of Consultancy services	Review of SLWRMP Requirements
2	Q2	Procurement of Contractors for Water Infrastucture, Livelihood Diversification, Land Use Mangement Plan	Due Process and Due Diligence
3	Q3	Procurement of Goods (Charcoal Making Units, Improved Cooking Stoves and Equipment for Research)	Progress report on the delivery and quality of goods and the progress of the training in the use of the goods.
	Works		
4	Q4-Q19	Implementation of Individual Project Components	Inception Workshop, Mid-term and Annual Review. M & E Reports
	Project Supervision		
5	Q4-Q19	Supervision Missions 1 to 10	Percentage of Targets Being Met
6	Q4-Q20	Annual Reviews by AfDB	Impact of Project on Beneficiaries
	Monitoring and Evaluation		Percentage of Targets Being Met
7	Q1-Q19	Monitoring by PIU	Community Participation and Percentage Implementation Number of Communities Trained
	Project Completion		
8	Q20	Project Review	General Effect of Project on Mozambique
9	Q21	Project Completion Report	Assessment of Project meeting its designed objectives

4.4. Sustainability

Use of simple technologies that are appropriate for the rural farmers ensures that adoption and replicability is assured. The project design is based on feasibility studies as well as stakeholders consultations to ensure climate resilience and sustainability. Community participation and capacity building will further bolster the abilities of the various groups to continue project activities even after completion. The livelihood enhancement activities offer additional sources of income and therefore greater climate change resilience. The communities will have committees for infrastructure operation and maintenance as well as for sustainable natural resources management. The committees will be technically supported by the National water and agriculture agencies. The infrastructure to be installed for irrigation and water harvesting was selected based on the national plans from both MINAG and DNA. Therefore the infrastructure will be owned both by the communities and the relevant Government agencies and token amounts paid for their day to day operations.

4.5. Risk management

The main risks for sustainable land management practices relate to the successful adoption of new practices by the communities. The implied change in behaviour and maintaining these practices can be mitigated by sensitization exercise and encouraging peer-to-peer knowledge transfer and show-casing visible gains to communities. The capacity building of the line Ministries in climate change adaptation measures will also

enhance the knowledge transfer process and reduce the risk of insufficient capacity from the staff in the agencies that need to provide support to the farmers and community members. The risk of droughts and floods within the Gaza Province cannot be completely eliminated but through the project activities the impacts of increased climate variability and change will be significantly reduced. The implementation of the project will result in increased adaptive capacity for the communities.

4.6. Knowledge building

The PPCR in itself underscores learning by doing hence the project will systematically document new lessons and experience for future use. The project is integrating climate adaptation measures in terms of sustainable land and water management and promotion of tested drought tolerant seeds. The outcome of this would be carefully monitored and documented. Furthermore, the Project will be financing a sustainable land management investment framework and mapping, all of which will be research outputs that could help the body of knowledge. Moreover, research outcomes from the support to IIAM's diverse trials on improved seeds would add to the body of knowledge. All project related studies and research would be made readily available on the AfDB and CIF websites for wider dissemination.

V – LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

The project will be financed pursuant to: (i) an ADF loan agreement between the Borrower and the ADF; and (ii) a SCF-PPCR Grant agreement between the Recipient and the AfDB as Implementing Agency of the SCF Trust Fund.

5.2. Conditions associated with Bank's intervention

5.2.1 Conditions for effectiveness

The ADF Loan Agreement will enter into force upon fulfillment by the Borrower of the provisions of Section 12.01 of the General Conditions. The SCF-PPCR Grant Agreement will enter into force upon signature by the Recipient and the Bank.

5.2.2. Conditions Precedent to First Disbursement of the ADF Loan and the SCF-PPCR Grant: The obligations of the Fund and the Bank to make the first disbursement of the ADF Loan and the SCF-PPCR Grant shall be conditional upon the entry into force of the Loan and the Grant Agreement, respectively, and the fulfillment by the Borrower/Recipient, in form and substance satisfactory to the Fund/Bank, of the following condition:

(i) Provide evidence of the opening of two foreign currency denominated Special Account for the Project in a bank acceptable to the Bank/Fund for the deposit of the proceeds of the Grant/Loan.

