



**The World Bank**

Additional Financing Sustainable Landscape Management Project (P176449)

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

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Appraisal Stage | Date Prepared/Updated: | Report No: PIDISDSA31561

**BASIC INFORMATION****A. Basic Project Data**

Country Madagascar	Project ID P176449	Project Name Additional Financing Sustainable Landscape Management Project	Parent Project ID (if any) P154698
Parent Project Name Sustainable Landscape Management Project	Region AFRICA EAST	Estimated Appraisal Date 01-Jun-2021	Estimated Board Date 24-Jun-2021
Practice Area (Lead) Environment, Natural Resources & the Blue Economy	Financing Instrument Investment Project Financing	Borrower(s) Government of Madagascar- Ministry of Economy and Finance, Ministry of Agriculture, Livestock and Fisheries, Ministry of Environment and Sustainable Development	Implementing Agency UGP PADAP, Agriculture, Livestock and Fisheries, Ministry of Environment, Ecology and Forests, MINISTER OF WATER, SANITATION AND HYGIENE

## Proposed Development Objective(s) Parent

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

## Components

- Component 1: Information and planning
- Component 2: Investments and capacity building in the selected landscapes
- Component 3: Project Management Coordination and M&E
- Component 4: Contingency Emergency Response

**PROJECT FINANCING DATA (US\$, Millions)****SUMMARY**

Total Project Cost	
Total Financing	
of which IBRD/IDA	
Financing Gap	

**DETAILS****World Bank Group Financing**

International Development Association (IDA)	40.00
IDA Credit	40.00

**Non-World Bank Group Financing**

Environmental Assessment Category

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

**B. Background and Rationale for Additional Financing****A. *Introduction***

1. This Project Paper seeks the approval of the Executive Directors to provide an Additional Financing (AF) in the amount of US\$40 million to the Madagascar Sustainable Landscape Management Project (*Projet d'appui à l'agriculture durable par une approche paysage*, PADAP, P176449). The AF aims to fill in the gap caused by the activation of the Contingency Emergency Recovery Component (CERC) in September 2020 to provide immediate support to Madagascar's response to the Coronavirus pandemic (COVID-19). The emergency component allowed the project to respond quickly to immediate needs and combined with the acceleration of the initial project activities the project is facing a significant financing gap. The project is now delivering in a satisfactory manner and the current project funds are fully programmed.

**B. *Project Background***

2. Parent project. The Executive Directors approved the SDR 48.40 (US\$65 million equivalent) PADAP on March 23, 2017). The Project is co-financed by Euro€25 million from the French Development Agency (AFD), and US\$13.7 million from the Global Environment Facility (GEF). The Project became effective on October 26, 2017. The current closing date is August 1, 2022. The Project Development Objective (PDO) is to increase access to improved irrigation services and agricultural inputs and strengthen the integrated management of natural resources in selected landscapes by local actors and, to provide immediate and effective response to an Eligible Crisis or Emergency. The project has four components: (1) Information and Planning; (2) Investments and Capacity Building in the Selected Landscapes; (3) Project Management, Coordination, and Monitoring and Evaluation; and (4) Contingent Emergency Response Component (CERC). The project supports the strengthening of institutional



capacity to develop planning tools and sustainable Landscape Management Plans (PAGDPs), and to finance productive investments identified in the plans. According to the initial Project design, PADAP was expected to benefit 32,800 persons, and cause 14,000 ha of agriculture land benefit from improve irrigation, and 550,000 ha of land managed sustainably through landscape level planning.

