AFRICAN DEVELOPMENT FUND

PROJECT: **DROUGHT RECOVERY AND AGRICULTURE RESILIENCE PROJECT (DRARP)**

COUNTRY: **REPUBLIC OF MOZAMBIQUE**

PROJECT APPRAISAL REPORT

RDGS/COMZ/AHAI

January 2018

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CURRENCY AND EQUIVALENTS

(August 2017)

1 UA = USD 1.41
1 UA = 86.80 MZN
1USD= 62.0 MZN

FISCAL YEAR

1 January – 31 December

WEIGHTS AND MEASURES

1 metric 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 AND ABBREVIATIONS

ADF	African Development Fund
AfDB	African Development Bank Group
AWPB	Annual Work Plan and Budget,
BDS	Business Development Services
CERUNS	Market Centres
CONDES	Technical Council of Environment
CPI	Corruption Perception Index
CPIA	Country Policy and Institutional Assessment
CSP	Country Strategy Paper
CTA	Confederation of Economic Associations of Mozambique
CTGC	Technical Council for Disaster Management,
DFID	Department for International Development
DP(s)	Development Partners
DPCG	Development Partners Coordination Group
ESMP	Environmental Social Management Plan
FAO	Food for Agriculture Organization
FE	Foreign Exchange
FRA	Fiduciary Risk Assessment
GDP	Gross Domestic Project
GCF	Green Climate Fund
GHG	Greenhouse Gas
GoM	Government of Mozambique
ICT	Information and Communication Technology
IFAD,	International Fund for Agriculture
INGC	National Institute of Disaster Management
JICA	Japanese International Cooperation Agency
MAE	Ministry of Public Administration
MASA	Ministry of Agriculture and Food Security
MDB	Multilateral Development Banks
MIS	Management Information System
MITADER	Ministry of Land Environment and Rural Development
NAPA	National Adaptation Plan
NCCAMS	National Climate Change Adaptation and Mitigation Strategy
PCN	Project Concept Note
PCR	Project Completion Report
PEDSA	Development Strategy of the Agrarian Sector
PICA	Integrated Plan for Agriculture Commercialization
PIU	Project Implementation Unity
PMP	Bank Procurement Methods and Procedures
PNISA	Development Strategy of the Agrarian Sector
PPCR	Pilot Program for Climate Resilience
SETSAN	Technical Secretariat for Food Security and Nutrition
SEP	Socio-Economic Plan
SNDR	Delivery and Performance Management Office
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States International Development Agency
UNDP	United Nations Development Agency

GRANT INFORMATION

CLIENT'S INFORMATION

BORROWER:	Government of Mozambique
EXECUTING AGENCY:	Ministry of State and Public Administration (MAEFP)

Financing plan

Source	Amount (UA million)	Instrument
ADF	10.00	Grant
GoM	01.00	Counterpart funds
TOTAL COST	**11.00**	

Key financing information

	ADF
Grant currency	UA 11.00 million
Interest type*	NA
Interest rate spread*	NA
Commitment fee*	NA
Other fees*	NA
Tenor	NA
Service Charge	NA
Grace period	NA
FIRR, NPV (base case) 20% USD$ 8.3 million	
EIRR (base case): 21% USD$8.9 million	

Timeframe - Main Milestones (expected)

Concept Note approval	August 2017
Project approval	January 2018
Effectiveness	February 2018
Completion	December 2022
Last Disbursement	June 2023
Last repayment	(month, year)

PROJECT SUMMARY

1.1. The Drought Recovery and Climate Resilience Project 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, and improving food production and marketing activities as well as capacity building for the affected communities. The total project cost is 11.0 Units of Account (15.51 million dollars) over 5 years (2018-2022) and will be implemented in the four drought prone districts of Magude, Matutuine, Chigubo and Chibuto with estimated total direct beneficiaries of 20,000 and additional 20,000 indirect beneficiaries. This project consists of three approaches for scaling up agriculture water infrastructure development through: (1) small irrigation schemes, (ii) construction and installation of water harvesting structures and (iii) installation of water treatment plants with desalination systems powered by solar panel systems. The project will also support the improvement of food security and marketing to increase resilience to climate change and provide capacity building on climate change risk management in particular related to drought, and systems for monitoring and evaluation.

1.2. The DRARP is a critical intervention as the effects and impacts of climate change are already being felt due to erratic and inadequate rainfall patterns and declining on-farm productivity as a result of the increasing intensity of adverse climatic conditions. The Bank's comparative advantage and added value in this project are derived from its accumulated experience in financing a number of previous operations, such as through the Pilot Programme for Climate Resilience (PPCR) to countervail the impact of climate changes in the agricultural sector in Mozambique and elsewhere which includes water harvesting infrastructure, and capacity building related interventions. This will be solidified by the newly introduced climate adaptation and resilience measures, improved procurement and disbursement, and local presence through the country office. Project implementation has therefore been designed to directly involve communities in small agriculture water infrastructure, including small scale irrigation; development and management of the community natural resource management; adoption of improved conservation techniques; capacity building, including on farm demonstration and beneficiary training programmes. The project will organise the stakeholders into various user groups to maximize benefits.

1.3 The Project is also in line with the *Bank's High 5 Action Plan on Climate Change* which brings "climate smart" agriculture production systems and promote actions for the enhancement of production base of vulnerable population by restoring degraded ecosystems, improving living conditions, integrating climate information into agriculture activities and integrated management of natural resources. The DRARP will also contribute to the second pillar of the new Country Strategy Paper 2018-2022 under preparation, through the envisaged increased agriculture productivity as a result of the *improved water and land management activities*. This Project is closely linked to the first objectives of the National Adaptation Plan for Action and National Climate Change Adaptation and Mitigation Strategy (NCCAMS) 2013-2025 which is the country's most comprehensive instrument to address climate change, in particular related to drought and floods and establishes clear actions and priorities across multiple government sectors. The Bank has a significant experience in Mozambique in the agriculture sector, having implemented many projects in the country, particularly in the Maputo and Gaza provinces. The lessons learnt have been incorporated into the design and development of this project.

Country and Project Name: ***Mozambique – Drought Recovery and Agriculture Resilient Project (DRARP)***
Purpose of the 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***

RESULTS CHAIN		PERFORMANCE INDICATORS			Means of Verification	RISKS / MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
I	Poverty Reduction and sustainable and climate resilient livelihood improvements	National Poverty Rate	49% (2015)	42% (2025)	MEF Reports	
OUTCOMES	1. Increase in income per household resulting from the interventions 2. Improved Food Security and Marketing to Increase Resilience to Climate Change 3. Degraded landscapes restored.	1. Increase annual income 2. Increased annual yields; 3. Reduction of degraded areas	1. USD250.00/year 2. Average yields of 1.5-2.0 ton/ha major arable crops (maize, rice). 3. 3000 ha of degraded land	1. USD400.00/year 2. Increase in yield to 2.5-4.0 ton/ha. 2. 1000 ha of degraded areas	• MEF statistics • MASA reports • INE statistics • WFP reports	***Risks*/Mitigations:** 1 *Internal migration from one community to another due to drought.* Best choice location of the infrastructures to mitigate the effects of drought. 2 *Farmers with no interest to adopt new technologies :* Promoting stakeholders participation, engagement and integration 3 *Adaptability of selected seeds:* Research & demonstrative activities, extension and capacity building.
OUTPUTS	**A: Scaled up Water Infrastructure Development** i Rehabilitation of small irrigation schemes ii Irrigation schemes using irrigation kits iii Water harvesting infrastructures iv Rain water harvesting systems and solar panels in the roof of the buildings; **B: Improved agriculture production and marketing to increase resilience to climate change** i Improved agriculture practices ii Improve food nutrition and diversification iii Market diversification through agro-processing iv. Rehabilitate the centre for artificial insemination v. Rehabilitation of youth incubation centres **C: Project Management** i Enhanced capacity of PIU in M & E ii. Strategic studies on climate issues	• Area rehabilitated under small-scale irrigation • Area developed with irrigation kits • N° of surface and subsurface reservoirs, water troughs and multifunctional boreholes • N° of rainwater harvesting systems including solar panels in the roof of the buildings • N° of farmers adopting new agriculture techniques • N° women & men trainers with nutrition's skills • N° of small agro processing units installed • Centre for artificial insemination • N° of youth incubation centers rehabilitate • No of PMU staff including those from the districts coordinating the project trained in M&E • N° of studies on climate issues	• 520ha in districts in 2017 • 360ha with irrigation kits in 2017 • 18, 15, 34 in 2017 • 10 in 2017 • 3600 in 2017 • 1000 trained in 2017 • 45 agro-proc in 2017 • 1 centre in 2017 • 2 centres in 2017 • 0 project staff trained on M & E • 2 studies in 2017	• 557ha by year 2022 • 530ha with irrigation kits • 31, 30, 48 by 2022 • 34 by 2022 • 5000 farmers (60% women) in 2022 • 1500 (20% men) in 2022 • 150 agro-proc in 2022 • 1 centre in 2022 • 2 centres rehabilitated • 20 Project core staff trained • 5 studies in 2022	Project M&E reports ARA-Sul MEF MASA INGC CERNACARTA SETSAN Dept. of Forestry	
	A: Agriculture Water Infrastructure Development **A.1 Sub-component 1: Establishment of Small Community Irrigation Schemes** o Rehabilitation of 37ha of small irrigation schemes o Providing 34 small irrigation kits **A.2 Sub-Component 2: Water harvesting Infrastructure** o 14 Surface and subsurface water reservoirs, 15 Water Troughs for Livestock and 27 Multifunctional Boreholes o 24 Rain water harvesting systems including solar panels in the roof of the buildings **B: Improved Food Security and marketing to increase Resilience to Climate Change** **B.1 Sub-comp 1: Improved Agriculture Practices** o Climate proof and resilient seeds o Conservation Agriculture o Agro-forest techniques o Forest fire prevention o Rehabilitate the 1 Center for artificial insemination for cattle in Chobela o Rehabilitation of 2 youth incubation centers **B.2 Sub-comp 2 Improve food nutrition and market diversification** o Farmers trained on small scale irrigation agriculture o Training of trainers in nutrition, food processing, business management & hygiene o Supply of small agro processing units **C: Project Management:** • Financial Management Development and Monitoring and Evaluation • Strategic Studies on Climate proofed infrastructures		**INPUTS** **A. UA 8..46 million** A.1. UA 1.46 million **A.2. UA 7.0 million** **B. UA. 1.26 million** B.1 UA 1.0 million B.2.UA 0.26 million **C. UA 1.28 million** **Total : UA 11.00 million**			**Sources of financing (million UA)** ADF: UA 10.00 million (USD 14.1 million) GOM: UA 1.0 million (USD 1.41 million) Total: UA 11.00 million (USD 15.51 million)

