Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 24-May-2018 | Report No: PIDISDSA24220

Apr 25, 2018 Page 1 of 24

BASIC INFORMATION

A. Basic Project Data

Country Mozambique	Project ID P164431	Project Name Smallholder Irrigated Agriculture and Market Access Project- IRRIGA 1	Parent Project ID (if any)
Region AFRICA	Estimated Appraisal Date 11-May-2018	Estimated Board Date 19-Jun-2018	Practice Area (Lead) Agriculture
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance and Economy	Implementing Agency Ministry Of Agriculture and Food Security	

Proposed Development Objective(s)

The proposed Project Development Objective (PDO) is to improve smallholder agriculture productivity and market access in the project areas developed with irrigation and provide immediate and effective response to an eligible crisis or emergency. The Program objective of the Series of Projects (SOP) is to increase farmers' productivity and improve rural livelihoods through increased access to irrigation and to markets.

Components

Component 1-Institutional Capacity Building

Component 2-Smallholder Irrigation Development and Management

Component 3-Agriculture Intensification and Market Linkages

Component 4- Project Management and Monitoring and Evaluation

Component 5-Contingency and Emergency Response

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	57.00
Total Financing	57.00
of which IBRD/IDA	55.00
Financing Gap	0.00

DETAILS

Apr 25, 2018 Page 2 of 24

World Bank Group Financing	
International Development Association (IDA)	55.00
IDA Grant	55.00
Non-World Bank Group Financing	
Counterpart Funding	2.00
LOCAL: BENEFICIARIES	2.00
Environmental Assessment Category B-Partial Assessment	
Decision	
The review did authorize the team to appraise and negotiate	

B. Introduction and Context

Country Context

- 1. Mozambique is a southeast African country, with a population of about 29 million people¹, of which about 70 percent reside in the rural areas. It is estimated that about 90 percent of the rural population depend on agriculture as the main source of their livelihood. With the current population growth rate of 2.7%, Mozambique's population is expected to reach 46 million by 2040. The country is endowed with potentially large arable land, water, energy, gas and mineral resources; and is also strategically located to support economic development in the region.
- 2. **Poverty levels remain high and economic growth has been highly inequitable.** Despite significant economic growth and macroeconomic stability over the last two decades between 1995 and 2015, rapid economic growth rates have not translated into poverty reduction. The country ranks 180 out of a total of 187 countries in the 2015 Human Development Index as reported by the United Nations Development Program (UNDP) and more than half of its population live in poverty². Approximately, half (43 percent)² of the children under age of five in Mozambique are stunted due to long-term effects of malnutrition and micronutrient deficiencies. Economic growth has been driven primarily by few large-scale capital investment projects, with very limited benefits to the poor living in the rural areas. Poverty is particularly persistent in the country's two most populous provinces, Nampula and Zambezia, where poverty rates have increased, while the rest of the country has experienced reduction in the poverty rates by over 10% between 2003 and 2015.
- 3. The country's near-term economic prospects have been recently worsened by political and economic instability. Against the backdrop of the longer-term challenge of stimulating more inclusive growth, political and

Apr 25, 2018 Page 3 of 24

¹ National Statistics Institute-INE (2018), Maputo, Mozambique.

² Disease data from the Ministry of Health and mortality data from the National Statistics Institute (MICS, 2008).

economic developments in 2016 led to a rapid and dramatic deterioration in Mozambique's macroeconomic framework. With large unreported debts and increased violence, the fast growth economy pre- 2016 slowed down significantly marked by high inflation and depreciation of local currency, coupled with falling commodity prices and exports. The country also suffered from the El Niño effects that led to extremely low rainfalls and a prolonged drought (2014 to 2018) which resulted in limited water supply and low agricultural productivity. This led to a humanitarian crisis in some of the most critical regions of the country.

- 4. However, medium-term economic prospects appear positive as the country recovers from the recent economic crisis. Real GDP growth fell below four percent in 2016, but is expected to pick up in the range of five to six percent in 2018. Inflation has stabilized at around 18%, following some tight monetary policy reforms to curb currency depreciation and fiscal deterioration. Amidst a medium growth rate forecast, the country still faces a number of development constraints, including high-dependence on rain-fed agriculture; limited access to basic services such as water supply and electricity; and lack of resilience to climatic events due to limited infrastructure and institutional capacity, among others.
- 5. **Mozambique is among the most affected countries by climate change in Sub-Saharan Africa.** Globally, Mozambique ranks 36th in terms of vulnerability and 144th in terms of readiness³, indicating significant risk to national social and economic development. The country has also been experiencing high rainfall variability, with more frequent droughts and floods. Highly variable rainfall, combined with limited water storage and flood control infrastructure, are among the main factors contributing to crop losses. The pattern, frequency and severity of floods and droughts are also changing over time with significant adverse implications for agriculture productivity and production.

Sectoral and Institutional Context

- 6. **Agriculture is the largest economic sector in Mozambique.** The agriculture sector accounts for 26 percent of GDP and employs 78 percent of the labor force. However, most of the population is engaged in smallholder, rain-fed subsistence agriculture which frequently suffers from climate-induced shocks with significant negative impacts for overall economic growth and poverty reduction. Only about 10 percent of its 36 million ha of arable land is currently under cultivation. In 2012, there were about 3.9 million farms in Mozambique, of which 99 percent were smallholders, and only about 1 percent were medium and large scale commercially-oriented farms involved in competitive value chains, primarily for cash crops. More recently, however, there is an emerging trend and potential for the involvement of commercially-oriented smallholders in the value chains of horticulture and other crops as the case the out-growers' systems develop under the implementation of the Sustainable Irrigation Development Project (PROIRRI).
- 7. Low agricultural productivity is a binding constraint to Mozambique's economic growth and poverty reduction. The country's agriculture productivity levels are lower than the average of the low-income countries in southern Africa, particularly for maize and rice, two important crops for food security and trade in the region. According to FAO statistics 2016, the average yield of maize in Mozambique is 35 percent lower compared to Malawi and 76 percent lower compared to Zambia. Average rice yields are similarly lower in Mozambique and are estimated at 60 percent lower compared to Malawi and 50 percent lower compared to Zambia. Key constraints include limited use of improved crop varieties (less than 3 percent of farmers); limited use of fertilizers (less than 5 percent of the farmers); inadequate agricultural support services, including extension (there are only 1,200 agricultural extension officers employed by the public sector in the country); very small area under irrigation (2.5 percent of the cultivated area); limited access to agricultural credit; limited access to mechanization and animal traction services (less than 9.5 percent

Apr 25, 2018 Page 4 of 24

³ ND-GAIN (University of Notre Dame Global Adaptation Index) is global index that summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.

of farmers used animal traction in 2014); and low connectivity and limited access to markets for inputs and outputs (road networks provide access to only about 33 percent of the rural population). Moreover, climate-related events and an inadequate land rights system present a substantial risk to agriculture productivity and sustainability and reduce the efficiency of land use.