**3. At the request of GoM, the World Bank Vice-President for the Africa Region (Eastern Africa) approved the activation of the CERC on September 2, 2020.** Following the February 2020 World Health Organization (WHO) declaration of COVID-19 as a public health emergency of international concern, due to the rapid increase in the number of cases outside China, and the increasing number of affected persons in Madagascar<sup>1</sup>, GoM declared a state of health emergency in March 2020 and set up strict confinement measures. In response to the pandemic, GoM also prepared a multi-sector emergency response plan for COVID-19, with support from partners. The Plan was approved by the Government on July 1, 2020. To co-finance the US\$256 million gap for the financing Plan, GoM requested an activation of the CERC at the World Bank portfolio level, for an amount of US\$123 million. These funds were reallocated from three Projects: the Sustainable Landscape Management Project (PADAP, P154698), the Integrated Growth Poles and Corridor SOP-2 (PIC.2.2, P164536), and the Integrated Urban Development and Resilience Project for Greater Antananarivo (PRODIR, P159756). The funds primarily contributed to building capacity of personnel and health facilities for testing and treatment, acquiring materials for rapid response and purchase of Personal Protective Equipment (PPE), medicines, and medical equipment. The World Bank continues to support GoM in its response to the pandemic, through anew US\$100 operation financing the procurement of vaccines is under preparation, as well as diverse included in several World Bank-financed projects. Additional information on the COVID-19 pandemic in Madagascar and World Bank support can be found in Annex 1.

**4. Reallocation of project financing to the CERC.** The COVID-19 crisis has caused a deep recession and rising poverty, especially among those with the fewest resources. Economic activity in Madagascar has been severely impacted by disruptions to global trade and tourism arrivals, and by domestic containment measures. As the Madagascar World Bank portfolio CERC which was triggered, US\$40 million in financing from the PADAP project was allocated to the health sector. The project financing supported part of the health response including: (i) coordination; (ii) strengthening disease surveillance system, including at community level, and contact tracing; (iii) developing and strengthening testing capacities (network of laboratories equipped and personnel trained); (iv) ensuring management of positive cases in hospitals and primary health care facilities (training of staff, equipment, oxygen therapy and PPEs) and ensuring continuity of essential health services (such as immunization and safe deliveries); (v) logistical support to social activities (transfers of drugs and inputs, ambulances, waste management, etc.); and (vi) communication at all levels to prevent disease spread.

**5. This financial support from the PADAP project was determinant for preparedness and response during the 2nd wave:** support for testing (8 GenExpert machines being procured and for more than US\$ 10 million of tests and laboratory reagents; contract with Pasteur Institute for testing and genomics analysis); drugs and key consumables to manage mild or severe cases (total amount US\$ 6.8 million); support to oxygen therapy (technical assistance with UNICEF and maintenance of oxygen generators in main hospitals to ensure delivery of oxygen); Personal protection equipment for health workers (more than 400,000 washable masks for community health workers; 395,000 FFP2 masks and 165,000 surgical masks, and additional protective items such as gloves,

<sup>1</sup> Madagascar registered its first case on March 22, 2020. As of April 11, 2021, a total of 28,541 cases and 506 total deaths (1.77 percent death rate) had been recorded; and 39 percent of the 149,929 tests provided were positive.



protective suits, etc..) and key equipment (85 ambulances, 6 digital X-ray, 562 tablets).

6. **PADAP Restructuring.** PADAP was restructured on December 21, 2020 to take into account the financing gap created in project components by the reallocation of US\$40 million through the CERC. Through this restructuring, PADAP focused on priority activities from the PAGDPs that would have a strong impact on the ground and could also be delivered relatively quickly, such as irrigation infrastructure, feeder road rehabilitation and multi-year contracts with protected area managers. Indicators to track progress of the emergency COVID-19 activities financed under the CERC were added to the Results Framework (RF). However, it was decided to leave the initial indicators in the RF, as they were in anticipation of additional financing to replenish the reallocation to the CERC.

### C. Parent Project Performance

7. **The Project is on course to achieving the objectives of improving agriculture practices and output and increasing sustainable management of selected landscapes.** Project achievements against its PDO include the rehabilitation of irrigation schemes for over 5,938 ha of agricultural land (42 percent of the original objective), over 174,931 ha currently under sustainable management practices (32 percent of the original objective), and over 23,600 beneficiaries already supported by the project (62 percent of the original objective). Five PAGDP have also been prepared through a highly consultative process. The achievement of the PAGDP are significant as they enjoin locally identified needs as with a broader sectoral and regional development vision.

8. **Project activities have accelerated significantly which has highlighted the financing gap.** The project has accelerated delivery of investments, particularly in Component 2, which focuses on productive activities, and has fully programmed the resources available. The activities will support improvements in agriculture productivity but will run into the limitations of available resources in the near future. Procurement tenders have been launched for works or for feasibility studies for all of the activities programmed. By the end of calendar year 2021 the project will not have sufficient resources to launch new investment activities to deliver as planned in the original document.