PROJECT TIMEFRAME

Activity Description	2017				2018				2019				2020				2021				2022				2023			
	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. Appraisal Mission																												
2. Grant Negotiation																												
3. Board Approval																												
4. Signature																												
5. Fulfillment of Conditions for Effectiveness																												
6. Project Launch /Start Off																												
7. Procurement of Water Infrastructures																												
8. Construction of Water infrastructures																												
9. Rehabilitation of existing Irrigation and water Infrastructure																												
10. Improve food security activities																												
11. Marketing and Agro-processing																												
12. Rehabilitation of Insemination and youth incubation centers																												
13. Project implementation																												
14. Training on nutrition																												
15. Supervision and Monitoring																												
16. Bank PCR																												
17. Audit																												

REPORT AND RECOMMENDATION OF THE MANAGEMENT OF THE ADB GROUP TO THE BOARD OF DIRECTORS ON A PROPOSED GRANT TO MOZAMBIQUE FOR THE DROUGHT RECOVERY AND AGRICULTURE RESILIENT PROJECT (DRARP)

Management submits the following Report and Recommendation on a proposed grant of UA 10.00 million from the ADF and UA 1.1 million from the Government for the financing requirement of the Drought Recovery and Agriculture Resilience Project (DRARP) in Mozambique.

I – STRATEGIC THRUST & RATIONALE

1.1 Mozambique is located in a region cyclically threatened by climate variability and extreme events such as droughts, floods, tropical cyclones and water borne disease epidemics, as well as earthquakes. Historical records on disasters over the past 58 years (1956-2016), indicate that it experienced 11 droughts, 24 floods, 15 tropical cyclones, 20 epidemics and two earthquake; as the climate change, such events are expected to increase in frequency and intensity. Climate change is estimated to affect over 58% of the population. Maputo and Gaza provinces, located in the south, are among the most adversely affected area in terms of climate change events with frequent occurrence of droughts and floods in the coastal areas of the provinces.

Natural hazards management related to Climate Change is a priority in Mozambique. Consequently, UNFCCC and the Mozambique authorities have developed the National Adaptation Program of Action (NAPA) in 2007 and the National Climate Change Adaptation and Mitigation Strategy (NCCAMS) 2013-2025 outlining urgent and immediate actions required to cope with climate change impacts and adaptation measures. This Project is closely linked to the first objective of the NCCAMS which is the country's most comprehensive instrument to address climate change, in particular related to drought and floods and establishes clear actions and priorities across multiple government sectors. The general NCCAMS objectives are to establish the action guidelines to create resilience through climate risk reduction in communities and the national economy, and promote low-carbon development and the green economy through its integration in the sectoral and local planning process.

1.2 The project is also in line with Mozambique's 5 year Social Economic Plan (SEP 2015-2019) which aims strengthening the capacities of the farm families and boosting productivity of the agriculture sector through sustainable management of the natural resources. The SEP also aims to reduce the disaster risk and vulnerability of local population, and to promote human well-being and economic development through rapid, inclusive and broad-based growth, based on three objectives: (i) increase of agricultural and fisheries production and productivity, (ii) employment promotion, and (iii) social and human development. These objectives are supported by two overarching pillars: macroeconomic management and governance.

1.3 The DRARP through the water infrastructure development for agriculture productivity is also aligned with the National Irrigation Strategy, National Agricultural Strategy (PEDSA) and the CAADP[1]. In Mozambique the Agriculture sector plays a key role, contributing 26 percent of Mozambique's GDP. Growth of the agriculture sector (which includes livestock and forestry) has fluctuated in recent years and has been estimated at 5.9 percent for 2015 and reduced to 4.2% in 2016 as result of recurring floods and droughts and fall of the international commodity prices. In this context, the Government of Mozambique is reviewing the National Agricultural Investment Plan (PNISA) 2013-2017, an implementation plan based on PEDSA and the CAADP goals, to expanded up to 2024 to include nutrition and poverty reduction issues, private sector role and increase their investment levels, increase crop yields of key food crops; expanding rural roads and adequately prioritized according to agricultural potential and establishment of service centers. The PNISA

aims to achieve growth averaging 7 percent annually over the next ten years; reduce in the prevalence of chronic malnutrition in children under five years to below 20 percent by 2020; and reduction by half in the proportion of the population of Mozambique that suffer from hunger.

1.4 The Project is also in line with the *Bank's Action Plan on Climate Change,* which emphasizes the need to increase support for capacity building to tackle climate risks and meets the requirements of the second pillar of the CSP 2018-2022, under preparation, through the envisaged increased agriculture productivity as a result of the *improved water and land management activities*. The DRARP through water infrastructure development for agriculture productivity, improving food production and marketing activities is also aligned with the Bank's Feed Africa Strategy pillar of agricultural infrastructure development. 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.

1.2. Rationale for Bank's involvement

1.2.1 The project will be implemented in two provinces of Maputo and Gaza, which are the most prone to adverse climate variability with frequent droughts recorded over the recent past. Therefore, the DRARP is in line with the Bank's Ten Year Strategy (2013-2022), Agricultural Transformation in Africa Strategy (2016-2025) under the Bank's *High 5*[1] *and Action Plan on Climate Change.* It will bring "climate smart" agriculture production systems and promote actions for the enhancement of resilience of production basis of vulnerable population by restoring degraded ecosystems, improving living conditions, integrating climate information into agriculture activities and integrated management of natural resources. The DRARP will also contribute to the second pillar of the new Country Strategy Paper 2018-2022, under preparation, through the envisaged increased agriculture productivity as a result of the *improved water and land management activities*. The new CSP 2016-2021, currently under preparation, focuses on two strategic pillars that have been approved by CODE: Pillar I infrastructure development; and Pillar II Agriculture.

1.3. *Donors Coordination*

Sector	Size		
	GDP	Export	Labor
[Agriculture/CC]	26%	20%	80%

Players - Public Annual Expenditure (average)**		
Organization	% contribution out of a total of Total 115.4 million UA/ Year	
	2014-2015	2012-2013
WB	45%	24%
USAID	9%	25%
EC	13%	13.4%
AfDB	18%	8.4%
JICA	7%	7.2%
Others	8%	22%

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] **High 5 refers to the five priority areas that the Bank will be focus on in the next 10 years.**

1.3.1 Comments on Donor Coordination

An active thematic donors' group for the Agriculture sector named the Agriculture and Rural Economic Development Group led by the World Bank in which the AfDB is member meets on a regular basis. Other members of the group are, IFAD, USAID, Canada, Sweden, Switzerland/SDC, JICA, Ireland, Austria, Italy, Denmark, Finland, France, Germany, Netherlands, UK/DFID, Norway, European Commission, FAO, UNDP, DFID, and Belgian. Most of these are providing support to the agriculture development through the Development Strategy of the Agrarian Sector (PEDSA) 2011-2020, the National Investment Plan for the Agriculture Sector (PNISA) and the Integrated Plan for Agriculture Commercialization (PICA). Related to climate change and environment issues, the Bank regularly participates in the meetings of the Environment Group led by the UN.

