COMBINED PROJECT INFORMATION DOCUMENTS / INTEGRATED SAFEGUARDS DATA SHEET (PID/ISDS) APPRAISAL STAGE

Report No.: PIDISDSA20769

Date Prepared/Updated: 24-Jan-2017

I. BASIC INFORMATION

A. Basic Project Data

Country:	Madagascar	**Project ID:**	P154698
		Parent Project ID (if any):	
Project Name:	Madagascar Sustainable Landscape Management Project (P154698)		
Region:	AFRICA		
Estimated Appraisal Date:	15-Dec-2016	**Estimated Board Date:**	23-Mar-2017
Practice Area (Lead):	Agriculture	**Lending Instrument:**	Investment Project Financing
GEF Focal Area:	Biodiversity		
Borrower(s):	Government of Madagascar		
Implementing Agency:	PN-BVPI, Agriculture and Livestock, Ministry of Environment, Ecology, Sea and Forests, Ministry of Water		

Financing (in USD Million)

Financing Source	Amount
BORROWER/RECIPIENT	0.23
International Development Association (IDA)	65.00
FRANCE French Agency for Development	26.62
LOCAL BENEFICIARIES	1.50
Global Environment Facility - IBRD as Implementing Agency	13.70
Total Project Cost	107.05

Environmental Category:	B - Partial Assessment
Appraisal Review Decision (from Decision Note):	The review did authorize the team to appraise and negotiate
Other Decision:	
Is this a	No

Repeater project?	

B. Introduction and Context

Country Context

Madagascar is endowed with a great potential for agriculture, mineral resources, abundant labor, and unparalleled biodiversity. With adequate management of natural resources, complemented by investments in physical and human capital and effective governance, it would be a prosperous country. However, Madagascar's wealth, and consequently its development potential, is being severely eroded, together with productivity in the rural space where the majority of the population lives. Its total wealth declined by 10 percent in real terms between 2005 and 2011, and its natural capital by 26 percent. This drop was associated with a 33 percent drop in cropland potential, a 31 percent drop in pastureland, and a 42 percent drop in non-timber forest value.

The country remains among the poorest countries in the world, and has shown little improvement in indicators of the well-being of its population over recent years. Despite its unique biodiversity and abundant mineral, water, and labor resources, it ranks among the relatively few countries in the world with real per capita GDP in 2010 lower than it was in 1960. Madagascar's poverty rates are exceedingly high, and according to internationally comparable estimates are the highest in the world. Using the World Bank's international poverty lines of US$1.90 per capita per day (in 2011 Purchasing Power Parity (PPP)), poverty in Madagascar is 77.8 percent. Close to 80 percent of Madagascar's population lives in rural areas, and rural poverty rates are more than twice as high as in urban areas. Food insecurity now affects about 20 percent of the population. Development indicators for rural areas lag behind those for urban areas: incomes are lower, infant mortality rates are higher, life expectancy is shorter, illiteracy is more widespread, malnutrition is more prevalent, and greater proportions of people lack access to clean water and improved sanitation services.

Sectoral and institutional Context

Sectoral Context

Four out of five Malagasy nationwide depends directly on natural resources, particularly land, water and forests, for their livelihoods. Agriculture is either a principal or secondary economic activity for 81 percent of all households (89 percent in rural areas). Most households engage in subsistence farming, with low levels of productivity. The reasons for low productivity include: unreliable water availability; limited uptake of improved technology, such as high-yielding seed, fertilizer, and agricultural machinery; insecure traditional land tenure arrangements; and inadequate access to markets. Livestock plays an important role in the livelihoods of rural households and forms an important economic activity within the landscapes covered by the Project. Livestock productivity is low due to inadequate fodder production and pasture management, poor animal health and ineffective disease control, and genetic depletion.

Yet, the balance between natural resources and livelihoods is extremely fragile and set on a downward spiral. Over the period 2004 to 2014 annual agricultural GDP growth was 1.3 percent, far below peer countries and the average for sub-Saharan Africa. Most of the rural poor practice a traditional form of slash and burn agriculture known as "tavy". Tavy involves felling trees and burning the biomass, which not only clears the land but also adds nutrients to the soil. Cultivation of successive cycles of rice, cassava, and other tavy crops impoverishes the soil and often sets off

large-scale erosion that contributes to siltation of watercourses, leading quickly to widespread land and water degradation. Slash and burn agriculture persists not only because it offers rural households the prospect of realizing production increases in the short run, but also because it allows them to establish a claim to the land that may persist over the longer term.