- 8. A gender gap persists in agricultural productivity in Mozambique. Female headed households tend to be poorer, and lack access to productive assets and labor. In addition, they are less likely to adopt improved technologies. As a result, they tend to be less productive than male headed households. In 2014, the average maize yield among female headed households was 50 kg less than average among male headed households, which represents an 8 percent yield gap. This result is consistent with the findings of the literature on agricultural productivity in sub-Saharan Africa.
- 9. The provinces of Manica, Nampula, Sofala and Zambézia have the highest agriculture potential, covering some of the most fertile soils in the country, along the Zambezi river basin, which accounts for about 17% of the irrigable land and 47% of the country's water resources.⁴ Also, these four provinces are home to about 1.85 million smallholder farmers or 47% of all the country's smallholder farmers. Nampula and Zambézia provinces face specific challenges: it is estimated that 11.21 million people or about 40 percent of the population in Mozambique live in these two provinces, but due to limited accessibility, rural households are more isolated and income from farm activities is three times lower as compared with the rest of country. In addition, there are generally low levels of irrigation coverage, and current investment patterns are not consistent with the highest-potential agriculture areas.
- 10. Irrigation has the potential to significantly enhance smallholder agriculture productivity. Mozambique has a potential to irrigate 3 million ha. However, only about 180,000 ha are equipped with irrigation infrastructure, and only about half of this is currently fully operational. Thus, only about 3 percent of the country's irrigation potential is currently being exploited. Under the World Bank financed PROIRRI Sustainable Irrigation Development Project (P107598, closing in December 2018), smallholder farmers have doubled their productivity in vegetable crops and increased cropping intensity to three harvests per year from investments in improved irrigation infrastructure and services. PROIRRI developed a total of 3,000 ha under irrigation; out of which 1,700 ha for rice, 800 ha for horticulture and 500 ha for out-grower crops.
- 11. The Ministry of Agriculture and Food Security (MASA) is the lead institution for agriculture development. MASA is responsible for formulating and implementing agricultural policies at the national level, including agrarian services, crop development, livestock, irrigation, forestry and food security. Irrigation development is the responsibility of the National Irrigation Institute (INIR) under MASA. INIR works in close collaboration with the other MASA departments responsible for agriculture and extension services, such as the National Directorate of Agriculture and Silviculture, the National Directorate of Agriculture Extension; and the Agriculture Development Fund which finances agriculture projects. Other relevant institutions for irrigation development include the National Directorate of Water Resources Management from the Ministry of Public Works, Housing and Water Resources (MOPHRH), which is responsible for water resources planning and allocation, as well as the development and operation of major hydraulic works through the Regional Water Administrations; and the National Directorate of Land and Forestry in the Ministry of Land, Environment and Rural Development (MITADER), which is responsible for land allocation and titling.
- 12. INIR was created by the Council of Ministers Decree 9/2012 of May 11th, with legal, technical and administrative autonomy to promote the development of an efficient and sustainable irrigation sector in the country. Currently INIR focuses on technical assistance to small irrigation schemes, including the oversight of design and construction supervision of irrigation rehabilitation, as it lacks the technical capacity to do the design and construction supervision of these rehabilitation investments in new irrigated areas. INIR is also responsible for

Apr 25, 2018 Page 5 of 24

⁴ INIR (2015) Programa Nacional de Irrigação.

oversight of two large state-owned irrigation enterprises operating a total of 41,000 ha of irrigated land along the Limpopo river basin (23,000 ha in Chokwe and 18,000ha in Xai-Xai). Other large irrigation schemes are owned and fully managed by private agribusiness enterprises engaged in sugar cane production along the major river basins.

- 13. In 2016, the National Irrigation Program (PNI) which was approved by the Government. The National Irrigation Program consists of a series of reforms and investments to address critical irrigation development needs and medium-term food security targets for the country. MASA developed three scenarios to implement the PNI, moderate, medium and high. In the moderate scenario, about U\$ 1 billion is needed to develop a minimum of 122,500 ha (32,000 ha public and 90,500 ha private) of irrigated land by 2042. The initial phase of the program is focused on strengthening MASA's institutional capacity to plan irrigation infrastructure and related services and to establish and provide training to Water User Groups and Water Users Associations (WUGs and WUAs) to improve on-farm water management, and operations and maintenance (O&M) of the irrigation schemes. Moreover, MASA intends to coordinate with relevant sector institutions to promote agriculture intensification and market linkages for smallholder farmers.
- 14. To support the PNI, the Government of Mozambique has requested the World Bank to support INIR's capacity building program and finance priority irrigation infrastructure investments along the Central-Northern region. Under the PROIRRI, the World Bank supported key sector reforms, including the development of the PNI, the Water User Associations Decree Law⁵, and the draft regulations for private sector engagement on irrigation development. PROIRRI also financed the construction of 3,000 ha priority smallholder irrigation schemes in Manica, Sofala and Zambézia provinces, including the establishment and training of Water User Associations (WUAs) and Water User Groups (WUGs), and facilitated market linkages through existing agribusinesses. Through the Agriculture and Natural Resources Landscape Management (SUSTENTA) Project (P149620, approved by the Board on June 30, 2016) the Bank is supporting small emerging commercial farmers (SECF) and strengthening market linkages in a landscape approach in ten districts of Nampula and Zambézia. IRRIGA will build capacity for planning, design, construction and operation of irrigation infrastructure as proposed under the PNI, and further develop services required to enhance agriculture productivity in the northern-central region of the country. The IRRIGA project therefore builds on PROIRRI achievements and partners with SUSTENTA to maximize value chain development.
- 15. The Government has also requested project support for the establishment at the central level agriculture investment management unit (AIMU) that will be responsible to coordinate all donor support to the sector. Participation of the World Bank is therefore key to contribute to the implementation of the PNI, and is expected to help catalyze additional financial contributions from the other development partners and the private sector. The World Bank has been a long-standing and valued partner in the agriculture sector in Mozambique, supporting the development of institutional reforms, as well as infrastructure investments. The proposed investment operation will build upon and leverage the World Bank's deep involvement in the agriculture sector over time.
- 16. The Bank support will be through a Series of Projects (SOP) to support MASA in the implementation of the National Agriculture Sector Investment Plan (PNISA). The SOP will support a Program aimed to increase farmers' productivity and improve rural livelihoods through increased access to irrigation and markets. The program will also fund the rehabilitation of a combined amount of 8,000 hectares of irrigated land, benefiting 12,000 smallholder farmers. The project description below and appraisal details refer to the first Project (SOP1).