II – PROJECT DESCRIPTION

2.1. Project Components

2.1.1 The DRARP goal is 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, and improving food production and marketing activities 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 million)	(USD million)	Description
I	Agriculture Water Infrastructure Development	8.46	11.93	**Sub-component 1: Establishment of Small Community Irrigation Schemes:** • This will include rehabilitation of 37 ha of small irrigation schemes in the (four) districts and • Provision of 34 irrigation kits that will cover at least 5 ha each **Sub-component 2: Water harvesting Infrastructure** • Provision of 4 containerized desalination plant with accessories; • Construction, installation of water harvesting structures:14 small earth dams, 14 watering points for livestock as well as construction of 14 and rehabilitation of 13 boreholes to enhance efficient water use for climate resilience. • Installation of 24 rain water harvesting structures and 16 solar panels in the roof of the buildings; • Rehabilitation of 2 incubation centers and training of beneficiaries on the use and maintenance of equipment, and sustainability of the infrastructures.

II	Improved Food Security and Marketing to Increase Resilience to Climate Change	1.26	1.76	**Sub-component 1: Improved Agriculture Practices** • Construction of 16 greenhouses; rehabilitation of artificial livestock insemination center in Chobela; • Provision of 100 mini-silos; • 14 animal feed troughs; farm tools; and supply of 2500 tons of drought tolerant seeds. • Promote conservation agriculture through promotion of mulching, composting for soil nutrient enrichment, minimum/zero tillage, appropriate crop sequencing and rotation mechanisms; reforestation and fire control. **Sub-Component 2: Improve food nutrition and market diversification:** The second sub-component will target sustainable livelihood enhancements particularly for women such as: • 60 sessions of training women on nutrition, food processing, agriculture conservation, business management &hygiene, and small-scale irrigations operations; • 30 training sessions to the staff of line Ministry's on issues related to project interventions • Provision of 140 small agro-processing machines ; • Provision of 10 extension kits and protective clothing;
III	Project Management	1.28	1.79	• 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	11.0	15.41	

2.2. Technical solution retained and other alternatives explored

Table 2.2: Project Alternatives Considered and Reasons for Rejection

Alternative name	Brief description	Reasons for rejection
Large dams/ Reservoirs	Construction of large dams /reservoirs to store water	▪ Cost considerations high ▪ Detailed and costly feasibility studies ▪ Requires complex management and continuous monitoring
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 irrigation Schemes	Construction/rehabilitation of large irrigation schemes	▪ Need a very detailed and long feasibility studies ▪ Costs are too high
Agro-processing factories	Construction/rehabilitation of large agro processing factories	▪ Not enough production supply along the year to make the factories sustainable

2.3. Project Type

The project is a stand-alone investment operation with funding mainly coming from the African Development Fund and counterpart funding from the Government of Mozambique. The Project is one of the two selected interventions planned for implementation in 2018 under the new CSP for Mozambique 2018-2022.

2.4. Project Cost and Financing Arrangements

2.4.1 Project Cost and Financing Arrangement

The total project cost of Drought Recovery and Agriculture (DRARP) over the five years of implementation is estimated at US$15.51million (UA11.0 million), including tax and customs duty and contingencies. Taxes and duties correspond to 7.07% (USD 1.096.896,22) of the total project cost. This is motivated by the need to ensure seamless project implementation in an environment of tight budgetary space for the Government, a full case for the ADF to cover duty and taxes, in line with the Policy on Expenditure Eligible for Bank Financing is formulated in Appendix IV. The Project is made up of US$**14.1million** (UA **10.00million**) in base cost, US$0.65million (UA0.47million) physical contingencies and US$0.75million (UA 0.53million) price contingencies. The foreign exchange element is estimated at US$**12.46million** (UA**8.83million**) which is 80.3% of the total cost of the project. Summaries of the project costs by component and by category of expenditure are presented below in Tables, while details are provided in Annex B.2 of Volume II of the Report.

Table 2.3: Summary Project Cost Estimates by Component

Components		**UA Million**			
S/N		**Foreign**	**Local**	***Total Costs***	***% Foreign***
1	Scaled up Water Infrastructure Development	6.41	1.40	7.81	81.9
2	Improved Food Security and Marketing To Increase Resilience to Climate Changes	0.50	0.52	1.02	49.0
3	Project Management	1.16	0.01	1.17	99.1
	Total base cost	**8.07**	**1.93**	**10.0**	**80.8**
	Physical contingency (%)	0.36	0.11	0.47	76.6
	Price Contingency (%)	0.40	0.13	0.53	75.4
	Total project cost	**8.83**	**2.17**	**11.0**	**80.3**

The Bank's contribution amounts to US$14.1 million of the total cost from TSF Pillar-1 resources in grant. The Bank financing will be 88.3% in foreign exchange and 11.7% in local. The Government will contribute to the tune of US$1.41 million both in kind (office space, electricity and water bills, and communications and travel expenses) and in cash (payment to the counterpart staff an operation and maintenance costs when needed). Because of the economic situation of the country, the beneficiaries are not expected to contribute any fund but they are expected to maintain the infrastructure that will be provided by the project.

Table 2.4: Sources of Finance

		UA million			**%Total**
	Source of Financing	**Foreign**	**Local**	**Total**	
1.	ADF	8.83	1.17	10.0	**90.0**
2.	GoM	0.00	1.00	1.00	**10.0**
	Total	**8.83**	**2.17**	**11.0**	**100**

Table 2.5: Project Cost by Category of Expenditure

Categories of expenditure		UA million			
		Foreign	**Local**	***Total Costs***	***% foreign***
A.	Works	5.69	1.39	7.08	80.3
B.	Goods	1.12	0.02	1.14	98.2
C.	Services	1.08	0.51	1.59	67.9
D.	Operating Costs	0.18	0.01	0.19	94.7
	Total base cost	**8.07**	**1.93**	**10.0**	**80.6**
	Physical contingency	0.36	0.11	0.47	76.6
	Price Contingency	0.40	0.13	0.53	54.4
	Total project cost	**8.83**	**2.17**	**11.0**	**80.3**

Expenditure will be carried out according to the schedule below during the implementation period for each component (see Table 2.6). The project will be implemented during five years geared mainly towards construction of infrastructure, support to agriculture and marketing activities and capacity building of the beneficiary smallholder farmers on conservation agriculture and nutrition as well as the staff of the project to improve their competence.

Table 2.6: Expenditure Schedule by Component

Components	Amount (**UA$ million**)					
	2018	2019	2020	2021	2022	Total
Scaled up water infrastructure development	1.61	3.29	2.16	0.73	0.02	7.81
Improved Food Security and Marketing to increase resilience to Climate Change.	0.41	0.28	0.28	0.02	0.03	1.02
Project Management,	0.43	0.18	0.19	0.19	0.18	1.17
Total Base Cost	2.45	3.75	2.63	0.94	0.23	10.0
Physical Contingencies	0.08	0.20	0.12	0.06	0.01	0.47
Price Contingencies	0.09	0.24	0.14	0.04	0.02	0.53
Total Project Cost	2.62	4.19	2.89	1.04	0.26	11.0

2.5. Project's Target area and Population

2.5.1 The activities of the project will be undertaken in two provinces, Gaza and Maputo. In each of the provinces two districts are selected to participate in the project. In Maputo, the project will be implemented in the districts of Matutuine and Magude, while in Gaza the selected districts are Chigubo and Chibuto. The selected communities are among those mostly affected by the drought and they will be the direct beneficiaries of the activities under the project. The total direct beneficiaries of the project will be about 20,000 individuals out of which about 60% will be women. With an average of 5 persons per household this would result in improved livelihoods of 100,000 rural dwellers.

2.5.2 Public institutions such as the Ministry of Public Works and Water Resources, National Agricultural Research Institute and relevant Directorates in the Ministry of Agriculture and Food Security and the provincial and district directorates of Agriculture and Public Works will benefit from the project interventions in terms of capacity building. Other indirect beneficiaries are health centers, public schools and district offices (benefiting from the rain water harvesting structures), processors, traders, entrepreneur, various service providers, NGOs, etc. In addition to infrastructure and improved agricultural practices, innovative techniques needed for quality maintenance of infrastructure, nutrition modules, and conservation and processing of food products will be developed. Many people will also benefit from the project through

radio jingles that will disseminate some of the project's nutrition and weather information and training programs. The indirect beneficiaries will be approximately 20.000 people.