Even in the most productive agricultural areas of the country, the situation is exacerbated by a chronic lack of infrastructure. In spite of abundant renewable water resources (estimated at 337 cubic km/year, which is almost 15 times the total water required for the development of the irrigation potential) water scarcity is widespread in all water-using sectors. Access to water is constrained primarily by lack of bulk water infrastructure. Less than 3 percent of the water used for irrigation is stored in dams and artificial lakes according to FAO estimates. In recent years, new dams have been built, but storage still lags far behind needs. Much of the existing irrigation infrastructure is obsolete, and canals are full of sediment.

Population growth and climate change are likely to further compound the challenge of managing landscapes and sustaining their ability to deliver development benefits. The population of Madagascar has more than quadrupled since 1960 and currently stands at around 24 million. This trend has eased but remains robust and, even under the most optimistic projections, the population is expected to double between now and 2050. In addition, floods and droughts are becoming increasingly unpredictable and severe, frequently disrupting agricultural production and livelihoods. The worsening climatic conditions projected in the coming decades are likely to have important impacts on many landscape functions, with potentially significant adverse impacts on crop yields and food security. Projections made using the IMPACT model suggest that compared to a no climate change reference case, the number of people at risk of hunger will increase progressively during the coming decades, with the increase by 2050 ranging between 20 percent and 40 percent, depending on the climate scenario considered.

Yet despite these challenges, there are reasons to be optimistic about Madagascar's development prospects. Large areas of the country are not degraded, and opportunities exist to reduce the pressure on the natural resource base associated with rapid population growth and rising demand for food. For example: (i) the productivity of areas that are only somewhat degraded can be restored through on- and off-site interventions; (ii) production of staple crops can be intensified to avoid further encroachment of agriculture into marginal areas, and (iii) markets for agricultural inputs and outputs can be better connected (e.g., through the building, rehabilitation or upgrading of roads) to improve productivity and profitability and promote sustainable intensification of areas that are already being used for crop and livestock production.

Institutional Context

Most land use planning decisions for agriculture, water and forests are taken by three sector Ministries. These are the Ministry to the Presidency for Agriculture and Livestock (MPAE), the Ministry of Water, Sanitation and Hygiene (MEAH) and the Ministry of Environment, Ecology and Forests (MEEF). Each of these Ministries has staff in regions and districts (i.e. Deconcentrated Technical Services, STD). Other key ministerial departments include the Ministry of Presidential Projects, Land Management and Equipment (M2PATE) and the Ministry of Interior and Decentralization (MID).

There are a number of important institutional challenges to supporting better land use planning for

agriculture, water and forests. These include among others; (i) lack of institutional coordination both between sectors and between levels of Government; (ii) lack awareness of the extent of progress in the preparation of Municipal Land Management Plans (SAC); (iii) limited technical capacity to carry out all the different steps required for land use planning (e.g., collecting data and putting in place the dynamic geospatial database, ensuring data quality, conducting the necessary analyses and developing the spatial models for scenario analysis; (iv) lack of an integrated decision support tool, geospatial data, and managing dynamic data frameworks; and (v) resource constraints which constitute a major barrier to overcome the current impasse. Currently decision-making does not benefit from any integrated decision support tool that informs decision-makers about the possible options and scenarios for land use planning. As a consequence, the decisions made often do not yield optimal results. Given the resources constraints, the capacity of the public sector to invest in infrastructure, conservation and enforcement, as well as the capacity of local populations to access new techniques and more sustainable practices, and increase productivity, is extremely limited. Moreover, there are important technical capacity gaps. While these can be addressed relatively quickly through trainings, the human and financial resources constraints are more challenging to tackle.

C. Proposed Development Objective(s)

Development Objective(s)

The Project Development Objective is: To increase access to improved irrigation services and agricultural inputs, and strengthen the integrated management of natural resources in the targeted landscapes by local actors and, to provide immediate and effective response to an Eligible Crisis or Emergency.