⁵ Decreto Lei nº 2/2015 de 31 de Dezembro

Apr 25, 2018 Page 6 of 24

C. Higher Level Objectives to which the Project Contributes

- 17. The project is aligned with the Country Partnership Framework (CPF, FY17-21)⁶ which acknowledges low agriculture productivity as a major constraint to economic growth and poverty reduction. Specifically, the project contributes to the Focus Area 1 of the CPF on Promoting Diversified Growth and Enhanced Productivity and the Focus Area 2 of the CPF on Investing in Human Capital.
- 18. The project addresses the Government of Mozambique's priorities. Irrigation development is a strategic objective under Priority III (promote jobs, productivity and competitiveness) and priority IV (develop social and economic infrastructure) of the Government's 5-year Plan 2015-2019. The project also supports the Strategic Plan for the Development of Agriculture Sector, 2010-2019 (PEDSA) and the National Agriculture Sector Investment Plan (PNISA), 2014-2019, which aim at increasing food security and income of agricultural producers in a competitive and sustainable manner, while guaranteeing social and gender equity.
- 19. The project also contributes to the World Bank Group's (WBG's) twin goals of ending extreme poverty and promoting shared prosperity. Improved agriculture and irrigation practices will contribute to increase agriculture productivity and income generation for the rural communities in Mozambique. It will also contribute to improvements in human nutrition by improving the quality and quantity of food and reducing food insecurity. Moreover, the project will contribute to women empowerment by improving access to water and enable multi-seasonal production, as well as establishing participatory governing bodies for water management. In addition, the project will promote private sector participation mainly through the market linkages and where possible, through public-private partnerships to invest and operate small irrigation schemes.

C. Proposed Development Objective(s)

The proposed Project Development Objective (PDO) is to improve smallholder agriculture productivity and market access in the project areas developed with irrigation and provide immediate and effective response to an eligible crisis or emergency. The Program objective of the Series of Projects is the same as the PDO of this Project.

- 20. The key PDO-level results indicators for the proposed project are:
 - Average crop yield of selected commodities in irrigated production systems;
 - Proportion of the production marketed for selected commodities;
 - Farmers reached with agricultural assets or services (desegregated by gender); and
 - Number of beneficiaries (desegregated by gender)

D. Project Description

21. The first phase of the project (SOP1) is expected to improve agriculture productivity and market access to smallholder on 3,000 hectares of irrigated land rehabilitated under PROIRRI and on additional 3,000 hectares of irrigated land to be rehabilitated under the project for a total of 6,000 hectares. While investments in agricultural intensification and market access will be primarily in these 6,000 hectares, they will be also extended to areas beyond those rehabilitated irrigation areas (in coordination with and involvement of the private agribusiness sector) as the

Apr 25, 2018 Page 7 of 24

⁶ World Bank (2017). Country Partnership Framework (CPF) for the Republic of Mozambique for the Period FY 17 – FY21.

opportunity arise. The IRRIGA project will establish and strengthen WUGs and WUAs, improve water service delivery and on-farm water management, expedite the introduction and transfer of improved agriculture technology, and improve the input and output market linkages to irrigated and non-irrigated areas.

- 22. The project will be implemented in four selected provinces Manica, Nampula, Sofala and Zambezia. The main criteria for the selection of these four provinces were: (a) significant agricultural potential; (b) availability of water for irrigation in areas currently or formerly irrigated; (c) potential for complementarity with other Bank- funded agriculture operations and other partners; (d) large share of population being rural and involved in agriculture for their livelihood; (e) high level of poverty; (f) potential for linkages with the private agribusiness sector and other development projects; and (f) availability of recently rehabilitated irrigation schemes under PROIRRI.
- 23. The project will finance the following five components: (i) institutional capacity building; (ii) smallholder irrigation development and management; (iii) agriculture intensification and market linkages; (iv) project management, monitoring and evaluation; and (v) contingency and emergency response. Below is the summary description for each component. Detailed project description is presented in Annex 1.
- 24. Component 1 Institutional Capacity Building (US\$8 million of IDA Grant). The objectives of this component are to strengthen the institutional capacity and to improve the enabling policy environment, and support the regulatory framework of the institutions involved in the development of irrigated agriculture, and to enhance beneficiaries' capacity for sustainable development and management of irrigated agriculture. In response to a request from the Ministry of Agriculture and Food Security, the project will strengthen MASA's capacity for investment planning, implementation, coordination and management of all donor funding for the agriculture sector development in the country. This component will finance three main activities: (i)strengthening irrigation institutional capacity; (ii) strengthening agriculture institutional capacity and market linkages; and (iii) the establishment the Agriculture Investment Management Unit (AIMU).
- 25. **Sub-component 1.1. Strengthening Irrigation Institutional Capacity.** This sub-component will finance technical assistance to support INIR to improve the enabling environment in the irrigation sub-sector and develop regulatory tools and a professional code of conduct to improve irrigation services delivery. Specifically, this sub-component will finance studies, training and equipment to: (i) improve the institutional and regulatory framework for the irrigation sector to improve irrigation service delivery; and (ii) establish a national irrigation water monitoring system that will collect data at watershed and irrigation perimeter level. These regulatory tools and processes are broadly identified in the PNI and include: preparation of the public private partnership (PPP) regulations; develop regulations and contract models for partnerships in irrigation, and guidelines for licensing irrigation development in the country; and partnerships with formal education systems in the country (e.g. University Eduardo Mondlane, Instituto Superior Politecnico de Manica, among others), including provision of internships for irrigation engineering and irrigation economics graduates for practical field work up to 12 months of field work.
- 26. **Sub-component 1.2. Strengthening Agriculture Institutional Capacity and Market Linkages.** This sub-component will finance capacity building of institutions involved in the development of irrigated agriculture, specifically: (i) The National Directorate of Planning and International Cooperation (DPCI) at MASA to strength the statistic services, agriculture market information systems to collect, process and disseminate market and price information (through digital mobile devices) in the country, and provision of training to staff; (ii) the National Directorate of Agricultural Extension Services (DNEA) and the Agricultural Research Institute (IIAM) to increase their capacity for the dissemination of improved agriculture technologies and practices in the project areas developed with irrigation; (iii) the National Directorate of Agriculture and Silviculture (DINAS) to establish a satellite monitoring system to monitor the use of all areas developed with irrigation in the country. This subcomponent will also establish an "agricultural observatory" to generate reports for decision making for relevant institutions involved in the agriculture

Apr 25, 2018 Page 8 of 24

development. These reports will support relevant departments at MASA, including IIAM, DNEA, DNAS, MITADER, Ministry of Public Works, Housing and Water resources (MOPHRH), and the Ministry of Trade and Industry (MIC), including input suppliers, traders and private agribusiness operators to improve their planning to support the development of the agriculture sector.