2.6. Participatory Process for Project Identification, Design and Implementation

2.6.1 Project Identification

In the last two years Mozambique was affected by a heavy drought. This disaster led to the loss of livestock, i.e. 4,500 cows and 2000 goats, 550,116 ha of crops affecting 320,498 farms (representing 11% of the total cultivated area in Mozambique). Against this background, the Government of Mozambique (GoM) made an appeal to all cooperating partners including the African Development Bank for establishing long-term interventions to countervail the drought situation. Therefore the Banks decision to finance the Project is justified considering that the drought situation: (i) is of a scale which is clearly beyond the capacity of the Government of Mozambique to handle alone in a long range; (ii) the need for a long term approach to sustain and make the local population more resilient to drought; and (iii) provision of long-term water related infrastructures to counter the effects the recurring nature of the drought.

2.6.2 Project Design

The project design was prepared following constant consultations with beneficiaries, government authorities, NGOs and development partners. The Bank also deployed designed resources to fine-tune, existing designs in particular adjusted proposed infrastructures to the implementation sites and provision of agricultural inputs to match farmers' needs and their financial limitations and to ensure sustainability of activities and outcomes. Consultations where also carried out with a number of Government authorities and other development partners that participate in different development donor programmes. While in the field, numerous interactions/consultations were conducted at the provincial and district levels; site visits to the selected districts and mini-workshops were held; and consultations with government, non-government and private organizations as well as community representatives near and within some of the targeted communities were carried out to modify and fine-tune the project proposal.

2.6.3 Project Implementation

The proposed DRARP is based on a fully participatory approach involving capacity training of members of the community and substantial training through demonstrative processes. The Project Implementation Unit (PIU) at the project headquarters and the provincial technical staff will be responsible for the monitoring of project results including output and outcome indicators on a participatory fashion. For example, the approach to Outcome 2 (Improved Food Security and Marketing to Increase Resilience to Climate Change) is fundamentally participatory, with all activities will be implemented based on community leadership and ownership. Data collection and evaluation tasks would be performed by all the institutions involved in the project or in partnership with other relevant institutions under close supervision of the Monitoring and Evaluation expert of the project. 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

The overall performance assessment of the Bank's portfolio in Mozambique conducted in 2015 is 3.30 on a scale of 1-4. The portfolio is comprised of 19 projects (17 public projects, 2 private sector projects and 1 multinational project). There are no projects at risk. Learning from recent Project Completion Reports (PCR's) and the ongoing Bank Projects in Mozambique which have informed the design features of the DRARP include the need to: a) improve the project design process with consideration to existing capacity

within the country so as to ensure timely implementation; b) Project readiness and quality at entry for both regional and national operations; c) Rationalize the number of conditions necessary to declare the Grant effective in order to reduce implementation delays; d) increase capacity of implementing agencies especially in the project management) enhance the supervision of projects particularly monitoring and evaluation to minimize delays in completion; and f) delays in provision of counterpart funds, partly owing to late approval and release of funds by Government. For the closed Projects in the last 5 years, the PCRs are up to date with all the reports prepared and posted on the Bank website.

2.8. Key Performance Indicators

The key performance indicators for the project have been outlined in the Result Based Logical Framework. Special emphasis will be placed on the targeting indicators that should be monitored and those related specifically to women as they carry the majority of the agriculture activities in the project area in order to assess the changes in the livelihood and nutrition levels within the household. Regular implementation progress will be measured through bi-annual Bank supervision missions led by Mozambique Country Office, Quarterly Progress Reports, and annual technical and financial audits. The M&E of the PIU will collect and analyze project data to monitor performance. The main performance indicators disaggregated by gender will be monitored from the baseline scenario of the log frame include among others: (i) the number of climate smart infrastructure provided by the project (ii) increased level of income of the beneficiary communities; (iii) increased level of climate resilience through agricultural and conservation agriculture practices; (iv). Reduction of degraded areas where intervention took place; (v) number of women adopting new agriculture techniques; and (vi) number of women & men trained with basic nutrition skills. All indicators selected for the project will help to enhance the performance of the agricultural and water sectors in Maputo and Gaza Provinces in particular and in Mozambique in general. The Bank's various supervision missions and periodic activity reports will reflect the level of achievement of the indicators.

III – PROJECT FEASIBILITY

3.1. Economic and financial performance

Table C.1: key economic and financial figures	
FIRR, NPV (base case)	20%, US$ 8.3 million
EIRR (base case)	21%, US$8.9 million

NB: detailed calculations are available in Annex B7

3.1.1 A simulation based on realistic assumptions "with" and "without" project was done to estimate the cost-effectiveness of the investments and the economic rate of return. The analysis is based on five crop enterprises (maize, beans, irish potato, tomato and onion) as a basis for the assessment of probable returns to investments in the various farm production activities carried out under the Project as well as from investments in boreholes and small dams. Only direct costs and benefits were estimated and quantified. Social and indirect benefits arising from the Project have not been taken into account. The period of analysis is 20 years. It is assumed that households realize on average an income increase of approximately 40 percent. The detailed methodology, assumptions and results are presented in item B.7 of the Technical Annex's Document.

3.1.2 A 10 percent drop in the output prices reduces the EIRR to 19.0% while delay in benefits for one year and two years reduces the rate of return to 17.7% and 15.4% respectively. With regards to the FIRR, a

10 percent drop in the output prices reduces the FIRR to 18.1% while delay in benefits for one year and two years reduces the rate of return to 17.% and 14% respectively. With an EIRR well above the opportunity cost of capital (12%), the Project can be justified on economic grounds. It should be noted that the analysis underestimates the Project's economic impact by far because not all economic benefits that can be expected have been quantified.

3.1.3 The Project is expected to create substantial employment opportunities, for 1000 people (including youth and women) both among the direct beneficiaries as well as in the rural communities in general. The multiplier effect on the rural economy, resulting from increased disposable incomes and demand for goods and services, is expected to be considerable. Therefore, it is reasonable to assume that the estimated economic benefits are on the low side of the potential economic returns which can be expected when the Project is implemented.

3.1.4 NPV=US $8.9 M (assuming an opportunity cost of capital of 12 percent) and EIRR= 21 percent. The results of the analysis of indicative farm budgets show the impact of the Project on financial profitability for all farm types to be high, with all enterprises financially viable. The financial efficiency of the enterprises were assessed using economic parameters including Gross Margin, Net Income, Returns to Labor, Incremental Income and Internal Rate of Return. These are summarized in Technical Annexes Document.

3.2. Environmental and Social Impacts

3.2.1 Under the Bank's safeguards system the project was environmentally classified under category 2, November 2016 by SNDR which implies that an Environmental and Social Management Plan (ESMP) will be implemented during the project. This classification was obtained considering the fact that project will have a number of positive environmental and social impacts, which include among others: increased income of rural communities, improved water harvesting system, improved agriculture production, improved access to markets, increased resilience of infrastructure against climate variability and increased control of women over irrigation water management in Maputo and Gaza provinces. The ESMP has been carried out and a summary has been validated and posted in the Bank Website. The ESMP is presented on the Technical Annex's B.8.

3.2.2 The project will recruit an M&E specialist with strong background on environmental and climate change management who will oversee the implementation of the ESMP. He/she will be supported by the Directorate for Management of Arid and Semi-Arid Zones of INGC and staff of the Provincial Directorates for Land, Environment and Rural Development.

3.2.3 Project activities such as prevention of forest fires, conservation agriculture through mulching, composting and zero tillage, introduction of more efficient practices of using natural resources, together with the diversification of activities will result in increased adaptation and resilience in the natural and social systems. No major adverse and irreversible 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 Plan. The other potential negative impacts expected from increased use of fertilisers and pesticides in the irrigated areas will be minimal and mitigated through some of the core activities of the project such as training on best management practices in agriculture and promotion of conservation agriculture.

3.3 Climate Change

3.3.1 The project has been identified and designed specifically to address the negative impacts climate variability and extreme events pose to rural agriculture systems and livelihoods. In this regards the 100% of the Banks contribution will count towards the Banks climate finance target (40 % on annual approvals by 2020). In relation to the Climate Screen the project is under category 2 in which it may be vulnerable to climate risk. The major climate rick in the project area is the reduced rainfall that causes prolonged dry season and drought which negatively impact agricultural productivity both crops and livestock. Therefore, the DRARP aims to introduce adaptation measures through the introduction of drought tolerant varieties and early maturing crop varieties and establishing a sustainable community-based water-harvesting program in the arid and semi-arid areas of the Maputo and Gaza Province.

3.3.2 The Project will also promote climate resilient infrastructure, i.e. installation of water harvesting structures such as small earth dams, watering points for livestock as well as construction and rehabilitation of boreholes, training farmers on conservation agriculture and providing them with agricultural inputs (drought tolerant seeds) to enhance efficient water use for climate resilience. The project will promote the installation of solar panels on the roofs of the buildings to increase resilience by making these facilities less reliant upon grid connections and reducing energy costs – mitigation co-benefit. These services would make the facilities more sustainable whilst at the same time demonstrating to the local community and other investors that solar PV is an increasingly attractive source of energy. Finally, the project 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. Opportunities to access climate finance from the GEF, Adaptation Fund and Green Climate Fund will be explored to scale-up the adaptation and/or mitigation co-benefits to be generated by this project.