5.2.3. Other Conditions: The Borrower/Recipient shall, in form and substance satisfactory to the Fund/Bank, fulfill the following conditions:

(i) Provide, within six (6) months after the first disbursement, evidence of the recruitment of experts in: (a) environment; (b) procurement; (c) financial management; (d) accounting (one accountant and two account assistants); and (e) monitoring and evaluation; whose qualifications and experience shall be acceptable to the Fund/Bank; and

(ii) Provide, within six (6) months after the first disbursement, evidence of the purchase and installation of the financial and accounting software for the Project.

5.2.4 Covenants: Under the Loan and Grant Agreements, the Borrower/Recipient covenants and agrees, in form and substance satisfactory to the Fund/Bank to:

(a) carry out, and cause its contractors to carry out, the Project in accordance with: (a) national legislation; and (b) the recommendations, requirements and procedures set forth in the Environmental and Social Management Plan (ESMP) prepared for the Project; and

(b) deliver to the Fund/Bank project quarterly reports (QPRs), in form and substance acceptable to the Fund/Bank, describing the Borrower's implementation of the ESMP (including any implementation failures and related remedies, if any).

(X) This project complies with all applicable Bank policies.

VI – RECOMMENDATION

Management recommends that the Boards of Directors approve: (i) an ADF loan of UA 2.10 million; and (ii) a SCF-PPCR grant of USD 15.75 million to the Republic of Mozambique to finance the Sustainable Land & Water Resources Management Project (SLWRMP) under the conditions and modalities stipulated in this report.

APPENDIX I. COUNTRY'S COMPARATIVE SOCIO-ECONOMIC INDICATORS

Mozambique
Comparative Socio-Economic Indicators

Indicator	Year	Mozambique	Africa	Developing Countries	Developed Countries	Charts
Basic Indicators						
Area ('000 Km²)		801.6	30,322.6	80,978.0	54,658.4	
Total Population (millions)	2011	23.9	1,044.3	5,628.5	1,068.7	
Urban Population (% of Total)	2010	38.5	0.0	44.8	77.7	
Population Density (per Km²)	2011	28.8	300,044,370.9	68.6	23.1	
GNI per Capita (US $)	2010	440.3	1,564.9	2,780.3	39,688.1	
Labor Force Participation - Total (%)	2011	48.2	40.7	0.0	0.0	
Labor Force Participation - Female (%)	2011	51.7	41.1	39.8	43.3	
Gender -Related Development Index Value	2007	0.4	0.5	..	0.9	
Human Develop. Index (Rank among 169 countries)	2011	184.0	441.0	..	..	
Popul. Living Below $ 1 a Day (% of Population)	2008	60.0	..	25.0	..	
Demographic Indicators						
Population Growth Rate - Total (%)	2011	2.3	2.3	1.4	0.7	
Population Growth Rate - Urban (%)	2010	4.3	3.4	2.4	1.0	
Population < 15 years (%)	2011	43.9	40.4	29.2	17.7	
Population >= 65 years (%)	2011	3.3	3.4	8.0	15.3	
Dependency Ratio (%)	2011	90.0	78.1	52.8	..	
Sex Ratio (per 100 female)	2011	95.0	99.5	934.9	948.3	
Female Population 15-49 years (% of total population)	2011	23.8	24.4	53.3	47.2	
Life Expectancy at Birth - Total (years)	2011	48.7	56.3	65.7	79.8	
Life Expectancy at Birth - Female (years)	2011	49.3	54.6	68.9	82.7	
Crude Birth Rate (per 1,000)	2011	36.7	34.6	21.5	12.0	
Crude Death Rate (per 1,000)	2011	15.2	11.8	8.2	8.3	
Infant Mortality Rate (per 1,000)	2011	80.7	77.0	53.1	5.8	
Child Mortality Rate (per 1,000)	2011	135.1	125.4	51.4	6.3	
Total Fertility Rate (per woman)	2011	4.8	4.4	2.7	1.8	
Maternal Mortality Rate (per 100,000)	2008	550.0	530.8	440.0	10.0	
Women Using Contraception (%)	2003	16.5	50.2	61.0	75.0	
Health & Nutrition Indicators						
Physicians (per 100,000 people)	2006	3.0	46.0	77.0	287.0	
Nurses (per 100,000 people)*	2006	29.1	160.5	98.0	782.0	
Births attended by Trained Health Personnel (%)	2003	47.7	64.5	39.0	99.3	
Access to Safe Water (% of Population)	2008	47.0	64.8	84.0	99.6	
Access to Health Services (% of Population)	2000	39.0	65.2	80.0	100.0	
Access to Sanitation (% of Population)	2008	17.0	40.7	54.6	99.8	
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2007	12.5	4.6	161.9	14.1	
Incidence of Tuberculosis (per 100,000)	2010	544.0	259.2	..	..	
Child Immunization Against Tuberculosis (%)	2010	90.0	85.6	89.0	99.0	
Child Immunization Against Measles (%)	2010	70.0	77.8	78.0	92.6	
Underweight Children (% of children under 5 years)	2003	21.2	17.2	27.0	0.1	
Daily Calorie Supply per Capita	2007	2,088.8	2,462.1	2,675.2	3,284.7	
Public Expenditure on Health (as % of GDP)	2008	5.8	2.4	4.0	6.9	
Education Indicators						
Gross Enrolment Ratio (%)		..	..	..	..	
Primary School - Total	2010	115.1	100.5	108.0	101.5	
Primary School - Female	2010	109.0	96.6	104.6	101.2	
Secondary School - Total	2010	25.5	44.1	62.3	100.3	
Secondary School - Female	2010	22.9	40.7	60.7	100.0	
Primary School Female Teaching Staff (% of Total)	2010	39.2	44.3	..	..	
Adult Literacy Rate - Total (%)	2009	55.1	58.9	19.0	..	
Adult Literacy Rate - Male (%)	2009	41.5	17.9	..	..	
Adult Literacy Rate - Female (%)	2009	70.1	71.4	..	..	
Percentage of GDP Spent on Education	2006	5.0	4.6	..	5.4	
Environmental Indicators						
Land Use (Arable Land as % of Total Land Area)	2008	5.7	7.6	9.9	11.8	
Annual Rate of Deforestation (%)	2000	0.2	0.6	0.4	-0.2	
Annual Rate of Reforestation (%)		..	..	..	..	
Per Capita CO2 Emissions (metric tons)	2009	0.1	1.1	..	..	