9. **The Project is on course to achieving the objectives of improving agriculture practices and output and increasing sustainable management of selected landscapes.** PAGDPs are akin to investment plans at a landscape level, prepared through intensive consultations with local stakeholders (such as communities, regional and local authorities, civil society, decentralized technical ministerial agencies), under the guidance of the Ministries responsible for Agriculture, Environment and Water. Once the PAGDPs were completed, the Ministries prioritized activities to be financed by the Project, ensuring that alignment with Government priorities. After a slow start largely due to the novelty of this integrated multi-sector landscape approach in Madagascar, the project has gradually improved its performance and overall implementation progress and progress towards achievement of the PDO have been rated Moderately Satisfactory since December 2020. Performance ratings for specific components, project management, fiduciary management, monitoring and evaluation and safeguards have all been consistently rated satisfactory since the inception of the project. Project disbursements increased from under US\$10 million in Fiscal Year 2020 (FY20) to US\$41.5 million in FY21, reaching a disbursement rate of 60 percent. This increase is associated with the approval of all five PAGDPs, a condition to move forward with approving certain activities and a concerted effort to accelerate investments as well as a reallocation of resources to the CERC component as part of a portfolio wide response to the COVID-19 pandemic. Both PDO and Implementation Progress ratings are expected to remain or improve in the coming months. The Project is in



compliance with all covenants, including audit and financial management reporting requirements.

10. **Project achievements.** Project achievements against its development objectives include the preparation of five integrated landscape management through a highly consultative process, as well as the rehabilitation of irrigation schemes for over 5,938 ha of agricultural land (42 percent of the original objective); the implementation of sustainable management practices on 174,931 ha (32 percent of the original objective); and the support of 23,600 beneficiaries (62 percent of the original objective).

**Component-specific performance is summarized as follows:**

11. **The project is making progress on delivering on targets in the Intermediate indicators, but they have not been fully met.** The unavailability of the PAGDPs, which determine the type of activities that will be financed under the Project, limited progress in certain areas. Since the PAGDPs are now available, the targets have been confirmed, as shown in the Results Framework, and investments are aligned with achieving the targets.

12. **Component 1: Information and planning.** The project has supported the preparation of five PAGDPs, that included a set of investments; some of these investments will be selected to be financed by PADAP. Technical assistance and analytical studies were focused on accompanying investments in priority. Important analytical work remains to be completed, through the proposed AF, including robust analyses of ecosystem service modelling that can inform landscape level decision making and payments for ecosystem services, climate-smart agriculture and climate vulnerability in landscapes, effective gender based approaches in agriculture and natural resource management, and fire management practices among others. The performance of this component is rated Satisfactory.

13. **Component 2—Investments and capacity building in the selected landscapes.** Following the validation of the PAGDPs, significant progress has been made in the rehabilitation of irrigation schemes that are delivered, underway or under technical, environment and social feasibility study. Some achievements so far include 39 community forest management committees operational (39 percent of objective) and 12 irrigation schemes managed by local water user groups (48 percent of objective). The rehabilitation of a feeder road (32 kilometers, RIP117) is underway and an additional seven feeder roads have been identified from the PAGDP and the technical feasibility studies are ongoing. With regards to improving the adoption of improved agriculture practices, a collaboration with the Agriculture Development Fund (FDA) being signed to involve a partner at the local level to improve access to agriculture inputs and small equipment. The component performance is rated Satisfactory.

14. **Component 3—Project Management Coordination and M&E.** Specific elements such as procurement and financial management are outlined below. The project has strengthened capacity at the regional level and there is effective coordination between the national and regional implementing units. With regards to monitoring and evaluation, there has been systematic tracking of both PDO level and intermediate level results indicators which point to progress towards the achievement of the PDO. Additional efforts are being made to track project implementation and the achievement of efficacy. Project Management and Monitoring and Evaluation are rated Satisfactory.