- 27. **Sub-component 1.3 Agriculture Investment Management Unit.** This sub-component will finance technical assistance and incremental operating costs for the establishment of AIMU to lead agriculture sector investment planning and implementation at MASA. AIMU will report to the Technical Committee, composed by the National and General Directors of MASA, and headed by the Permanent Secretary. AIMU will initially manage and implement IRRIGA under the strategic guidance and supervision of INIR and then gradually evolve into the MASA operational unit for agriculture programs implementation, thus hosting all the MASA's investment operations with donor funding in close coordination with the Policy Unit of MASA, in charge of the PEDSA and PNISA. The goal is to create a strong, long-term operational capacity within MASA and achieve economies of scale while reducing the burden on other functional areas tasked with regulatory and policy functions.
- 28. **The AIMU will consist of five teams,** including financial management, procurement, safeguards management, monitoring and evaluation and technical design and supervision team (TDST). Under the IRRIGA Project, the unit will be responsible for the design of irrigation schemes and assurance of technical quality in all phases of the development of the irrigation schemes.
- 29. Component 2: Smallholder Irrigation Development and Management (US\$28 million of IDA Grant). This component will finance engineering design of 5,000 ha for irrigation development; and construction supervision, equipment and civil and hydraulic works for 3,000 ha of irrigated land in the project areas to improve water availability and resilience of irrigation services. Forty potential districts have been identified in the four beneficiary provinces based on Government strategies for agriculture development, market needs and existing agro-climatic conditions, land and water availability, and existing markets. The location of the potential districts is presented in MAP 1. Out of the 3000 ha, 500 ha have already been assessed (feasibility) under PROIRRI and 2,500 ha additional schemes which will be further assessed in the first eight months of project implementation to determine the exact scope of irrigation works to be financed by the project. The timeline for project implementation is presented in Annex 1.
- 30. **Sub-component 2.1: Irrigation Infrastructure Investment:** This sub-component will finance technical assistance for detailed engineering design for 5,000 ha irrigated land, of which 3,000 ha will be rehabilitated and modernized under SOP1 and 2,000 in SOP2. The rehabilitation and modernization will consist of: (i) upgrading the water intake and transmission main; (ii) rehabilitation and expansion of water collection and storage structures; (iii) upgrading the distribution system; (iv)installation of water distribution and control structures; and (v) rehabilitation and protection of the catchment area and embankments for conservation and erosion control. The AIMU will be responsible for the technical oversight and quality control of the irrigation infrastructures to be constructed under this component. Priority will be given to gravity-fed open canal irrigation systems, as they are relatively simple to operate and maintain, and are less costly compared to pumped systems. Pumping will be considered, if at all, only for high value crops and under exceptional cases. The construction of the irrigation infrastructure will take into consideration environmental and social risks and will utilize the relevant safeguards instruments to implement appropriate mitigation measures.
- 31. **Sub-component 2.2: Irrigation Infrastructure Management:** This subcomponent is designed to support the establishment and capacity strengthening for the Water User Groups (WUGs) and Associations (WUAs) in all irrigation schemes in the project areas to manage, operate, and maintain the irrigation and drainage systems operational. Specifically, the project will finance technical and logistical support to establish WUGs and WUAs; develop manuals and associated learning materials and media products, and deliver trainings on operation and maintenance of the schemes. The project will also finance incremental operating costs for transitional O&M and investment costs for WUAs

Apr 25, 2018 Page 9 of 24

operational offices and equipment.

- 32. The expected outputs from this subcomponent would be: (i) the establishment of WUGs and WUAs in all areas developed with irrigation infrastructure to manage, operate, and maintain the irrigation and drainage systems at turnout and tertiary levels, and (ii) improvement of the level of bulk water service delivered to the WUAs. Expected benefits include: (a) improved maintenance of irrigation systems; (b) improved water distribution; (c) increased level of water fee collection; and (d) enhanced transparency and accountability.
- 33. Component 3: Agriculture Intensification and Market Linkages (US\$13 million of IDA grant). This component will improve productivity, production, cropping intensity, competitiveness and market access for 9,000 smallholder farmers cultivating roughly 6,000 ha of land in the project area. This component builds on successful interventions models in the country and the region. It will finance training, technical assistance, equipment and matching grants. This component will finance three main activities and specific eligibility criteria will be further developed in the PIM to ensure equity and avoid double dipping with beneficiaries already receiving assistance under PROIRRI.
- 34. **Sub-component 3.1. Capacity Building for Smallholder Farmers** Under this sub-component, the project will support organization of farmers into producer groups and provide training through Farmers' Field Schools (FFSs), and through the Integrated Program for the Transfer of Agricultural Technologies (PITTA-*Programa Integrado de Transferência de Tecnologias Agrárias*), using methodologies currently under use by MASA. Training to farmers will include: (a) supporting the establishment of smallholder farmers' organizations and producers' groups; (b) strengthening the knowledge of farmers on improved agricultural practices, technology, inputs and marketing; (c) strengthening the functional literacy and numeracy of farmers; (d) improving household nutrition; (e) improving soil fertility and integrated nutrient management; (f) promoting climate smart and conservation agriculture and other climate smart agriculture technologies and practices; and (g) conducting demonstration trials at the farm level (FFS). The project will also support training to staff from the local government institutions and service providers, including local NGOs, to provide technical assistance to the project's smallholder farmer beneficiaries to prepare business plans. It is expected that up to a total of 9,000 farmers and 200 Government staff and more than 100 local service providers will benefit from the project support.
- 35. **Sub-component 3.2 Investment Support to Enhance Smallholder Agricultural Production.** This subcomponent will finance vouchers for eligible farmers to allow access to improved farm technologies. These would include but not be limited to: seeds, inputs, mechanization services such as those using draft animals, power tillers, tractors, etc. for individual farmers. The mechanism will enable market access to agricultural inputs and services and improve the capacity of suppliers to plan and delivery quality inputs and services based on voucher system. The voucher serve as a financial credit for the purchase of inputs and services and will be co-financed by the beneficiary. This approach will build on and expands a model promoted in country and in other neighboring countries such as Zambia with FAO support, which proved successful in equipping farmers and promoting local input providers. It is expected that this sub-component will assist up to 9,000 farmers, of which half are expected to be women. The Project Implementation Manual will specify a sliding scale for financial support, with an increasing co-financing percentage paid by the beneficiary as the value of support provided by the project to the farmer increases.
- 36. **Sub-component 3.3 Matching Grants for Market-led Production and Value Chain Development** This subcomponent will finance matching grants to support business proposals to improve production, post-harvest, value addition, equipment, storages and marketing facilities. Matching grants will either finance business plans for groups of producers (window 1, including equipment, storage facilities, and technical assistance), or for Small and Medium Enterprises (window 2, for processing and value addition to improve existing businesses that benefit producers in the project area by purchasing production, grading, packaging etc.). Typical investments would include technical assistance and equipment to clean, sort, grade, wash, weigh, package, store or any other activity that add value.