Sources : ADB Statistics Department Databases; World Bank: World Development Indicators
UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports.

Last update: February 2012

Note : n.a. : Not Applicable ; ... : Data Not Available.

APPENDIX III. KEY RELATED PROJECTS FINANCED BY THE BANK AND OTHER DEVELOPMENT PARTNERS IN THE COUNTRY

Donor	Name of the Project	Implementing Agency		Currency	Amount in Country Currency	Amount in US Dollars	Funding Modality	Duration	Local	Comments
						€ 1 = $1,308				
CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION										
ON-GOING PROJECTS										
NATIONAL LEVEL										
UNDP (GEF)	Climate Changes and Drought Adaptation Program	MICOA (DNGA), Gaza province		$ USD		1.889.840	Grant	2007-2012	Guijá Distrito da Prov. de Gaza	
Danida/EU Commission (Irish Aid)	Support Program to the Environment Sector (PASA II)	MICOA		$		60,980,000.00	Grant	2011-2015	National, provincial and local	
UNDP –Gov Japan	Africa Adaptation Programme	MICOA, INGC, MPD				2,987,620	Grant	2009 - 2012	National, provincial and local	Gaza, Tete, Cabo Delgado
BM, IFC, BAD	SPCR, Strategic Program for Climate Resilience	MICOA/MPD		$		86,000,000.00	Grant/ Loan	2012 - 2015?	National	Vale de Limpopo, Vale do Zambeze, Beira, Nacala (Reserva do Niassa/PNG)
UNDP (LDCF/GEF)	Adaptation in the coastal zones of Mozambique	MICOA		$	Total Grant	9,667,000.00 4,433,000.00	Grant	1/10 2011 - 1/9 2015	National, local (Pemba, Inharrime, Pebane)	Total ($14,110,000) includes a GEF contribution of $4.433.000; GoM contribution of US$ 827,000 (in kind and money); UNDP funds; parallel funding
Joint Program "UN Delivery as One"	Support to Risck Reduction Against Disasteries	UNDP/UN-HABITAT UNICEF/FAO/WFP IOM/WHO/UNFPA		$		10,000,000.00	Grant	2008-2010	National, provincial and local	