15. **Component 4—Contingency Emergency Response.** As outlined above the emergency component was activated to enable to provide resources to assist with providing health related support, providing PPE, medicines



and medical equipment of which there was a serious shortage. The support has enabled 100 percent of health facilities to have no stock-outs of PPE during the last 30 days and supported of the country in conducting 134,726 Covid-19 tests.

16. **Procurement.** The Project Implementation Unit (PIU) procurement staff are experienced and familiar with World Bank procurement guidelines and processes. They have benefited from frequent procurement training and hands-on support from the World Bank. Procurement supervision missions have reported satisfactory results. Documentation and decisions are of good quality, reliable, timely, and transparent with only minor supervision or corrections needed by the Bank. Procurement risk mitigation measures have largely been implemented. Procurement performance is rated Satisfactory.

17. **Financial Management.** The PIU has well qualified financial management (FM) staff and an adequate manual of procedures supported by a computerized accounting system. The project complies with World Bank FM requirements, such as the timely submission of quarterly Interim Unaudited Financial Reports (IFRs) and annual audit reports. FM compliance is rated Satisfactory.

18. **Environmental and social safeguards.** Framework instruments have been prepared. The Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), Integrated Pest Management Plan (IPMP), and Small-Dam Safety Manual (SDSM) are of good quality and are being implemented in a satisfactory manner, including through the development of site specific Environmental and Social Management Plans (ESMP), and the inclusion of environmental and social (E&S) clauses in bidding documents, that are also implemented satisfactorily. No resettlement has taken place and thus there has been no need for a Resettlement Action Plan (RAP) to date. Dedicated staff have been hired to cover environmental and social safeguards and have adequate capacity and central and regional levels. Overall safeguards compliance is rated Satisfactory.

19. **Risks.** The overall risk rating of the project was High at the beginning of the project as the project is complex (multisector), the approach was new, and the capacity of the PIU was low. Over the course of implementation these risks have been largely mitigated and as of the April 14, 2021 Implementation Status Report (ISR), the overall risk rating was reduced to Moderate. The landscape approach has been broadly embraced by the client and stakeholders and the different ministries involved were able to effectively collaborate. Additionally, the four regional PIUs have demonstrated their capacity to lead and deliver the various activities and their performance continues to improve. As far as the fiduciary risks are concerned, the risks of substantial delays in procurement procedures and processes, have been reduced or minimized, with particularly helpful guidance and support from the World Bank. However, FM risks remain substantial as is consistent across projects in Madagascar.

#### **D. Rationale for Additional Financing**

20. The AF will be used to fill the financing gap caused by the activation of the CERC and will allow the project to fully deliver on its initial objective. With the acceleration in delivery the project will soon face the constraints of not being able to launch new tenders due to limitations of available financing.

#### **C. Proposed Development Objective(s)**

Original PDO



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

Current PDO

No change

#### Key Results

Indicator Name	PBC	Baseline	End Target
<b>Area provided with new/improved irrigation or drainage services (Hectare(Ha), Corporate)</b>			
Area provided with irrigation and drainage services (ha) (CRI, Hectare(Ha))		0.00	14,000.00
<b>Farmers adopting improved agricultural technology (Number, Corporate)</b>			
Clients who have adopted an improved agr. technology promoted by the project (CRI, Number)		0.00	12,500.00
<b>Land area under sustainable landscape management practices (Hectare(Ha), Corporate)</b>			
Land area where sustainable land mgt. practices were adopted as a result of proj (CRI, Hectare(Ha))		0.00	550,000.00
<b>Direct project beneficiaries (Number, Custom)</b>			
Direct project beneficiaries (Number)		0.00	50,000.00

#### D. Project Description

21. **The AF will replenish funds to fill the financing gap for the originally planned activities.** Through the request of May 19, 2021, GoM requested that the AF be used to ensure that adequate resources are allocated to activities that ensure the landscape approach, such as the stabilization of gully erosion, *lavaka* in Malagasy, landscape restoration, water management, hillside stabilization, agroforestry, forest fire management, as well as investments in improved agriculture outputs through an integrated landscape approach. These activities will consolidate the impact of investments in irrigation and road rehabilitation. They will also ensure a cohesiveness to investments as the landscape management plans outline “bundles” of activities where upstream, downstream and in between are all taken into account. Without the AF, financed activities will be productive and useful but will not fully integrate the landscape approach. There will be no impact on the scope of GEF funded activities and no changes to GEF financing and component activities. Nevertheless, there have been concerted efforts to accelerate disbursement of GEF-funded activities, including the signing of several large contracts for reforestation and protected area management that are expected to be reflected in disbursement levels in the coming months.