Global Environmental Objective(s) (From PAD)

The Global Enviromental Objective is: ➢(To increase access to improved irrigation services and agricultural inputs, and strengthen the integrated management of natural resources in the targeted landscapes by local actors and, to provide immediate and effective response to an Eligible Crisis or Emergency.➢(

Key Results

Key results include:

Project Development Objective level:

PDO Indicator 1: Area provided with new/improved irrigation or drainage services
PDO Indicator 2: Farmers adopting improved agricultural technology
PDO Indicator 3: Land area under sustainable landscape management practices
PDO Indicator 4: Direct project beneficiaries (of which female)

D. Project Description

The Project is designed as an investment project financing (IPF) operation to be implemented over five years starting in 2017. The Project's main aim is to develop a model for integrated landscape management that can be replicated and scaled up in other parts of Madagascar, and thus reach a large number of households. It is the first in what is expected to be a Series of Projects (SoP) for which the Program Goals are to: (1) strengthen good governance in sustainable management of landscapes; (2) reduce the degradation of natural resources; (3) increase income

from productive sectors; and (4) improve rural livelihoods. It was designed in close coordination with the French Development Agency and is fully aligned with the engagement of other development partners such as the European Union (EU), the Japanese International Cooperation Agency (JICA), the German International Cooperation (GIZ), the United States Agency for International Development (USAID), the International Fund for Agricultural Development (IFAD) and the African Development Bank (AfDB).

The Project is designed as an investment project financing (IPF) operation to be implemented over five years starting in 2017. The total base project cost is US$78.7 million (US$65 million IDA credit and US$13.6 million GEF grant). AFD has provisionally committed to provide a credit of Euro 25 million as joint financing on a pari-passu basis (Pari passu in this case refers to joint financing of IDA and AFD resources. For each dollar used by the project 70 percent will be financed by IDA and 30 percent by AFD). Contributions by beneficiaries are estimated at US $1.5m. The Government of Madagascar would also contribute approximately US$225,000 to cover compensation costs for resettlement (land acquisition costs; compensation on crops, trees, shelter, habitat, structures, etc.) that may occur as a result of implementation of the Project. This would bring the total amount of project financing to approximately US$107 million.

The Project has four components: (i) Information and Planning; (ii) Investments and capacity building in the selected landscapes; (iii) Project Management Coordination and monitoring and evaluation; (iv) Contingency Emergency Response. The Project will support several categories of key activities: (i) investments in data management and multi-sector integrated decision making as a tool for policy development and planning; (ii) enhancing local capacities at the project sites for integrated landscape management; (iii) hard investments in water management infrastructure and other rural infrastructure; (iv) investments in agriculture, agroforestry, forestry and livestock productivity enhancements; (v) investments in value chain development; and (vi) investments in the management and restoration of hillsides and protected areas.

The project will be implemented in four regions with different agro-ecological environments, farming systems and social structure/institutions: (i)Andapa (SAVA region); (ii) Iazafo and Soaneireana-Ivongo (Analanjirofo Region) in the Eastern coastal zone agro-ecoregion; and Bealanana (Sofia Region) and Marovoay (Boeny Region) in the North-Western low altitude plains agro-ecoregion. The sites were identified by a joint agriculture/environment Malagasy government team based on the below criteria:
i. Likelihood of demonstrable results (e.g. existence of earlier investments; accessibility);
ii. Strength of spatial linkages across landscape (e.g. conservation (high ecological value), high agriculture potential and irrigation potential);
iii. Innovation and learning potential (e.g. new technologies/approaches that show promise for paradigm shifts and scaling-up); and
iv. Preparation readiness (e.g. political commitment; information availability; enabling policy adequacy (e.g. fiscal/legal); institutional capacity; investment preparation status).

The ultimate beneficiaries of the project are smallholder farm households in the targeted landscapes that depend on land, forestry and agro-forestry resources for their livelihoods. These farm households and their communities will benefit from the improved management of the natural resources and improved access to productive inputs. The improvements include irrigation and land-linked interventions (e.g., hillside and gully stabilization, increase in tree and vegetative cover) and value chain interventions (e.g., improved seeds and technology, extension services,

storage capacity, financing) and other services (e.g., land titling). Community organizations, i.e., local forest user groups, or Communautes de Base (COBA) and water user associations (WUAs), will benefit from the project in terms of capacity building and equipment. Producer associations will benefit from access to good practices in terms of management tools, technology and the Sustainable Landscape Management Plans. The government institutions responsible for delivering specific services and inputs to farmers will benefit from capacity building and equipment.