3.4 Gender

3.4.1 The Government of Mozambique has demonstrated strong commitment with gender equality, and with the integration of gender into climate change and environmental legislation, policies and strategies. This is reflected in the approved policies, i.e. the National Environment Policy in 2005, Environment Strategy for Sustainable Development of Mozambique in 2007 and the Gender, Environment and Climate Change Strategy and Action Plan (2010). All these policies pay specific attention to women in order to enhance natural resources management, environmental education and gender equality in all development processes. Furthermore, these polices also aiming at insuring equality between women and men, and boys and girls, to access and control of natural resources, technologies for climate change adaptation and mitigation, and to benefits and opportunities for development, through sustainable use of natural resources for the combating poverty.

3.4.2 Women comprise 51 % of Mozambique's population and about 85% of them live in the rural areas. They represent 52% of the total population that is economically active in agriculture and have a higher adult literacy rate (58.5% versus 29.9% for men), they 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 reaching approximately 30%. In the project area, women play a key role in food and nutrition security and family economics. They participate actively in agricultural and livestock production, in the conservation, processing, storage and marketing of food, and are the main responsible for household nutrition. They also have a great knowledge of the environment, their natural resources and biodiversity, and are responsible for providing water and wood fuel

to the household for domestic activities. Targeting the food and nutritional security of households and improve income generation through increased involvement of the women in the value chain in particular to improve market access is a priority.

3.4.3 In general women and men are differentially impacted by climate changes in the project areas due to the current power relations and their differentiated roles in these communities. Successive droughts that have affected the these communities in the project areas in the last two years have increased men's migration to South Africa, Swaziland and main cities, including Maputo and Xai-Xai in search for jobs. This has led to women having more access to but not control over natural resources and other property rights, since men continue to make the decisions on how the resources are used and allocated. Traditionally, male family members have always been given preference in inheritance. This has continue to make women the most vulnerable in cases of flood and drought occurrence. Over 60% of the targeted population for the project are women (including those that heading their own households) whom have not had equal access to natural resources, credit or extension support in the past, although there are many women trading charcoal.

3.4.4 Therefore, the project will also be targeting vulnerable women to increase their access to inputs, irrigation kits, nutrition training in order to reduce their level of vulnerability. Women, in particular the elderly ones are the most vulnerable and affected by the drought it is expected that the project will contribute to women's wellbeing by improving the productivity and climate resilience of their farming plots and value addition through agro-processing, nutrition and access to markets. Therefore, a number of actions have been planned such as: (i) the promotion of small processing units (ii) promotion of training where the main objective is the education on the importance of nutrition and better use of local products; (iii) training of women in the use of improved techniques and agricultural practice; and (iv) management of natural resources, gender analysis, participation. Women will be strongly encouraged to participate in all the activities in order to increase their access to natural resources and in combating deforestation and desertification, involving in planning, management, research, promotion and access to and appropriation of technologies and their implementation, highlighting their role in management and use of forest resources and biodiversity conservation.

3.5 Social

Positive social impacts are anticipated based on the establishing water harvesting infrastructures and restore the agriculture capacity of the communities that will enhance agricultural production and livelihood diversification. 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. Agriculture 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.

3.6 Involuntary resettlement

No resettlements are expected to be originated by the project.

IV – IMPLEMENTATION

4.1 Implementation arrangements

4.1.1 The project will be implemented over a period of five years, between January 2018 and December 2022. The Implementing Agency would be the National Institute for Disaster Management (INGC) which will host the Project Implementation Unit. The INGC, was established in 1999 and coordinates disaster risk management activities in Mozambique. It operates under the Ministry of State Administration (MAE) with a mandate to coordinate emergencies, promote disaster prevention through population and government mobilization; protect human lives; ensure multi-sectoral coordination in disaster emergency; coordinate early warning systems; carry out public awareness; and implement projects to recover arid and semi-arid zones affected by drought. They are responsible for coordinating disaster risk management at the national, provincial and district levels. They have received and continue to receive technical and financial assistance towards improving their effectiveness. The existing Technical Council for Disaster Management (CTGC), which meets three times a year and brings together key line ministries, i.e. MASA, MAE, MOPHAI and agencies at ministerial level will serve as the *Project Steering Committee*. The PSC will be chaired by the General Director of INGC, while the PIU will act as secretariat. The PIU will be composed by a Project Coordinator, Monitoring and Evaluation officer, Procurement officer and an Accountant. Based on the PD No. 02/2015, the PIU has been recruited in order to start the project implementation immediately after the Board Approval.

4.1.2. The National Directorate of Water Supply and Sanitation (DNAAS) and the National Irrigation Institute (INIR) are the central level institutions of the Ministry of Public Works Housing and Water Resources and the Ministry of Agriculture and Food Security, respectively, created by the Government to implement Water and Sanitation and Irrigation programs in Mozambique. DNAAS and INIR are structured for the management of projects and will be responsible for the technical backstopping of the project component of water supply and irrigation, respectively in coordination with INGC and other stakeholders. A Memorandum of Understanding (MOU) between the above mentioned institutions and INGC will be signed.

4.1.3 At the province and district levels, the line ministries, the Directorates of Agriculture and Food Security and the Directorate of Public Works will be responsible for overall activities. The project also involves capacity building by training community members through demonstrative processes. The community members will thus develop the capacity to maintain the community infrastructure to be installed with support from the Public Works and Agriculture Departments.

4.2 Procurement arrangements

4.2.1 Procurement of goods and works and the acquisition of consulting services, financed by the Bank for the project, will be carried out in accordance with the *"Procurement Policy for Bank Group Funded Operations"*, dated October 2015 and following the provisions stated in the Protocol of Agreement. Specifically, Procurement would be carried out following:

4.2.2 Borrower Procurement System (BPS): Specific Procurement Methods and Procedures (PMPs) under BPS comprising its Laws and Regulations, namely, Decreto 5/2016 de 8 de Março – Regulamento de Contratação de Empreitadas de Obras Públicas, Fornecimento de Bens, e Prestação de Serviços ao Estado*(Regulations for Contracting of Public Works, Supply of Goods and Consultancy and Non-Consultancy Services*), using the national Standard Solicitation Documents (SSDs) for implementation of small value activities such as services for the production of Nationwide Radio jingles used to educate

households on basics of infant and young child health and nutrition including breastfeeding and miscellaneous activities under operating costs, whose individual value does not exceed thresholds of UA 10,000.00.

4.2.3 **Bank Procurement Methods and Procedures (PMPs):** Bank standard PMPs, using the relevant Bank Standard, for all contracts under goods, works, consultancy and non-consultancy services that are above the threshold recommended for BPS. This provision is based on the outcome of recent assessment conducted on Mozambique's procurement system which found the risk in the use of the BPS in the implementation of projects financed from Bank resources as substantial.

4.2.4 **Procurement Risks and Capacity Development:** Country, Sector, Executing Agency (EA), and Project procurement risk assessments were undertaken for the project and the output have informed the decisions on the procurement regimes BPS and Bank and the PMPs being used for specific transactions or groups of similar transactions under the project. The global rating of risk assessment was substantial with possibility of reducing to moderate after the implementation of the mitigating measures. The appropriate risks mitigation measures have been included in the procurement PRCA action plan proposed in Annex B5.

4.3 Financial Management, Disbursement and Auditing Arrangement

4.3.1 The overall conclusion of the FM assessment is that INGC's capacity to handle the FM aspects of the project partially satisfies the Bank's minimum requirements as per the Bank FM guidelines. The Agency has handled Bank-funded (Emergency Humanitarian Relief Assistance Drought Disaster) and other donor-funded projects. INGC's FM performance in managing past projects has indicated some slight delays in planning implementation and reporting. Although in general the Agency is generally adequately staffed, it will recruit an accountant specialist to handle all the accountant system under this project. The agency make use of functional computerized accounting system (e-SISTAFE) to record and process transactions complemented by the use of excel for financial reporting purposes. The control environment from budget preparation, execution, monitoring and reporting were found to be adequate. The internal control system is being strengthened further by updating the financial and administrative procedures manual and introduction of a functional internal audit unit to cover the institution.

4.3.2 The institution's management are committed to strengthen the system. In that regard, the Bank will make use of the existing systems within INGC (while closely monitoring and providing assistance as required) under the overall responsibility of the Director of Finance department, to handle the project's FM including accounting for the project resources and submitting the required financial reports to the Bank. In accordance with the Bank's financial reporting and auditing requirements, the project will be required to prepare and submit to the Bank Interim Quarterly Progress Report (IQPR) no later than 45 days after the end of each quarter. In addition, the project will be required to prepare separate project annual financial statements which will form the entry point for external audit due diligence. The overall FM residual risk for the project is assessed as Moderate (The detailed FM assessment is attached as Annex B4).