22. **The AF will also finance analytical work,** such as the analysis of ecosystem modelling that can inform



landscape level decision making and payments for ecosystem services; climate-smart agriculture and climate vulnerability in landscapes; effective gender-based approaches in agriculture and natural resource management; and fire management practices, among others.

23. **The identified investments will capitalize on the recently completed Advisory Services and Analytics (ASA) on irrigation**, “Unlocking the potential of irrigation schemes in Madagascar” (P168000)<sup>2</sup>. This study recommended: (i) investment in small and medium irrigation schemes appears to be most sustainable 60 percent of schemes are functional for small and medium schemes vs. 45 percent for large schemes; (ii) modernizing infrastructure design with sand traps at the headworks of the irrigation system and farmer-led desilting in their own canal system, to reduce operational and maintenance cost of the system and, therefore, increase the profitability; and (iii) accompanying infrastructure rehabilitation with a complementary rice intensification measure. These recommendations have all been built into the design of activities to be financed under the AF.

24. **Extension of closing date:** It is proposed that the AF is given a 12-month extension, until August 1, 2023, to allow adequate time to fully implement project activities. COVID-19 restrictions have slowed down some the implementation of some activities, but this has varied by region. The current circumstances seem to be stabilizing and with the focus on larger contracts (for certain activities) with partners that have an existing presence, the project is expected to deliver the results with the proposed extension.

25. **Changes to components and cost:** The US\$40 million AF will be allocated to the components that will support activities selected from the PAGDPs. A few changes in sub-component financing reflect two critical shifts that have occurred since the parent project preparation, namely that the PAGDPs, which were not available at the time of Board approval) have identified specific critical investment needs that have a higher value than previously estimated.

26. **Component 1: Information and planning.** Following the validation of five PAGDPs in June 2020 it is expected that under Component 1, the Project will support coordinated and integrated management of landscapes at local, municipal and regional levels as well as at the national level: (i) at the local level, establish new local community organizations and build the capacity of existing ones; support the organization of COBAs, WUAs and livestock producer groups; (ii) at the municipal and regional level, support the integration of water resources, forest resources and conservation areas management plans into land use and other territorial plans; (iii) at the national level, build FDA/FRDA’s project development and management capacity; support CSAs; provision of technical assistance; support forest resources surveillance and monitoring; and (iv) strengthen the capacity of CSAs. The project will also establish a spatial information system and prepare and disseminate five policy briefs, one for each landscape. Component 1 financial allocation will increase from US\$2.75 to US\$3.80 million.

27. **Component 2: Investments and capacity building in the selected landscapes.** Following the validation of PAGDPs in June 2020, it is expected that under Component 2, the Project will support to address the constraints that cause low productivity and resilience of systems through: (i) targeted investments in the five selected landscapes; (ii) Targeted investments in feeder road maintenance; (iii) enhance linkages between producers and the market and developing silvicultural approaches in forestry; and (iv) support to local producers to address the

<sup>2</sup> Report No: AUS0002289



constraints that cause low productivity and resilience of agriculture production systems; introduce new technology; strengthen technical capacity and skills; improve the profitability and sustainability of natural forests and plantations; and pilot Payment for Environmental Services (PES) in select locations within the selected landscapes. The project will deliver 400,00 ha under conservation with 150,000 ha in protected areas with management effectiveness scores over 70, 100 COBAs operational, 25 irrigation systems managed by Water User Associations and 28 decentralized technical institutions operational. Component 2 financial allocation will increase from US\$55.93 to US\$93.8 as in the original project however with slight adjustments between sub-components. Since the bulk of funds reallocation to the CERC came from Component 2, the AF will mostly replenish this Component. Amounts tentatively allocated, at the time of appraisal, for capacity building, support to private sector partnerships, and support for local partnerships have been reduced, based on the specific priorities identified in the PAGDPs. For example, support to local producers was identified as a much higher need than anticipated, in part due to COVID-19 economic recovery. However, the nature of the support and funding allocated will only require minor adjustments in the budget of the relevant Subcomponents and the target indicated in the RF are achievable.