Component Name

Component 1: Information and planning

Comments (optional)

Activities under this component aim to develop the analytical capacity, the planning tools, and a conducive policy environment that will allow for a landscape management approach to be developed in detail and take root. The component forms a foundation on which the landscape management approach will we tested and implemented, and scaled up during subsequent phases of the program.

Component Name

Component 2: Investments and capacity building in the selected landscapes

Comments (optional)

The component supports on-the-ground implementation of the landscape approach. It will facilitate and finance preparation, implementation, monitoring, and scaling-up of investments to improve agricultural performance and effective natural resources management in a landscape context, as well as build local structures➢(capacity for effective and long-term adoption of improved practices.

Component Name

Component 3: Project Management Coordination and M&E

Comments (optional)

The component covers the management of the Project by the PIU and the RIUs. It will support all aspects of project management, including fiduciary management, M&E, knowledge generation and management, communication, and monitoring mitigation measures related to safeguards.

Component Name

Component 4: Contingency Emergency Response

Comments (optional)

The component establishes a disaster response contingency funding mechanism that could be triggered in the event of an eligible crisis or emergency, such as a natural disaster involving a formal declaration of a national or regional state of emergency, or a formal request from the Government of Madagascar in the wake of a disaster. In that case, funds from other project components could be reallocated to this component to facilitate rapid financing of a positive list of goods and services related to components 1 and 2, and that would still be relevant to the achievement of the PDO.

E. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Five project sites with different agro-ecological environments, farming systems and social

structure and institutions have been selected. They include:

i. Andapa landscape in SAVA Region;
ii. Iazafo and Soaneireana-Ivongo landscape in Analanjirofo Region;
iii Bealanana in Sofia Region;
iv Marovoay in Boeny Region.

F. Environmental and Social Safeguards Specialists

Paul-Jean Feno (GEN07)

Peter F. B. A. Lafere (GSU01)

II. Implementation

Institutional and Implementation Arrangements

The project's coordination and management structure will be based on four main bodies: the Inter-ministerial Project Steering Committee (IPSC) (Comite de Pilotage Interministeriel), four Regional Monitoring Committees (RMCs) (Comites Regionals de Suivi), the Project Implementation Unit at the central level (Agence d'Execution), and four Regional Implementing Units (Cellules Regionales d'Execution).

The IPSC will provide strategic oversight of the project and will include representation from the key stakeholders (ministries to the Presidency for Agriculture and Livestock; Ministry of Environment, Ecology and Forests; Ministry of Water, Sanitation and Hygiene (MEAH); the Ministry of Presidential Projects, Land Use Planning and Equipment (M2PATE); the Ministry of the Interior and Decentralization (MID); the Ministry of Finance (MFB); as well as the Heads of Region (4); and the representative of Commune Federation (Federation VOI).

The four RMCs will ensure consistency of project activities with regional development policies and planning processes (regional land use and development planning, commune-level planning), and monitor project progress.

The PIU, based within the MPAE, with staff drawn from the MPAE, MEEF and MEAH, will manage the Project's day-to-day activities, procurement, disbursement, accounting, financial and technical reporting, project monitoring and evaluation and the environmental and social safeguards aspects, and policy dialogue on integrated landscape management.

The four RIUs will be responsible for the project day-to-day implementation of activities at the regional level, including, disbursement, financial and technical reporting, project monitoring and evaluation, and the environmental and social safeguards aspects.

III. Safeguard Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The proposed project activities in component 2 may lead to some social and environmental impacts. Most adverse environment impacts are expected to be limited and temporary, which can be mitigated through implementation of an Environmental Management Plan. Since the exact locations of these infrastructure investments and activities cannot be