4.3.3 Flow of funds to finance the institution follows the national treasury and appropriation procedures with controls over the use of funds generally adequate. Overall disbursement performance by the institution has been generally satisfactory. Specific to this project, payments will be primarily by direct payment where the Bank will pay contractors/consultants and suppliers directly based on satisfactory performance in accordance with the Bank's Disbursement Handbook. Disbursements would be made upon preparation and submission of all relevant documentations by INGC to the Bank's Disbursement Division, through the Bank's Country Office in Mozambique. In addition, a Special Account denominated in USD and its associated MZN denominated project operating account shall be opened in a reputable Bank approved by

the Ministry of Finance and acceptable to AfDB and will be limited for use in paying for the small operating project expenses that are recurring in nature. A Disbursement Letter will be issued by the Bank.

4.3.4 INGC has been audited by a private auditor appointed by the *Tribunal Administrativo* (TA). Issues raised in the previous audit include the need for training in E-Sistafe and procurement. The TA is constitutionally mandated to audit all public institutions in Mozambique, however given the capacity constraints, some of the audits especially in Bank funded projects have been audited by private audit firms competitively recruited with the involvement of the TA. A separate audit report will be prepared for the project annually with the audit carried out by an independent external auditor recruited in accordance with the Bank's requirements. The audit will be conducted in accordance with a Bank approved audit Terms of Reference with the costs of the audit financed from the Grant. The annual audited financial statements including the auditor's opinion and management letter will be submitted to the Bank not later than six months after the end of each fiscal year.

4.4. Governance

The 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 Technical Council for Disaster Management (CTGC), as the steering committee, which gives oversight policy direction for the implementation of the project. The CTGC 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 work plan and budget (AWPB), progress reports and procurement plans. The Bank is effectively on the ground with the Country Office (COMZ) 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 COMZ Sector Experts will give a quarterly schedule of implementation progress to the Country Manger and Manager RDGS2.

4.5. Monitoring

4.5.1 The monitoring and evaluation specialist will be responsible for the internal monitoring and evaluation of project activities and logical framework indicators, working in liaison with the technical experts on the project implementation team. The Project Implementation Unit at the project headquarters and the province will be responsible for the monitoring of project results including output and outcome indicators. Data collection and evaluation tasks would be performed by all the institutions involved in the project or in partnership with other relevant institutions.

4.5.2 The PIU will be recruited and staffed with qualified M&E Specialist, who will benefit from tailored capacity building programs to acquaint themselves very well with the scope and nature of the project and the methodology to be followed. The project will support the deployment of an M&E and Management Information System (MIS) that will facilitate performance monitoring and impact evaluation against the specified indicators, including gender tracker and environmental safeguards related indicators. While the performance monitoring process facilitates informed decision-making, the outcome assessment will provide information on whether the project has achieved its development objectives.

4.5.3 The PIU will work closely with relevant Ministries Departments and Agencies of government and research institutes for the purposes of data collection, and monitoring and evaluation of the project. A monitoring information system facility will be developed to maintain the database of project results, including performance against social and environmental indicators. With respect to reporting, a quarterly project progress report will be prepared by the project and submitted to the Bank and project Steering Committee as applicable. The project progress report will capture the use of funds as well as project disbursement, including progress made under each component of the project. Along with the progress report, the project result framework will be used to show progress against project targets. The tracking of project results will be carried out through field visits to the project sites by the relevant staff as well as through regular surveys at the province or district level. The data collection activities will be coordinated at the province level by the Monitoring and Evaluation Officer under the supervision of the Project Coordinator.

4.6. Sustainability

4.6.1 Technical sustainability of this project depends on the ongoing technical support and backstopping provided to the beneficiaries on a going concern by the various National, Provincial and District Administration staff, and also on the beneficiaries adopting improved technologies on a permanent basis and making profit on their investments. Groups provide a viable framework within which sustainability can be nurtured and accelerated. The groups will be made capable of planning and implementing development initiatives with or without external assistance. Sustainability also depends on availability of national skills/resources and newly acquired skills. Adequate arrangements will be made for training of the beneficiaries and the supporting staff by intensive and extensive capacity building of the staff and beneficiaries through workshops, trainings and demonstrations, leading to skill acquisition on improved technologies. This would require institutional linkages, particularly with the agricultural research institutes having mandates to promote technology dissemination through province and district extension services. The project would be implemented through participatory approach to ensure the involvement and commitment of all stakeholders, particularly farmers, province and districts governments. Sustainability would similarly be ensured by linkages between farmers and the private sector in providing more services such as drilling of boreholes and small earth dams.

4.6.2 The beneficiaries will be encouraged to form functional and effective community management groups and be linked to market operators for off-taking their output (a) the districts, and local communities would manage their physical infrastructure investments in a sustainable way; (b) public and private sector operators would provide quality services that are demanded by smallholder producers and rural entrepreneurs; (c) The public institution responsible for overseeing water harvesting infrastructures in Gaza and Maputo provinces would be strengthened; and (d) sustainable water harvesting management farmers organizations would be formed.

4.6.3 The institutional and implementation arrangement that will mainstream project activities into government programs and institutions will secure ownership and commitment of the authorities towards achieving project development objectives.

4.7. Risk management

The main risks for DRARP will be related to continue drought and 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 within the Maputo and Gaza Provinces 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.

Table 4.2: Risk and Mitigation

N°	Risk	Level of Occurrence	Mitigation
1	Internal migration from one community to another due to drought.	M	Best choice location of the infrastructures to mitigate the effects of drought.
2	Farmers with no interest to adopt new technologies	M	Promoting stakeholders participation, engagement and integration
3	Adaptability of selected seeds	L	Research and demonstrative activities, extension and capacity building

4.8. Knowledge Building

The DRARP will allocated resources for systematically document and publicise 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 number of studies in particular related to build a knowledge on designing resilient infrastructures, contributing to include drought related issues into the Law for Emergence, and other adaptive and resilience livelihoods. All project related studies and research would be made readily available on the AfDB websites for wider dissemination.

V – LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

The Legal Instrument for the Project shall be an ADF Protocol of Agreement. The Protocol of Agreement shall be entered into between the African Development Fund (ADF or Fund), on the one hand and the Republic of Mozambique (Recipient) on the other hand.

5.2. Conditions associated with the Fund's intervention

5.2.1 **Entry into Force of the Protocol of Agreement**

The Protocol of Agreement shall enter into force on the date of its signature by the Fund and the Republic of Mozambique.

5.2.2 **Condition Precedent to First Disbursement of the Grant.**

The obligation of the Fund to make the first disbursement of the grant shall be subject to the fulfilment by the Recipient of the following operational condition:

(i) Provision of evidence of the recruitment of a (a) Project Coordinator; (b) Procurement Expert; (c) Accountant; (d); and (e) Monitoring and Evaluation Expert whose qualifications and experience shall be found acceptable to the Fund;

5.2.3 **Other Condition**

The Recipient shall, in form and substance satisfactory to the Fund, fulfil the following condition:

(i) Provide at the latest, before the request for first disbursement is made, evidence of the opening of a foreign currency denominated Special Account for the Project in a bank acceptable to the Fund for the deposit of the proceeds of the Grant.

5.2.4 **Undertakings**

The Recipient undertakes, in form and substance satisfactory to the Fund to:

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

(ii) Deliver project quarterly reports, describing the Recipient's implementation of the ESMP (including any implementation failures and related remedies, if any).

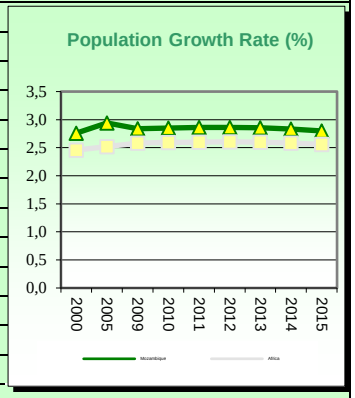
(X) This project complies with all applicable Fund policies.

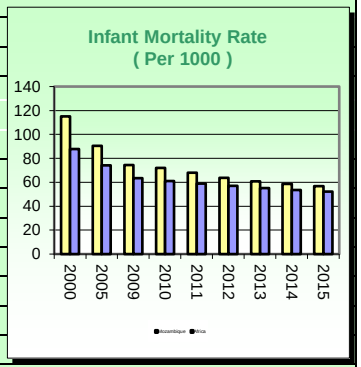
VI – RECOMMENDATION

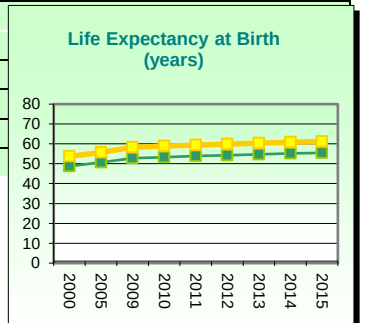
Management recommends that the Board of Directors approve an ADF grant of UA 10 million to the Republic of Mozambique to finance the Drought Recovery and Agriculture Resilient Project (DRARP) under the conditions and modalities stipulated in this report.