Apr 25, 2018 Page 10 of 24

- 37. The matching grant structure will be similar to that implemented under the World Bank financed SUSTENTA Project. Window 1 will typically be up to US\$100,000 of which 50 percent will be grant, 40 percent credit from a commercial bank to be repaid by the beneficiaries and 10 percent beneficiaries own contribution. Window 2 projects would be above US\$100,000 and up to US\$1 million. Specific details of the matching grants schemes will be further detailed in the PIM and matching grants manual (MGM).
- 38. The eligibility criteria for the grants (see Annex Table A1.3) will take into consideration the capacity level of the farmer's organization, including the availability of a business/investment plan, agronomic skills and experience, and alignment with project supported value-chains. The implementation arrangements and grant delivery structure will be reflected in the PIM and harmonized with similar programs under implementation by the Government of Mozambique.
- 39. Component 4: Project Management, Monitoring and Evaluation (US\$6 million of IDA grant). The objective of this component is to ensure project management efficiency and efficacy, by ensuring the use of resources in accordance with the project's objectives, procedures, and fiduciary guidelines; and finance monitoring and evaluation (M&E) activities during the project implementation and report regularly on implementation status and performance, and the achievement of project indicators and development objective. Specifically, the project will finance (i) incremental operating costs for project implementation at the national level led by AIMU and at the provincial level led by Provincial Implementation Units (PPIUs); and (ii) the establishment of a Management Information System (MIS) for irrigated agriculture, and the project monitoring and evaluation (M&E) system.
- 40. **Component 5: Contingency and Emergency Response (US\$0).** This component will provide immediate response in the event of an eligible crisis or emergency. This is a "zero-dollar" Contingency and Emergency Response Component. In the case of an adverse event that causes a major disaster, the Government of Mozambique may request the World Bank to channel some financial resources from this component to address the emergency. If agreed by the World Bank, part of the project resources will be re-allocated to this component to finance any critical emergency activities under this component. This component will facilitate access to rapid financing by allowing reallocation of uncommitted project funds in the event of a natural disaster, either by a formal declaration of a national or regional state of emergency or upon a formal request from the Government of Mozambique. Component 5 will use IDA Immediate Response Mechanism.

E. Implementation

Institutional and Implementation Arrangements

- 41. The project will be implemented by MASA at three levels of implementation: the national, provincial and district levels (Figure 1). Detailed implementation arrangements are provided in Annex 2 and will be further detailed in the PIM.
- 42. **At the National Level.** MASA will be responsible for the overall implementation of the project, in consultation with the other relevant Ministries to ensure that the project activities are consistent with the national policies and programs. A Project Coordination Committee (PCC), chaired by the Minister (or by delegation by the Vice Minister), with participation of MOPH, MITADER, and Ministry of Industry and Trade (MIC), will have the overall decision-making responsibility regarding the management of the project, review decisions made by AIMU, issue directives to guide project interventions, methods and criteria. The PCC will be responsible for the approval of work plans and budgets, and oversight on compliance with World Bank fiduciary requirements. The Permanent Secretary of MASA will be the executive level head responsible for strategic direction of the project with support from the Technical Committee of

Apr 25, 2018 Page 11 of 24

the National Directors. AIMU will be responsible for day-to-day management of the project and will be composed by a Program Coordinator (PC), a communication specialist, an environmental safeguards specialist, a social safeguards specialist, an M&E specialist, a procurement specialist, a financial management specialist and the lead specialists for TDST. The detailed composition of the TDST is presented in Annex 2.

43. **AIMU.** MASA will establish AIMU at the national level that will be (i) responsible for the project coordination and management of fiduciary issues in conformity with the standards and requirements agreed with the World Bank; and (ii) manage the project in accordance with the Financing Agreement and other project documents such as Project Appraisal document and the PIM.

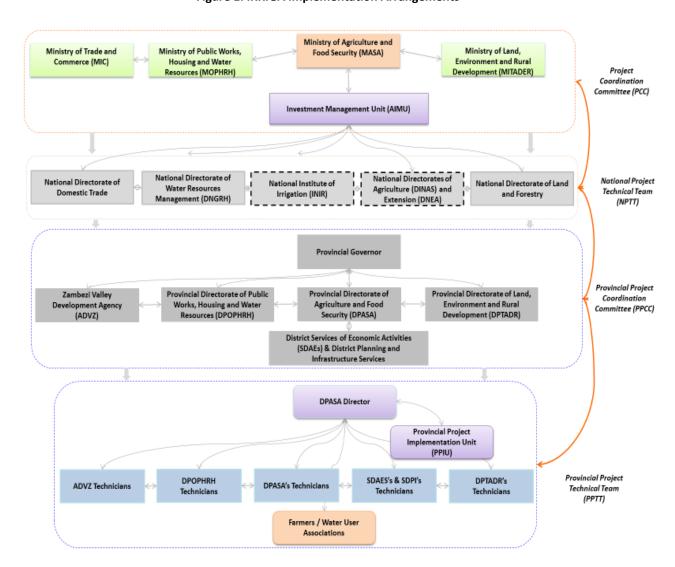


Figure 1. IRRIGA implementation Arrangements

Apr 25, 2018 Page 12 of 24

- 44. **At the provincial level.** Each beneficiary province will have a Provincial Project Implementation Unit (PPIU) with a minimum of five staff including provincial coordinator, irrigation engineers, safeguard team and will collaborate with beneficiary districts to facilitate the project implementation.
- 45. The Provincial Directorate of Agriculture will be responsible for implementation of the project in coordination with the provincial government directorates and district governments. A Provincial Project Coordination Committee (PPCC), chaired by the Provincial Governor, will oversee project implementation, including monitoring project progress at the provincial level and making decisions in line with the objectives and institutional arrangements that are consistent with the project document and legal agreements. The PPCC will approve and monitor the implementation of activities at provincial level. The Provincial Director of Agriculture (within the provincial government) will be responsible for strategic direction of the project at the Provincial level with support from the Provincial Project Implementation Unit, (PPIU) headed by a Provincial Project Coordinator (PPC) that will be responsible for day-to-day management of the project at the provincial level.
- 46. Activity implementation on the ground will primarily be handled by service providers with involvement of local technical staff at Provincial Directorate of Agriculture. Component 2 will hire qualified engineering firms to undertake the design of the schemes and supervise the construction based on TORs agreed with the World Bank; Component 3 will be implemented by services providers hired on competitive basis, based on TORs also agreed with the World Bank. Component 3 will provide training and demand based support in the e-vouchers for eligible farmers, and farmer groups for production, processing and marketing sub-projects. A specific Cost sharing grant will be prepared by the Project to guide the implementation of the grants in accordance with World Bank and Government of Mozambique Policies. The AIMU, PPIU will be responsible for overall coordination of implementation of the approved projects.
- 47. At the District Level. Agricultural activities and marketing take place at district level. Given that the capacity is in most cases weak, the project will provide capacity building and targeted technical assistance. The District Office of Economic Activities (SDAE) will be responsible for project implementation at the district level, in coordination with District Services for Planning and Infrastructures and consultation with the District Administration. The SDAE will be actively involved in site identification and general oversight of the irrigation infrastructure development at the district level, identification and selection of sub-project proposals for matching grants with the Administrator's guidance. The preparation and implementation of sub-projects for matching grants is at the level of irrigation scheme and smallholder farmer groups and associations. To effectively participate in the implementation of the project, local SDAEs will have to carry out their work in accordance with their usual functions (training, extension, technical advice, among others), but they will require capacity building. To facilitate this process, the project will assist in: (I) capacity building; (ii) provide technical assistance; and (iii)engage service providers to assist local SDAEs. The farmers will also be involved in the design and construction works for the irrigation schemes and will be fully responsible for O&M of the schemes.

B. Results Framework and Monitoring and Evaluation

48. The Project will establish a Progress and Results Information Monitoring System (PRIMS) at MASA to monitor the implementation progress and the project outcomes. The system will be programmed as a web-based data reporting and management tool that will help: (i) to collect, document, analyze and generate reports on project progress and results indicators; (ii) to cross reference annual work plan and budget (AWP&B) tables with progress and results information; (iii) to integrate progress and results data of all sub-projects (i.e., monitoring of business plan implementation); (iv) to store and document geo-referenced data on seasonal water flow and use, agricultural production at plot level, and input/output markets; and (vi) to serve as a project related grievances monitoring database. The PRIMS will be procured in the first year of implementation.