		determined prior to project appraisal and all technical studies will be conducted during the first year of implementation. Therefore, the Borrower has prepared an Environmental and Social Management Framework (ESMF) that includes an Environmental and Social Management Plan (ESMP) has been approved by the RSA in December 2016.
Natural Habitats OP/ BP 4.04	Yes	The instruments to mitigate any potential impacts are described under Environmental Assessment OP BP 4.01. The ESMF assessment has demonstrated that the project has as main objective to preserve natural habitat, no major activities could affected natural habitat and Measures to reduce risks and impacts to preserve the natural site in the project zones have been identified (ex:. patrolling missions, firebreaks, guard stations and materialization of park boundary markers; forest active and passive restoration activities for conservation purpose ...etc.).
Forests OP/BP 4.36	Yes	The ESMF report has determined whether forests are likely to be affected by the proposed project. The ESMF report has determined the forests will not affect by the proposed project. The main project activities will preserve forests and reduce human pressures to the natural forests. Ex: Hillside stabilization through terracing, investments in green infrastructure through forest landscape restoration with endemic species or/and fast growing species; partnerships with the private sector to promote reforestation, agroforestry and silvicultural approaches; adoption of new techniques, agroforestry, community-based management of forests.
Pest Management OP 4.09	Yes	Improving agricultural performance may lead to the extensive use of pesticides to boost agriculture productivity. To ensure safe pest management, the project has prepared a Pest Management Plan for sub-projects and value chains selected to be supported by the project in the 3 project regions. The PMP is a stand-alone report and has been approved by the RSA in December 2016.
Physical Cultural Resources OP/BP 4.11	Yes	No Physical Cultural Resources are expected to be impacted by the Project following the results of public consultation and field visits . The ESMF has considered a chance find procedure for the project.
Indigenous Peoples OP/BP 4.10	No	There are no indigenous peoples as defined by the policy present in the project area.
Involuntary Resettlement OP/BP 4.12	Yes	The activities under subcomponent 2.2 Productive Investments in Selected Landscapes such as the construction of physical infrastructure for irrigation, hillside stabilization through terracing, construction of gully erosion control structures, feeder road maintenance and forest landscape restoration will result in the involuntary resettlement of people. Expected

		impacts include loss of land and/or structures; the temporary or permanent loss of livelihoods, loss of crops and crop trees; the temporary or permanent displacement of people. The exact nature and location of the investments are not yet known but it is expected that up to 12,700 ha of land will be required either temporarily or permanently. To mitigate negative impacts, activities will be planned according to the agricultural calendar in order to minimize loss of crops. A number of community investments will be able to benefit from voluntary land donation, often in conjunction with access to agricultural intensification activities, and assistance for cash crop development. Expropriation or imposition of easements is estimated for up to 1,300 ha affecting approximately 570 households, but exact site locations are not yet known. The Borrower has prepared a Resettlement Policy Framework (RPF). The RPF report has been approved by the RSA in December 2016. Even though the project will include a number of activities on the management of critical ecosystems and protected areas, no restrictions on the use of natural resources will be imposed.
Safety of Dams OP/ BP 4.37	Yes	While the project will not finance the construction of large dams and reservoirs, the policy on Safety of Dams is triggered as: (i) the project might build smaller check dams; and (ii) irrigation schemes that are identified for rehabilitation rely on existing dams. To ensure their safe management, a generic dam safety analysis for the update current of a Small Dams Security Manual has be prepared by the client. The revised Small Dam Security Manual report has been approved by the RSA in December 2016.
Projects on International Waterways OP/BP 7.50	No	The policy on Projects on International Waterways is not triggered given the location and potential impact of the Project.
Projects in Disputed Areas OP/BP 7.60	No	There are no disputed areas associated with the Project.

IV. 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 proposed activities in component 2 may lead to social and environmental impacts, but none would be large scale, significant and/or irreversible. The proposed project activities are to: (i) improve farmer rice productivity (i.e. rehabilitation of existing small irrigation infrastructures; replacement of hydraulic equipment/materials, watershed management program; (ii) reduce soil erosion and land degradation (i.e. Hillside stabilization through terracing, forest landscape restoration with endemic species or/and fast growing species; promoting of reforestation,

agroforestry and silvicultural; cultivation of fodder crops; (iii) rehabilitate and maintain of feeder roads. Overall, these activities will impact positively on the biophysical environmental since they will support watershed management (stabilizing/reducing soil erosion and land degradation, reforestation within watershed impacting existing irrigation perimeters, promotion of agro-ecological production techniques, improvement of water availabilities within existing irrigation perimeters rehabilitated). These activities could involve negative impacts and risks like the increased levels of dust, noise, and other emissions from civil works, the generation of solid wastes during the civil works and channel cleaning out; the traffic disturbance and accident risks during feeder road civil works; and health and safety issues for workers; loss of vegetation cover, water and soil pollution and contamination; health issues due to the pesticides/fertilizers contamination/poisoning; HIV AIDs contamination from the temporary workers and safety issues ...etc.) may be associated with rehabilitation of civil works, operation of facilities, usage, storage/disposal and application of agrochemicals products, etc. Involuntary Resettlement impacts, including land acquisition, economic displacement, and physical displacement of people will be limited through the adoption of a construction schedule that is compatible with the agricultural calendar and the encouragement of voluntary donation of land or permission to improve infrastructure when participating in the income-raising activities above.