APPENDIX I. COUNTRY'S COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Mozambique	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2016	799	30,067	97,418	36,907
Total Population (millions)	2016	28.8	1,214.4	6,159.6	1,187.1
Urban Population (% of Total)	2016	31.4	40.1	48.7	81.1
Population Density (per Km²)	2016	36.6	41.3	65.1	33.8
GNI per Capita (US $)	2015	580	2 153	4 509	41 932
Labor Force Participation *- Total (%)	2016	79.1	65.7	63.5	60.0
Labor Force Participation **- Female (%)	2016	82.3	55.7	48.9	52.1
Sex Ratio (per 100 female)	2016	95.7	100.1	106.0	105.0
Human Develop. Index (Rank among 187 countries)	2015	181	...	...	...
Popul. Living Below $ 1.90 a Day (% of Population)	2008	68.7	...	21.1	...
Demographic Indicators					
Population Growth Rate - Total (%)	2016	2.8	2.5	1.3	0.6
Population Growth Rate - Urban (%)	2016	3.4	3.6	2.4	0.8
Population < 15 years (%)	2016	45.1	40.9	27.9	16.8
Population 15-24 years (%)	2016	20.1	19.3	16.9	12.1
Population >= 65 years (%)	2016	3.4	3.5	6.6	17.2
Dependency Ratio (%)	2016	94.2	79.9	54.3	52.0
Female Population 15-49 years (% of total population)	2016	23.1	24.0	25.7	22.8
Life Expectancy at Birth - Total (years)	2016	55.8	61.5	69.9	80.8
Life Expectancy at Birth - Female (years)	2016	57.0	63.0	72.0	83.5
Crude Birth Rate (per 1,000)	2016	38.4	34.4	20.7	10.9
Crude Death Rate (per 1,000)	2016	11.0	9.1	7.6	8.6
Infant Mortality Rate (per 1,000)	2015	56.7	52.2	34.6	4.6
Child Mortality Rate (per 1,000)	2015	78.5	75.5	46.4	5.5
Total Fertility Rate (per woman)	2016	5.2	4.5	2.6	1.7
Maternal Mortality Rate (per 100,000)	2015	489.0	476.0	237.0	10.0
Women Using Contraception (%)	2016	18.7	31.0	62.2	...
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2005-2015	5.5	41.6	125.7	292.2
Nurses and midwives (per 100,000 people)	2005-2015	40.1	120.9	220.0	859.4
Births attended by Trained Health Personnel (%)	2010-2015	54.3	53.2	69.1	...
Access to Safe Water (% of Population)	2015	51.1	71.6	89.4	99.5
Access to Sanitation (% of Population)	2015	20.5	39.4	61.5	99.4
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2015	10.5	3.4	...	...
Incidence of Tuberculosis (per 100,000)	2015	551.0	240.6	166.0	12.0
Child Immunization Against Tuberculosis (%)	2015	95.0	81.8	...	...
Child Immunization Against Measles (%)	2015	85.0	75.7	83.9	93.9
Underweight Children (% of children under 5 years)	2010-2015	15.6	18.1	15.3	0.9
Prevalence of stunding	2010-2014	43.1	33.3	25.0	2.5
Prevalence of undernourishment (% of pop.)	2015-2016	25.3	16.2	12.7	...
Public Expenditure on Health (as % of GDP)	2014	3.9	2.6	3.0	7.7
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2010-2016	105.8	101.2	104.9	102.4







Primary School - Female	2010-2016	101.2	98.4	104.4	102.2
Secondary School - Total	2010-2016	32.4	52.6	71.1	106.3
Secondary School - Female	2010-2016	31.1	50.2	70.5	106.1
Primary School Female Teaching Staff (% of Total)	2010-2016	43.1	47.1	59.8	81.0
Adult literacy Rate - Total (%)	2010-2015	58.8	66.8	82.3	...
Adult literacy Rate - Male (%)	2010-2015	73.4	74.3	87.1	...
Adult literacy Rate - Female (%)	2010-2015	45.5	59.4	77.6	...
Percentage of GDP Spent on Education	2010-2015	6.5	5.0	4.0	5.0
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2014	7.2	8.7	11.2	10.3
Agricultural Land (as % of land area)	2014	63.5	41.7	37.9	36.4
Forest (As % of Land Area)	2014	48.5	23.2	31.4	28.8
Per Capita CO2 Emissions (metric tons	2014	0.2	1.1	3.5	11.0

*Sources : AfDB Statistics Department Databases; WB: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports.: Last updated June 2017 ; Data Not Available. * Labor force participation rate, total (% of total population ages 15+) Note n.a.: Not Applicable,** Labor force participation rate, female (% of female population ages15+*

APPENDIX II: TABLE OF ADB'S PORTFOLIO IN THE COUNTRY

Sector	Project Name	Approval	Closing	Loan/ Grant	Disb. Rate	Uncommit
Agriculture	MASSINGIR DAM AND SMALLHOLDER AGRICULTURE REHABILITATION PROJECT (SL)	02.03.2007	30.06.2016	16.85	100%	0.00
Agriculture	MASSINGIR DAM EMERGENCY REHABILITATION PROJECT SUPPLEMENTARY		31.12.2017	13.30	93%	0.15
Agriculture	MASSINGIR DAM EMERGENCY REHABILITATION PROJECT SUPPLEMENTARY	22.05.2013	30.06.2018	22.01	56%	2.27
Agriculture	BAIXO LIMPOPO IRRIGATION & CLIMATE RESILIENCE PROJECT	26.09.2012	30.06.2019	16.53	79%	2.67
Agriculture	BAIXO LIMPOPO IRRIGATION & CLIMATE RESILIENCE PROJECT	26.09.2012	30.06.2019	9.23	42%	2.86
Agriculture	BAIXO LIMPOPO IRRIGATION & CLIMATE RESILIENCE PROJECT	26.09.2012	30.06.2019	1.95	7%	1.81
Agriculture	SUSTAINABLE LAND & WATER RES. MGT PROJECT (SLWRMP) PPCR	31.10.2012	31.12.2018	2.10	66%	0.30
Agriculture	SUSTAINABLE LAND & WATER RES. MGT PROJECT (SLWRMP) PPCR	31.10.2012	31.12.2018	11.18	46%	2.46
Agriculture	FEASIBILITY STUDIES FOR BUILDING CLIMATE RESILIENCE OF LIMPO	01.12.2014	31.12.2017	2.88	23%	0.59
Agriculture	FEASIBILITY STUDIES FOR BUILDING CLIMATE RESILIENCE OF LIMPO	03.10.2014	31.12.2018	0.67	11%	0.37
Agriculture	COFAMOSA IRRIGATION PROJECT - PPF	24.11.2015	30.06.2017	0.82	18%	0.12
Agriculture	EMERGENCY RELIEF 2016 DRAUGHT	17.06.2016	31.12.2016	0.71	100%	0.00
Governance	ECONOMIC GOVERNANCE AND INCLUSIVE GROWTH II	15.12.2015	31.01.2016	15.00	100%	0.00
Finance	AFRICA SME PROGRAM LOC - MOZABANCO S.A MOZAMBIQUE	11.04.2014	30.05.2016	6.39	100%	0.00
Mineral Res	MOMA MINERAL SANDS PROJECT	21.05.2003	18.10.2007	28.40	100%	0.00
Mineral Res	MOMA MINERAL SANDS EXPANSION PROJECT	27.03.2015	29.04.2017	0.45	100%	0.00
Mineral Res	SASOL NATURAL GAS PROJECT	22.10.2003	15.12.2005	29.76	100%	0.00
Energy	ELECTRICITY IV PROJECT	13.09.2006	31.12.2016	26.30	92%	
Energy	ELECTRICITY IV PROJECT	07.09.2006	31.12.2016	7.38	82%	0.89
Energy	ENABLING LARGE SCALE GAS & PWR INVESTMNT	18.12.2013	30.06.2018	9.95	1%	9.84
Social	CONSOLIDATION WOMEN'S ENTREPRENEURSHIP	18.12.2013	31.12.2018	1.24	46%	
Social	CONSOLIDATION WOMEN'S ENTREPRENEURSHIP	18.12.2013	31.12.2018	2.56	23%	0.90
Social	JOB CREATION AND LIVELIHOOD IMPROVEMENT	18.05.2016	30.12.2021	4.53	5%	3.97
Transport	MONTEPUEZ-LICHINGA ROAD PROJECT	27.10.2006	30.06.2018	30.10	67%	1.05
Transport	MONTEPUEZ-LICHINGA ROAD PROJECT	19.03.2007	31.05.2016	21.00	60%	-0.99
Transport	SUPPLEMENTARY LOAN TO MONTEPUEZ - LICHINGA ROAD PROJECT	26.10.2010	30.06.2018	32.65	67%	3.74
Transport	MULTI-NACALA CORRIDOR PROJECT (MOZAMBIQUE)	24.06.2009	01.07.2018	102.72	40%	48.87
Transport	MULTI-NACALA CORRIDOR PROJECT (MOZAMBIQUE)	10.03.2010	06.07.2016	38.26	100%	0.00
Transport	NACALA TRANSPORT CORRIDOR PHASE-III	05.12.2012	31.12.2018	38.65	13%	6.69
Transport	NACALA TRANSPORT CORRIDOR PHASE-III	05.12.2012	31.12.2018	0.18	19%	0.15
Transport	MTWARA DEVELOPMENT CORRIDOR	29.10.2012	31.12.2017	1.30	72%	0.34
Transport	MUEDA-NEGOMANO ROAD PROJECT	09.12.2016	31.12.2022	51.28	0%	0.00
Transport	MUEDA-NEGOMANO ROAD PROJECT	09.12.2016	31.12.2022	2.24	0%	0.00
Transport	NACALA RAIL CORRIDOR & PORT PROJECT-CORR.LOGISTICO INTEGRADO NACALA	16.12.2015	15.01.2028	79.13	0%	0.00
Transport	NACALA RAIL & PORT PROJECT-CDN	16.12.2015	10.04.2020	59.41	0%	0.00
Transport	NACALA RAIL & PORT PROJECT-VALE LOGISTICS LTD (VLL)	16.12.2015	10.04.2020	61.57	0%	0.00
Water	NIASSA PROVINCIAL TOWNS WATER AND SANITATION	29.04.2009	30.03.2016	18.00	97%	0.43
Water	NATIONAL RURAL WATER SUPPLY PROGRAM	09.11.2010	30.09.2017	5.27	94%	0.21
Water	NATIONAL RURAL WATER SUPPLY PROGRAM	09.11.2010	30.09.2017	5.04	89%	0.01
Water	URBAN SANITATION FOR I'BANE AND CHIMOIO	14.07.2016	31.12.2018	1.34	0%	0.00