Apr 25, 2018 Page 13 of 24

- 49. The Results Framework (RF) and the arrangements for monitoring results are reported in Section VII. The RF will be used to periodically track progress in achieving the project's objectives. Also, the critical processes to achieve the project's objectives, such as procurement, safeguards, technical assistance and institutional development activities, will be closely monitored. The project will rely on existing data sources at MASA and other Government agencies including the National Institute of Statistics, supplemented by regular data collection, and special surveys and assessment updates will be carried out by contracted specialists. Both quantitative and participatory M&E methods will be used to assess the social and gender inclusion of project participants. All teams involved in the implementation of the project will participate in the process of data collection, compilation, analysis, and use. The project will finance MIS costs under component 4.
- 50. MASA will recruit an M&E specialist using project funds to be responsible for tracking progress on project results indicators. The M&E specialist, reporting to the AIMU, will be responsible for managing the PRIMS. The PRIMS will include an activity-specific database aligned with the annual activity plans and the M&E Plan for all outcome and intermediate performance indicators. The M&E specialist will be responsible for regular updating the PRIMS and producing quarterly progress reports. Two evaluations of project outputs and outcome will be commissioned, first at midterm and the second at completion. An M&E unit will be established within AIMU and the MIS and procedures for data collection and reporting will be prepared to the World Bank's satisfaction. The project will finance M&E costs, including the impact evaluations (midterm and completion) as well as the implementation completion report, ICR.

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The project will support the rehabilitation of irrigation schemes in 3,000 hectares in four provinces of central and northern Mozambique: Manica, Sofala, Nampula and Zambézia. The exact locations for the interventions have not yet been selected, though they are expected to fall within the above-listed provinces. The irrigation schemes will be assessed before investment is considered to ensure, economic, financial, social and environmental feasibility. In addition, no infrastructure investment will be made before critical issues such as land and water user rights have been fully secured. The project will not support construction of large scale irrigation structures to minimize the extent of environmental and social impacts. Priority will be given to gravity-fed open irrigation systems, as they are relatively simple to operate and maintain, and are less costly compared to the piped systems, and will consist of: diversion weir from the river, main canal from the weir to the irrigated area, distribution network canals, drainage network, internal road, protection dykes (for flooding risk), and land levelling. Dams are not required because the irrigation schemes will target permanent streams/rivers with enough water for irrigation and downstream use. The design and construction of the infrastructures will take into consideration the need to avoid and minimize environmental and social risks. Under the ongoing PROIRRI project it can be concluded that associated negative environmental and social impacts include water abstraction on downstream users, loss of wetland habitat because of the irrigation infrastructure needed, point and non-point pollution of water sources, soil erosion and siltation, acquisition of land for development of irrigation infrastructure, water and land-use related conflicts. However, some other potential impacts may have moderate intensity and significance, as well as being non site-specific, such as reduction of downstream water flow and eventual social conflicts among downstream water users. IRRIGA is rated as a Category B project, since most of these impacts are

Apr 25, 2018 Page 14 of 24

minor or of low-intensity, site-specific, thus relatively straight forward to manage with adequate participation of the Local Government entities.

G. Environmental and Social Safeguards Specialists on the Team

Nuno Maria Brilha Vilela, Environmental Safeguards Specialist Mario Rizzolio, Social Safeguards Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	Proposed project investments under Components 2 and Component 3 involve irrigation and infrastructure activities (irrigation related infrastructure, grain storage and processing facilities). Such investments have a potential of causing environmental impacts that require due safeguards consideration. Some of the associated negative environmental and social impacts include water abstraction on downstream users, loss of wetland habitat as a result of the irrigation infrastructure needed, point and non-point pollution of water sources from use of pesticides, fertilizers and other agrochemicals, soil erosion and siltation, water and land-use related conflicts. The specific location/site and scope of all project components are not yet known. Therefore, an Environmental and Social Management Framework (ESMF) has been prepared, consulted upon, and publicly disclosed prior to appraisal. Once there is information specific to individual sub-projects, site/project specific Environmental and Social Management Plans (ESMPs) will be prepared during implementation. The ESMF includes a set of Environmental and Social Clauses (ESC) for project implementers, provisions for stakeholder engagement as well as a grievance redress mechanisms.
Performance Standards for Private Sector Activities OP/BP 4.03	No	The project does not expect to involve or invest in Private Sector activities as defined under this policy