Most adverse environment impacts are expected to be limited and temporary, which can be mitigated through implementation of an Environmental and social Management Plan with specific mitigation measures. In addition, the environmental and social impacts of anticipated activities are expected to be moderate, site-specific, no irreversible impacts and manageable to an acceptable level, and the proposed project requires no exceptions to the World Bank►(s policies on environmental and social safeguards. Therefore, the Project is classified as category B in the World Bank►(s Environmental Assessment classification due to the low size and site specific nature of its foreseen social and environmental risks and impacts. The Five environmental and social Safeguard Policies triggered by this operation are: OP 4.01 (Environmental Assessment), OP 4.04 (Natural Habitats), OP 4.09 (Pest Management), OP 4.12 (Involuntary Resettlement); OP 4.36 (Forests); OP 4.11(Physical Cultural Resources); and OP 4.37 (Safety of Dams).

Since the exact locations of these infrastructure investments and activities cannot be determined prior to project appraisal, all technical studies will be conducted during the first year of implementation. Therefore, the Borrower has prepared an Environmental and Social Management Framework (ESMF) that includes an Environmental and Social Management Plan (ESMP), a Resettlement Policy Framework (RPF), a Pest Management Plan (PMP) and updated the Small Dam Safety Manual, all of which have been approved by the RSA in December 2016.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

No long term risks or impacts are anticipated as a result of potential future project activities. Overall project impacts are considered modest and will be site specific. Potential impacts are related to the civil works such as setting up camps, exploiting quarries for the rehabilitation of feeder roads ►(and agriculture activities under the agribusiness component with the increasing of pesticide usages. Expected impacts could include: soil erosion, air pollution, health risks, land acquisition, land use conflicts and population densification as a result of increased incomes. PADAP activities are expected to sustainably increase rice productivity in selected irrigation sites and soil and water conservation in upper watersheds; to strengthen and improve natural resource management at local and regional level for water resources management; forest conservation; agroforestry; and fire management (bush and forests). The types of impacts and risks could be generated with these activities under the component 2 are site specific and whose potential environmental and social effects are well understood, unlikely to be significant, and readily

manageable. Therefore, it is rather believed that the project overall outcome would be much more positive as they would tangibly contribute to the improvement of agriculture yields/productivity and forest landscape conservation.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

N/A. There are no alternatives to the present project design.

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 client has been actively responsive in addressing safeguards issues. At the national level, Madagascar has a legislative and regulatory framework which is conducive to good environmental management. The Ministry of Agriculture has the ultimate responsibility for the project's compliance with World Bank safeguards guidelines. This sector has long standing experience in implementing Bank funded investments. The Malagasy Environmental law mentions that Environmental assessment for both private and public development is regulated under Decret NÂ° 2004-167 (MECIE). This is fairly effective but institutional capacity needs to be developed to ensure more widespread application and improved monitoring. The national environmental law will be reinforced by the World Bank safeguard policies for this proposed project. The Ministry of Agriculture through its Project National Coordination Unit has engaged the services of a consultant to prepare four separate safeguards instruments. These instruments have assessed the potential impacts of all activities to be supported by the proposed operation, the expected adverse environmental and social impacts, and identified mitigation measures, including the principles, procedures to be followed for the safeguards policies triggered.