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										
World Bank	Sustenta	MITADER (DNGA), Nampula and Zambeze province		$ USD		40,000,000.00 (26000000,00 grant /14000000 loan)	Loan/Grant	20016-2021	Nampula and Zambeze	
Danida/EU Commission (Irish Aid)	Support Program to the Environment Sector (PASA II)	MITADER		$		60,980,000.00	Grant	2011-2015	National, provincial and local	
World Bank	PROIR	MASA				Loan	Grant	2011 - 2018	National, provincial and local	Gaza, Tete, Cabo Delgado
World Bank	APSA	MASA/IIAM		$		30000000.00	Loan	2015 - 2020	National	Research
UNDP (LDCF/GEF)	Adaptation in the coastal zones of Mozambique	MITADER		$	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	MITADER/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 MASA		$		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/MITADER		$		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 different 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+	MASA (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+)	MASA (DNTF)		$	3,500,000		Technical 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)	MITADER		$		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		

APENDIX IV: JUSTIFICATION FOR 100% PROJECTS' COST FINANCING, INCLUDING VAT AND DUTIES

The Government of Mozambique has submitted a request to the Bank Group to finance 100% of the projects' costs, including VAT and duties, for projects approved in 2017 and 2018. This would bring the practice of the Bank in line with other development partners such as the World Bank and address some emerging project implementation issues.

The Policy on expenditure eligible for Bank financing[2] (2008) allows the Bank Group to waive the principle that its projects are exempt from duties and taxes on a case-by-case basis, in cases where (para 4.2.1 of the mentioned policy):

(i) The country's tax system has a reasonable level of tax and duty rates; and (ii) the taxes and duties do not constitute a significant proportion of project costs or are not specifically directed at Bank-financed projects, activities or expenses

This annex considers the justification to accede to this request on grounds of improved project implementation during a period of tight fiscal space and shrinking departmental budgets.

The fiscal context. Mozambique is facing a difficult fiscal outlook, with the suspension of direct budget support by the donor group G-14 and the IMF financing programme going-off track in April, 2016. The suspension of these financing programmes were partly a consequence of the discovery of previously undisclosed commercial debt obligations, putting public debt on an unsustainable path and requiring fiscal consolidation of the public budget, as well as contributing to a weakening of the exchange rate.

In January 2017 the country defaulted on part of its commercial debt service, which led to a downgrade of Mozambique's credit rating to "selective default", in turn affecting investment flows into the country. The default was on its commercial severing guaranteed loss, and the Government of Mozambique remains committed to honouring its financial obligations with DFIs.

Moreover, delays in start-up of the natural-resources based mega-projects in Mozambique mean that expected revenues and signature bonuses are moved further out in the future. As seen in Table 1 below, income tax and VAT collection have steadily fallen between 2014 and 2016 as a percentage of GDP.

[2] **BD/WP/2007/106/Rev.2**

Table IV-1: Mozambique's budget position (figures in % of GDP)

	2014	2015	2016	2017 (Law.)	2018 (Prop.)
TOTAL REVENUES	**29**	**26**	**24**	**23**	**23**
Income taxes	*12*	*10*	*9*	*8*	*8*
Taxes on goods and services	*13*	*11*	*10*	*10*	*10*
VAT revenues	*9*	*8*	*7*	*6*	*6*
Trade taxes	*2*	*2*	*2*	*2*	*2*
TOTAL SPENDING	**42**	**31**	**34**	**34**	**31**
Current spending	*22*	*20*	*21*	*20*	*19*
Investment spedning	*16*	*11*	*9*	*10*	*8*
Financial operations	*3*	*1*	*2*	*2*	*1*
BALANCE BEFORE GRANTS	**-12**	**-5**	**-6**	**n/a**	**n/a**
Grants	5	3	2	2	2
Source: conta geral do estado (2012, 2014,2016) e orcamento de estado (2017 e 2018)					

Policy response and implications. The Government undertook a gradual fiscal consolidation in 2016 and 2017, expected to continue into 2018, implementing expenditure cuts on targeted areas. The investment budget fell by 7 percentage points of the GDP between2014 and 2016. Budget reductions means that there will be continued uncertainty over the quarterly budget transfers to sector ministries, including for compensating for foregone taxes and duties for projects funded by development partners. It is estimated that in August 2017 total public arrears to the private sector has surpassed USD 500 million.

Bank-funded projects in Mozambique have already experiencing challenges relating to co-financing of VAT and other expenses as well as with VAT reimbursement to private operators. At least 14 active Bank projects have reported arrears in payment of VAT from Government, causing significant delays in project implementation.

Compliance with Bank policy requirements. The request for the Bank to cover tax end duties on project activities is consistent with the conditions laid out in the policy:

1) Tax and duty rates in Mozambique are broadly in line with continental average. VAT rates, at 17% are slightly above the SADC average but broadly in line with similar economies in the continent (see table 2 below).

Table IV-2: Comparative VAT rates

Mozambique	**17%**		Tanzania	18%
Ghana	17.5%		Kenya	16%
Cote d'Ivoire	18.%		RSA	14%
Zambia	16%		Namibia	15%

Taxes and duties are estimated at 7.07% (USD 1, 096,896.22) of total project costs in the Drought Recovery and Agriculture Resilient Project (DRARP), with the infrastructure component attracting most duties. According to the Government Decree 13/2016, art. 15 infrastructure and its operation and maintenance are cover by an especial exemption of 60% of the total cost. Charging of taxes and duties are not specifically directed at Bank projects; in fact the World Bank already covers these expenditures under its projects in Mozambique.

Table IV-3 : Cost by expenditure category (VAT)

Expenditure categories	Total		Foreign exch.	Local (excl. taxes)	Taxes
	Amount	%			
A. WORKS	7.79	70.2	6.24	1.55	0.75
B. GOODS	1.25	11.3	1.02	0.02	0.30
C. TRAINING	0.77	6.9	0.23	1.21	-
D. SERVICES	0.98	8.8	0.74	0.02	0.04
E. OPERATIONS	0.20	1.8	0.07	0.01	-
Total costs	**11,10**	**100,0**	**8.30**	**2.81**	**1.09**

The goal of the DRARP is 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, and improving food production and marketing activities as well as capacity building for the affected communities. However, by nature it is not expected to generate short to medium term revenue gains for the Government. Therefore it makes sense to ease its implementation by allowing it to cover VAT and duty costs over 2017 and 2018.

The requested exception should be considered as a temporary measure to be applied only in 2017 and 2018, strictly on a case by case basis, to reflect the current macroeconomic and fiscal conjuncture and to support the Government in its re-engagement with International Financial Institutions and with creditors, while ensuring smooth project implementation.

APPENDIX V: MAP OF THE PROJECT AREA