Apr 25, 2018 Page 15 of 24

Natural Habitats OP/BP 4.04 Yes Overall, promotion of irrigation and agriculture intensification could lead to some negative impacts on natural habitats. Such impacts may include natural habitats degradation due to an increased land use pressure, water bodies and soil contamination from use of pesticides, fertilizers and other agrochemicals including reduced quantity and quality of water upon which natural habitats depend. Hence, OP 4.04 was triggered and the borrower prepared an ESMF which includes appropriate measures to address any potential impacts on natural habitats. The OP/BP4.36 is not triggered. IRRIGA will not have any direct or indirect impacts on health and quality of forests per this policy definition, or on people who depend on forests, as activities will mainly involve rehabilitation of existing irrigation schemes. Promoting intensification through improved inputs under Component 3 may lead to an increased use of pesticides (though at a low scale to boost agriculture productivity) which could affect the quality and quantity of water or lead to soil contamination and degradation including risks to the health and safety of the farmers from the use pesticides or agrochemicals. To address such impacts the borrower has prepared and implemented under PROIRRI a Pest Management Plan (PMP) which includes guidelines and procedures that are essential in disseminating sustainable agricultural practices by promoting ecological and biological control of pest management. The PMP also contains specific measures to address health and safety risks to community and farmers due to mishandling of pesticides or disposal and storage of empty containers. The PMP was duly updated, under IRIGA, tconsulted upon and publicly disclosed prior to appraisal. The proposed project will involve civil works and could potentially involve chance finds of PCR during construction. The ESMF include Chance Find Procedures. The policy does not apply to Mozambique, as there are no populations/communities that meet the definition of In			
Forests OP/BP 4.36 No any direct or indirect impacts on health and quality of forests per this policy definition, or on people who depend on forests, as activities will mainly involve rehabilitation of existing irrigation schemes. Promoting intensification through improved inputs under Component 3 may lead to an increased use of pesticides (though at a low scale to boost agriculture productivity) which could affect the quality and quantity of water or lead to soil contamination and degradation including risks to the health and safety of the farmers from the use pesticides or agrochemicals. To address such impacts the borrower has prepared and implemented under PROIRRI a Pest Management Plan (PMP) which includes guidelines and procedures that are essential in disseminating sustainable agricultural practices by promoting ecological and biological control of pest management. The PMP also contains specific measures to address health and safety risks to community and farmers due to mishandling of pesticides or disposal and storage of empty containers. The PMP was duly updated, under IRRIGA, tconsulted upon and publicly disclosed prior to appraisal. Physical Cultural Resources OP/BP 4.11 Yes The proposed project will involve civil works and could potentially involve chance finds of PCR during construction. The ESMF include Chance Find Procedures. The policy does not apply to Mozambique, as there are no populations/communities that meet the definition of Indigenous Peoples as described in the	Natural Habitats OP/BP 4.04	Yes	intensification could lead to some negative impacts on natural habitats. Such impacts may include natural habitats degradation due to an increased land use pressure, water bodies and soil contamination from use of pesticides, fertilizers and other agrochemicals including reduced quantity and quality of water upon which natural habitats depend. Hence, OP 4.04 was triggered and the borrower prepared an ESMF which includes appropriate measures to address any potential
under Component 3 may lead to an increased use of pesticides (though at a low scale to boost agriculture productivity) which could affect the quality and quantity of water or lead to soil contamination and degradation including risks to the health and safety of the farmers from the use pesticides or agrochemicals. To address such impacts the borrower has prepared and implemented under PROIRRI a Pest Management Plan (PMP) which includes guidelines and procedures that are essential in disseminating sustainable agricultural practices by promoting ecological and biological control of pest management. The PMP also contains specific measures to address health and safety risks to community and farmers due to mishandling of pesticides or disposal and storage of empty containers. The PMP was duly updated, under IRRIGA, tconsulted upon and publicly disclosed prior to appraisal. The proposed project will involve civil works and could potentially involve chance finds of PCR during construction. The ESMF include Chance Find Procedures. The policy does not apply to Mozambique, as there are no populations/communities that meet the definition of Indigenous Peoples as described in the	Forests OP/BP 4.36	No	any direct or indirect impacts on health and quality of forests per this policy definition, or on people who depend on forests, as activities will mainly
Physical Cultural Resources OP/BP 4.11 Yes could potentially involve chance finds of PCR during construction. The ESMF include Chance Find Procedures. The policy does not apply to Mozambique, as there are no populations/communities that meet the definition of Indigenous Peoples as described in the	Pest Management OP 4.09	Yes	Promoting intensification through improved inputs under Component 3 may lead to an increased use of pesticides (though at a low scale to boost agriculture productivity) which could affect the quality and quantity of water or lead to soil contamination and degradation including risks to the health and safety of the farmers from the use pesticides or agrochemicals. To address such impacts the borrower has prepared and implemented under PROIRRI a Pest Management Plan (PMP) which includes guidelines and procedures that are essential in disseminating sustainable agricultural practices by promoting ecological and biological control of pest management. The PMP also contains specific measures to address health and safety risks to community and farmers due to mishandling of pesticides or disposal and storage of empty containers. The PMP was duly updated, under IRRIGA, tconsulted upon and publicly disclosed prior
Indigenous Peoples OP/BP 4.10 No are no populations/communities that meet the definition of Indigenous Peoples as described in the	Physical Cultural Resources OP/BP 4.11	Yes	could potentially involve chance finds of PCR during construction. The ESMF include Chance Find
	Indigenous Peoples OP/BP 4.10	No	are no populations/communities that meet the definition of Indigenous Peoples as described in the

Apr 25, 2018 Page 16 of 24

Involuntary Resettlement OP/BP 4.12	Yes	resulting in the loss of crops, OP 4.12 has been triggered. Land acquisition is expected to be low in magnitude and it is unlikely that the rehabilitation and expansion of agricultural areas would potentially result in physical displacement. Consequently, MASA has updated the Resettlement Policy Framework (RPF) of the PROIRRI to adequately address issues of land acquisition resulting in physical impacts on people and/or loss of assets, means of livelihoods or
		resources. The RPF sets forth the principles and procedures for managing issues of land acquisition requiring compensation and/or the physical displacement of persons/households. The RPF has been consulted and was sill be disclosed both in-country on 15 May 2018 and by the World Bank on 17 May 2018 prior to Appraisal. The RFP includes specific guidance for screening subprojects for resettlement and livelihood impacts, and for the preparation (prior to subproject approval) and subsequent implementation of site-specific Resettlement Action Plans (RAPs) and/or Abbreviated Resettlement Plans (ARAPs).
Safety of Dams OP/BP 4.37	Yes	This policy is triggered since IRRIGA will support activities that will involve rehabilitation of water storage or water control structures, canals and rehabilitation of small dams/water diversion weirs. The project will not finance any large dams as defined under this policy. Nonetheless, the borrower prepared an ESMF that includes basic guidelines and measures to address potential environmental impacts from rehabilitation of small dams. Such measures will be included in the project design and will be reviewed by qualified engineers prior to commencement of the works.
Projects on International Waterways OP/BP 7.50	Yes	IRRIGA will support construction and rehabilitation of irrigation schemes along Buzi and Zambezi River basins. However, the activities supported by the

Apr 25, 2018 Page 17 of 24

	project will have a low likelihood of interference in intentional watershed, given the downstream location of the areas of the project intervention relative to riparian countries (Mozambique is the lowest riparian country of these rivers). LEGEN has determined that the project qualifies for an exception to the notification requirement in OP 7.50. A memo for exception to notification prepared which was duly cleared by the AFRVP.
No	This policy is not triggered. The area in which the project will be implemented is not known to include any disputed areas.
	No

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The project may have some unintended negative environmental and social impacts such as soil erosion, siltation, salinization, water pollution with fertilizers and pesticides, health risks for farmers due to agrochemicals usage, limited water availability for downstream users and biodiversity loss in mountain water springs, and loss of wetland habitat as a result of the irrigation infrastructures needed. Additionally, expansion of irrigation areas may also result in land acquisition and limited water availability for downstream which could then lead to loss of crops and livelihoods with potential to generate water and land-use related conflicts. Most of these impacts are minor or of low-intensity, site-specific and thus relatively straight forward to manage, with involvement of the Local Governments entities and WUAs. Nonetheless, some other potential impacts may have moderate intensity and significance, as well as being non site-specific, such as reduction of downstream water flow, eventual social conflicts among downstream water users, drawing from PROIRRI's identified environmental and social impacts, or maybe labor influx issues with local communities. Overall, no potential large scale, significant or irreversible impacts are expected under IRRIGA.

Other impacts associated with the civil works include health and safety of the workers and communities, dust pollution, and construction waste/debris. Some of the schemes rehabilitation/expansion works and equipment installation will be along the cultivated fields. Although the works will primarily occur along the edges of the fields, some works may disrupt farmers activities restricting their access to water and potentially resulting in the loss of crops. It is not anticipated that the project will lead to significant land acquisition or significant restrictions on access to sources of livelihood. Moreover, some of the construction works may require the hiring of external work force, thus leading to the risks of labor influx in rural areas. Such risks should be manageable and will be adequately addressed through application of standard Bank safeguard instruments (ESMF, RPF, ESIA/ESMP and RAP).

The predecessor project, PROIRRI continues to face compliance issues. The ESMPs for the subprojects (32 irrigation schemes) were recently approved. The PIU has submitted a remediation plan which needs to be consolidated and implemented, to which end time and resources will have to be allocated.