Since the precise locations and potential impacts of future subprojects cannot be identified prior to appraisal, an Environmental and Social Management Framework (ESMF) has been prepared to be used to screen sub-project proposals for environmental, social, gender, and health and safety impacts by using the ESMF screening form and checklist. The ESMF includes an Environmental and Social Management Plan (ESMP), has taken into account Eco regional environmental and social review and described the environmental and social profiles in the project areas on the potential activities to be supported by the project. The ESMF/ESMP outlines an environmental and social screening process for future sub-projects to ensure that they are environmentally and socially sound and sustainably implementable, in line with GOM and World Bank policies and guidelines on environmental and social impact management. The ESMF considers the activities and subprojects to be financed by a Category B project and, to ensure consistency, created a "negative list" of activities that would be classified as Category A. The screening outcomes will determine if sub-projects will need to prepare an Environmental and Social Impact Assessment (ESIA), a freestanding Environmental and Social Management Plan (ESMP), a Resettlement Action Plan (RAP), implement an Integrated Pest Management Plan (IPMP) or if no action will be needed.

Similarly, a Resettlement Policy Framework has been prepared to guide the mitigation of safeguards issues around Involuntary Resettlement. For a number of activities, particularly for those that are either non-site specific or for those where the main beneficiaries of the activity are those whose land would be affected, the project will encourage voluntary donation and/or agreements. It is expected that for around 10% of the activities (around 1,300 ha or 570 affected households, although not yet defined), land acquisition or other involuntary resettlement as defined by the policy will be required and for which Resettlement Action Plan(s) will be developed during implementation. The project will not impose new restrictions on the use of

natural resources in legally protected areas, and hence a Resettlement Process Framework was not required. If during the course of the project, new involuntary restrictions would be deemed to be required for the long term conservation of the protected areas, these would be consulted and implemented as part of the national REDD+ strategy and in accordance with the Resettlement Process Framework that is currently being developed under FCPF Readiness Fund Grant (P124655).

The screening of sub-projects will be done by the safeguard environmental and social focal point, who will be part of the Project Implementation Unit. The ESMF contains sample TORs for Environmental and Social Impacts Assessments (ESIA) that may be needed for Project-supported activities, as well as screening guidelines to be used to implement Project-supported works (e.g., rehabilitation/construction of feeder roads, infrastructure storages). In case safeguard instruments need to be prepared, the safeguard environmental and social specialist in the PIU technical team should prepared the required safeguard instruments through the sample of ToR proposed in the ESMF and RPF. The safeguard environmental and social specialist will be responsible for the procurement of consultants to prepare them, supervise the consultants and it will be responsible for the monitoring of the implementation of the ESMPs, PMPs and RAPs in the project areas. The safeguard specialist also will ensure that all contractor contracts include environmental and social clauses, which are attached as an annex to the ESMF, in order to ensure adequate environmental and social management practices during construction and operation. For OP 4.36, the project activities will be focused on the reforestation, forest plantation with local species. It is available coherent analysis and approach to ensure compliance with the safeguard policy triggered. For OP 4.11. The public consultations and field visits have confirmed that the project activities could not affect any sites defined as physical cultural resources and chance find procedure is available for the project. For OP 4.04, the project has as main objective to preserve natural habitat and reduce risks and impacts to preserve the natural site in the project zones.

Pest management (OP 4.09) is triggered and an Integrated Pest Management Plan (IPMP) was prepared. Project funds will be used to purchase and distribute agrochemicals throughout matching grant to the local farmer beneficiary of the project. Agribusinesses may also encourage farmer groups to use more inorganic fertilizers and pesticides. To ensure safe pest management, the Project has prepared an Integrated Pest Management Plan which includes: (i) a survey on the local bio pesticides and agronomic technical practices to reduce the impacts of pests on the agriculture value chains in the project areas; (ii) appropriate actions to reduce the exposure of farmer groups to pesticides used in agricultural production systems; (iii) guidelines to be adopted on the possibility of agrochemical application and disposal; (iv) training sessions to strengthen the capacity of different actors (farmers, local vendors, regional agricultural agents, etc.) on the use, storage and disposal of agrochemical products; and (v) a coherent budget available in the project financing with coherent monitoring system and indicators.