28. **Component 3: Project Management Coordination and M&E.** Component 3 design and financial allocation (US\$8.37 million) will increase by \$1.08 million to allow for the additional year of implementation and to cover operational and monitoring costs at the national and regional levels.

29. **Component 4: Contingency Emergency Funds.** Component 4 financial allocation (US\$40 million) will remain unchanged.

30. The table below details component and sub-component costs from the initial project allocation, allocations following restructuring with CERC allocation, and current project allocations with AF.

Table 1: Project Cost by Component

Component/ Subcomponent	Original Allocation (\$ million)	Reallocation after CERC activation (\$ million)	Proposed allocation with AF (\$ million)	Action
1. Information and Planning	4.88	2.75	3.80	Revised
2. Investments and Capacity building in target landscapes	93.80	55.93	93.80	Revised
2.1. Capacity Building	10.72	2.26	7.52	Revised
2.2 Productive Investments	75.23	45.81	76	Revised
2.2.1 Infrastructure	46.58	37.03	55.4	Revised



2.2.2. Support for private sector partnerships	7.38	1.09	2.43	Revised
2.2.3 Support for local producers	21.26	7.69	18.17	Revised
2.3 Management of critical ecosystems and Protected Areas	7.86	7.86	9.56	Revised
3. Project Management	8.37	8.37	9.45	No change
4. Contingency Emergency Response	0	40	40	No change
Total	107.06	107.06	147.06	

31. **Application of safeguards policies.** As per guidance from OPCS3 , project covered by Safeguards Policies that have triggered CERCs in response to the COVID-19 emergency may process an additional financing to cover the financing gap created by the CERC. This AF will cover the financing gap created by the CERC and is only to replenish the funds which have been allocated to CERC, not for scale-up activities.

32. **Institutional Arrangements.** The institutional arrangements for the AF remain unchanged from the parent project. The project will continue to be led by the PIU at the national level and will be supported by the Regional Implementation Units (RIUs) at the regional level. The PIU and the RIUs support all aspects of project management, covering fiduciary management, M&E, knowledge generation and management, procurement, communication, and implementation and monitoring of mitigation measures related to safeguards. The co-implementation between ministries especially at the regional levels, was a bit cumbersome at first, but has proven effective through implementation. It is a novel approach in Madagascar but has highlighted the links between investments and activities and interconnected impacts that agriculture and environment related activities have on each other. The PIU is responsible for overall project implementation of all components and sub-components, subcomponent 2.3 in particular is executed in close collaboration with the Ministry responsible for the environment.

33. **Climate co-benefits.** Like the parent project, the AF will help reduce the negative impacts of climate change. Subcomponent 2.3 fully focuses on restoring or maintaining environmental services (including watershed functions); maintaining resilience of forest systems; maintaining productivity of forest systems, and increasing use of trees, woodlots, forests, wood and non-wood products in rural adaptation strategies. For the investments in improving agriculture output and practices (Subcomponents 2.1 and 2.3) the project adopts a landscape approach and covers four main land use types that each have target interventions in each land use type have potential to reduce GHG emission and carbon sequestration in soil and biomass. The project is expected to have a sizable mitigation and adaptation potential, which will be demonstrated through improved irrigated rice management practices ; alternate wetting and drying and reduction of methane emission; improved livestock management

<sup>3</sup> COVID-19 IPF Project Processing and Implementation: March 23, 2020



(impacting GHG intensity by increasing productivity) and improved input use to reduce GHG emissions, including rehabilitation of irrigation systems. On the slopes where contours and terraces are, farmers typically engage in livestock, diverse agricultural and agroforestry production, the project will introduce improved agronomic practices for horticulture and crop production. On higher hillside where reforestation and afforestation through forestry and agroforestry are possible, the project plans to introduce agroforestry plantations, reduced use of fire, reduced deforestation; afforestation of plantations; reduced land degradation which will have a high carbon sequestration and GHG mitigation potential. In protected areas, it is expected that project will support the reduction of deforestation. It is estimated that approximately US\$72.5 million of the US\$93.8 from component 2 will support activities that contribute to adaptation and mitigation co-benefits of which approximately US\$45 million of the \$65 million of IDA financing (without considering the \$40 million being allocated to the CERC which is for emergency response).