Apr 25, 2018 Page 18 of 24

Borrower capacity to implement sound safeguard management procedures is low, but improving, therefore although global environmental and social impacts from IRRIGA are considered to be moderate, the environmental and social risk assessment of the overall project, including the PIU (AIMU - Agriculture Investment Management Unit) capacity to perform adequate project safeguard management and procedures, is considered to be substantial.

- 2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area: As examples of potential indirect and/or long term impacts of IRRIGA, downstream water contamination from on-farm agro-chemicals application, reduction of downstream water flow and eventual social conflicts among downstream water users can be put forward. However, water availability studies were undertaken through other WB financed projects in the same target area, such as SUSTENTA and involving National and Regional Water authorities. These studies demonstrate that river flows are high and current uses are very low, hence easily accommodate the extra water need for IRRIGA and for other future water uses. Recent figures related to water availability, made at river basin level (for Lúrio, Meluli, Licungo, Zambezi, Pungoe and Buzi) clearly show that future cumulative water demand with IRRIGA ranges from 0.16% to 4.6% of these river's mean annual runoff. The ESMF includes an examination of potential cumulative and induced impacts to followed upon during implementation.
- 3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts. The project will not support construction of large scale irrigation structures in order to minimize likely environmental and social impacts. Priority will be given to gravity-fed canal irrigation systems. The feasibility studies, the design, the safeguards instruments and construction of the irrigation infrastructures will take into consideration the need to avoid and minimize to the extent possible, environmental and social risks.
- 4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The project implementation arrangements related to the environmental and social safeguard requirements, national legislation and Bank policies, will be under responsibility of the Agriculture Investment Management Unit (AIMU) at MASA.

The capacity of MASA to implement safeguard policies is still inadequate, but improving. MASA through AIMU (Agriculture Investment Management Unit) is currently implementing other WB funded projects and its overall capacity has been gradually strengthened at central ad local levels to address the increasing safeguards risks in this sector. AIMU comprises among others, a Project Coordinator and two dedicated safeguards specialists (environmental & social) who will ensure management of project's safeguards requirements. IRRIGA safeguards capacity will build on experiences learnt from PROIRRI implementation while also establishing strategic synergies with other WB projects coordinated by FNDS (MOZBIO, SUSTENTA) with overlapping geographical area to ensure harmonization of procedures and protocols among projects and institutions. In addition, measures are being taken to ensure that the remedial measures still pending implementation under the ongoing PROIRRI project are satisfactorily addressed so to serve as he basis for IRRIGA safeguards management.

The existing safeguards specialists at central level, will be further assisted at the provincial level by a team of social and environmental technicians who will closely oversee implementation and ensure compliance with safeguards policies in each of the targeted provinces. In addition, detailed team roles, responsibilities, as well as capacity building (training) requirements and procedures for sound management of environmental and social impacts were adequately included and budgeted for in the ESMF. A series of regional training seminars/workshops will be organized for all actors involved in the implementation of social and environmental safeguards policies, upon project effectiveness.

Apr 25, 2018 Page 19 of 24

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

During preparation of the ESMF, RPF and PMP a Public Consultation Process was undertaken in all provinces targeted by the IRRIGA, plus Maputo province, aiming to inform, hear and gather recommendations from different potentially affected and interested groups on project design, environmental and social impacts and risks related with the project activities.

After project approval a Stakeholder Engagement Plan (SEP) will be prepared to identify key stakeholders that are affected, and/or able to influence project design and its activities while also identifying effective methods and structures through which to disseminate project information and to ensure regular, accessible and transparent consultation; guide AIMU to build mutually respectful, beneficial and lasting relationships with stakeholders; Establish a Grievance Redress Mechanisms; and define roles and responsibilities for the implementation of the SEP. The main stakeholders to engage in this project are Farmers, Associations of Farmer, women associations, vulnerable groups (youth, elderly, disabled), Ministry of Land, Environment and Rural Development (MITADER), DPTADER, Ministry of Agriculture and Food Security, Provincial Directorate of Agriculture and Food Security, District Services of Economical Activities (SDAE), District Services of Planning and Infrastructure (SDPI), National Directorate of Water Resource Management (DNGRH), Regional Administrations of Water (ARAs), Ministry of Industry and Commerce, NGOs, Academia and other ongoing projects such as SUSTENTA, MozFIP, MOZBIO, among others.

At IRRIGA subproject level, during the prefeasibility phase and through the implementation of the E&S Screening Form (ESSF), stakeholders will be consulted in the identification and assessment of the social and environmental risks of a proposed project so that project design alternatives can be identified prior to proceeding to project feasibility.

B. Disclosure Requirements

Environmental	Assessment/Audit/Ivianage	ement Plan/Other

Date of receipt by the Bank

Date of submission for disclosure

Date of submission for disclosure

Date of submission for disclosure

distributing the Executive Summary of the EA to the Executive Directors

10-May-2018

"In country" Disclosure

Resettlement Action Plan/Framework/Policy Process

Date of receipt by the Bank Date of submission for disclosure

10-May-2018 17-May-2018

"In country" Disclosure

Apr 25, 2018 Page 20 of 24

Pest Management Plan

Was the document disclosed prior to appraisal?

Date of receipt by the Bank

Date of submission for disclosure

Yes

10-May-2018

17-May-2018

"In country" Disclosure

Mozambique

15-May-2018

Comments

The documents were publicly disclosed at the clients website: http://www.masa.gov.mz/

If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.

If in-country disclosure of any of the above documents is not expected, please explain why:

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

OP/BP 4.04 - Natural Habitats

Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

No

Apr 25, 2018 Page 21 of 24

OP 4.09 - Pest Management

Does the EA adequately address the pest management issues?

Yes

Is a separate PMP required?

Yes

If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?

Yes

OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?

Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

Yes

OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

OP/BP 4.37 - Safety of Dams

Have dam safety plans been prepared?

No

Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?

NA

Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?

NA

OP 7.50 - Projects on International Waterways

Have the other riparians been notified of the project?

No

If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?

Yes

Apr 25, 2018 Page 22 of 24

Has the RVP approved such an exception?

Yes

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

CONTACT POINT

World Bank

Aniceto Timoteo Bila Sr Agricultural Spec.

Borrower/Client/Recipient

Ministry of Finance and Economy Adriano Umbisse Director of Treasure adriano.umbisse@mef.gov.mz

Implementing Agencies

Apr 25, 2018 Page 23 of 24

Ministry Of Agriculture and Food Security Paiva Munguambe General Director kensydoge@yahoo.com

FOR MORE INFORMATION CONTACT

The World Bank 1818 H Street, NW Washington, D.C. 20433 Telephone: (202) 473-1000

Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Aniceto Timoteo Bila
Annroyed Ry	

Approved By

Safeguards Advisor:	Nathalie S. Munzberg	24-May-2018
Practice Manager/Manager:	Dina Umali-Deininger	24-May-2018
Country Director:	Mark R. Lundell	24-May-2018

Apr 25, 2018 Page 24 of 24