Safety of Dams (OP 4.37) is triggered because of the proposed rehabilitation of small irrigation infrastructures and the replacing of old hydraulic equipment/material. PADAP would not finance any new constructions or rehabilitation of large-scale irrigation facilities and dams above 15 meters or reservoir more than 3 million cubic meter; but rather small check-dams to treat lavakas (gully erosion). The borrower has available the current Small Dams Safety Manual (SDSM) prepared in 2012, approved by the Bank and publicly disclosed both in-country on May 25, 2012 and at the InfoShop on May 29, 2012. This SDSM has as main objective to harmonize and improve project operation in agriculture sector on the existing irrigation perimeters to be funded. The Small Dams Safety Manual provides basic characteristics on the type of dams, irrigation

equipment, hydraulic materials, and the forms of management of irrigation schemes, the institutional arrangement and the social and environmental clauses to be respected by Construction companies during rehabilitation and exploitation of the above hydro-agriculture infrastructures. The current Small Dams Safety Manual (SDSM) prepared in 2012 was updated for the PADAP activities. The revised SDSM is sufficient and relevant to manage and reduce the potential risks and impacts could be generated by this proposed project in the potential existing irrigation perimeters and hydraulic infrastructures to be financed.

The PADAP National Coordination Unit of the Ministry of Agriculture (MoA) is the implementing agency. The ESMF has concluded the need of some additional support to strengthen the technical capacity on both social and environmental safeguards management. It is proposed a full-time Environmental and Social Safeguards Specialist (ESSS) at national to strengthen safeguard environmental and social aspects. The National ESSS will work collaboratively with the National Office of Environment (ONE), the national authority responsible for environmental and social management and also ensure compliance with national regulation and safeguards document reviews. It will be operational at the regional office by the hiring of regional environment and social focal points. Both the PADAP National Coordination Unit and the Bank recognize that in general, the PADAP capacity in both environmental and social management is weak and needs further enhancement such as the safeguards training workshop on the safeguard framework instruments of the project.

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

During the preparation of this proposed project, intensive public consultations and participation have been held in selected project zones. These safeguard documents ESMF, RPF, IPMP, and SDSM have been approved by the RSA in December 2016 and disclosed in-country on January 07, 2017 and in the InfoShop on January 09, 2017.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	28-Nov-2016
Date of submission to InfoShop	09-Jan-2017
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
Madagascar	07-Jan-2017
Comments:	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	28-Nov-2016
Date of submission to InfoShop	09-Jan-2017
"In country" Disclosure	
Madagascar	07-Jan-2017
Comments:	

Pest Management Plan	
Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	28-Nov-2016
Date of submission to InfoShop	09-Jan-2017
"In country" Disclosure	
Madagascar	07-Jan-2017
Comments:	
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

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [×] No [ ] NA [ ]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [×] No [ ] NA [ ]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [×] No [ ] NA [ ]
OP/BP 4.04 - Natural Habitats	
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [ ] No [×] NA [ ]
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?	Yes [ ] No [ ] NA [ ]
OP 4.09 - Pest Management	
Does the EA adequately address the pest management issues?	Yes [×] No [ ] NA [ ]
Is a separate PMP required?	Yes [×] No [ ] NA [ ]
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 [×] No [ ] NA [ ]
OP/BP 4.11 - Physical Cultural Resources	
Does the EA include adequate measures related to cultural property?	Yes [×] No [ ] NA [ ]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [×] No [ ] NA [ ]
OP/BP 4.12 - Involuntary Resettlement	

Has a resettlement plan/abbreviated plan/policy framework/ process framework (as appropriate) been prepared?	Yes [×] No [ ] NA [ ]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [×] No [ ] NA [ ]
Is physical displacement/relocation expected? 2300 Provided estimated number of people to be affected	Yes [×] No [ ] TBD [ ]
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods) 2300 Provided estimated number of people to be affected	Yes [×] No [ ] TBD [ ]
OP/BP 4.36 - Forests	
Has the sector-wide analysis of policy and institutional issues and constraints been carried out?	Yes [×] No [ ] NA [ ]
Does the project design include satisfactory measures to overcome these constraints?	Yes [×] No [ ] NA [ ]
Does the project finance commercial harvesting, and if so, does it include provisions for certification system?	Yes [ ] No [×] NA [ ]
OP/BP 4.37 - Safety of Dams	
Have dam safety plans been prepared?	Yes [ ] No [×] NA [ ]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes [ ] No [×] NA [ ]
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	Yes [ ] No [×] NA [ ]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [×] No [ ] NA [ ]
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 [×] No [ ] NA [ ]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have costs related to safeguard policy measures been included in the project cost?	Yes [×] No [ ] NA [ ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [×] No [ ] NA [ ]

V. Contact point

World Bank

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VII. Approval

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