Donor	Name of the Project	Implementing Agency		Currency	Amount in Country Currency	Amount in US Dollars	Funding Modality	Duration	Local	Comments
Joint Program from the Spanish Fund for ODM	Climate Change Adptation and Environemental Integration	FAO/UNEP/ UNDP		$		7,000,000.00	Grant	2008-2012	Limpopo Basin and Chicualacuala district - Gaza	Mostly in the district of Chicualacuala. Financed by the Spanish Government through the MDG-F. Project will close in mid-2012
German Cooperation	Institutional Advisor for consolidation and increasing risk management for calamities in Mozambique	INGC		$		7,600,000.00	Grants	2007- fim 2012	National, Provincial, Local	Caia, Beira, Buzi, Save, Mabote, Funhalouro, Vilankulos, Maputo
UNDP França (AFD) Danida	Climate Change Project at INGC Fase II – Response às CC em Moç	INGC		$	3,600,000.00	3.600.000, Danida: 1057000, PNUD: 1250000, AfD: 243000	Grant	2009-2011	National	Draft final reports made available mid-March 2012
Irish Aid				Euro	250,000.00	327,000.00		2011 - 2012	Mabote	
JICA	Climate Changes Water Supply Emergence Program	MICOA/INGC/DNA		$		11,000,000.00	Grant	2009-2010	Províncias de Maputo e Gaza	Previsto para envolver 75.000 pessoas, mas devido a limitação de recursos apenas 20.000 pessoas
Holanda Canada CAD 5.000.000.00 USAID In-Country Missions (U.S.A.)	Promotion and Protection of Means of Subsistence (LPP) under emergency Situation	WFP em parceria com INGC e MINAG		$		40,000,000.00	directo multilateral	2008-2010	30 Distritos vulneráveis do Plano Director do INGC	
AFD (GEF francês)	Adaptação às mudanças climáticas no Parque National das Quirimbas	MITUR		€	1,000,000.00	1,308,000.00	Grant	2011-2014	Cabo Delgado - PNQ	Parte dum projecte mais global de apoio do PNQ
AFD (GEF francês)	REDD+ - Reserva National do Gile e sua periferia	MITUR		€	2,000,000.00	2,616,000.00	Grant	2011-2014	Zambezia	Statuto : início
UNDP	Capacity Development for RRD and AMC	INGC/MICOA		$		4,568,000		2012-2015		Note that the total refers to UNDP core funding already allocated; the project plans to mobilize an additional $10,771,000.

Donor	Name of the Project	Implementing Agency		Currency	Amount in Country Currency	Amount in US Dollars	Funding Modality	Duration	Local	Comments
MITIGAÇÃO										
FINANCIAMENTO EM CURSO										
Noruega	Sul-Sul REDD	IIED with differet institutions		NOK	3.800.000 + 2,000,000	645,934.00	Grant	2009-Marco 2012		
Japan, Government of	Provision of survey equipment, satellite images, PC, and softwares for RS for monitoring REDD+	MINAG (DNTF)		Yen	##########	7,000,000.00	Grant	2010	National	A part of the Japan Grant Aid for Forest Preservation Programme: US$200million for 22 countries
Japan International Cooperation Agency (JICA)	Technical Cooperation Project (Establishment of Sustainable Forest Resource Information Platform for Monitoring REDD+)	MINAG (DNTF)		$	3,500,000		Technial Cooperation	2012-2017	National	
German and Dutch	Energizing Development: Access to modern Energy Services (AMES), grid densification and off grid solar and hydro	FUNAE		$	3,800,000	5,244,000	Grant	2010-2012	Maputo/Matola /National /Manica province	
UNDP	Green Human capacity Development (GHD project)	MICOA		$		1,253,000		2012-2015	National - Local	Note that the total refers to UNDP core funding already allocated; the project plans to mobilize an additional $1.800.000. Also note that the project involves CCA and not only mitigation
Noruega	Capacity building for CDM projects in Mozambique	Pöyry AS/Dr. AJ Tsamba da UEM		NOK	1,600,000.00	271,972.00	?	2010-2011		

APPENDIX IV. MAP OF THE PROJECT AREA