**34. Results Framework.** The PDO statement has not been changed. The additional activities that will be carried out under the AF are aligned with the PDO. Due to the change of focus on priority activities, the number of beneficiaries has been revised from 32,800 to 50,000 and the extent of irrigation schemes has also been increased from 14,000 to 20,000 ha. There will be additional beneficiaries resulting from activities in relation to the extension of further feeder road rehabilitation. With the development of the landscape management plans and the strong demand for certain activities the number of beneficiaries became clearer. The demand for support to small-scale farmers, road irrigation rehabilitation and road rehabilitation allowed the project to focus on activities that reached more people than estimated at the outset. Nonetheless, these activities are still within the target landscapes whose impacts are already factored into the expected outcomes of the project. The objectives remain the same but some of the means for attaining them are adjusted to be more effective, such as working with partners to deliver support to local agriculture productivity rather than through the private sector as initially anticipated. Similarly, the areas under sustainable landscape management which covers restoration, hillside stabilization and agroforestry systems may not be met without the AF thus the target remains the same. The definition of the monitoring system for protected area management efficiency has been modified to include the two types of systems used (Management Effectiveness Tracking Tool and Effectiveness Management Indicator—IEG by the acronym in French), for which the rating scales are similar. As the AF is seeking an extension of closing date the results appear as modified based on the delivery schedule that has been extended by 12 months.

## E. Implementation

### Institutional and Implementation Arrangements

**35. Institutional Arrangements.** The institutional arrangements for the AF remain unchanged from the parent project. The project will continue to be led by the PIU at the national level and will be supported by the Regional Implementation Units (RIUs) at the regional level. The PIU and the RIUs support all aspects of project management, covering fiduciary management, M&E, knowledge generation and management, procurement, communication, and implementation and monitoring of mitigation measures related to safeguards. The co-implementation between ministries especially at the regional levels, was a bit cumbersome at first, but has proven effective through implementation. It is a novel approach in Madagascar but has highlighted the links between investments and activities and interconnected impacts that agriculture and environment related activities have on each other. The PIU is responsible for overall project implementation of all components and sub-components, subcomponent 2.3 in particular is executed in close collaboration with the Ministry responsible for the environment.

**F. 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.

**G. Environmental and Social Safeguards Specialists on the Team**

Paul-Jean Feno, Environmental Specialist  
Andrianjaka Rado Razafimandimby, Social Specialist  
Brandon Enrique Carter, Environmental Specialist

**SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	
Performance Standards for Private Sector Activities OP/BP 4.03	No	
Natural Habitats OP/BP 4.04	Yes	
Forests OP/BP 4.36	Yes	
Pest Management OP 4.09	Yes	
Physical Cultural Resources OP/BP 4.11	Yes	
Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	Yes	
Safety of Dams OP/BP 4.37	Yes	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	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:

Activities proposed for the AF have similar type and nature as the parent project. 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 propagation as well as the transmission and propagation of COVID-19 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. The project involves civil works components that entail significant social, SEA and GBV risks for the population living in its area of influence. Even if no case has been registered to date for the parent project, the project will continue to pay attention to GBV which is rated substantial. 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. There has been nor physical displacement, nor economic displacement to date with the parent project, and communities have privileged voluntary donation, mainly for activities related to the rehabilitation of irrigation infrastructures as they are benefitting directly from the project. Indeed the parent project has adopted guidance from ESS5 related to land donation and the resettlement policy framework has been updated to consider these provisions for the project.

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 (except the GBV risk which is maintained as substantial ), 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. 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 seven 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).

The project will funds several ongoing subprojects in which ESMPs have been already developed, cleared and disclosed (16 ESMPs have been developed and disclosed for the parent project). Some subproject are still on



identification process. And because of similarity of nature and type of activities of the project compared to the parent project, the existing Environmental and Social Management Framework (ESMF) that includes an Environmental and Social Management Plan (ESMP), the Resettlement Policy Framework (RPF), the Pest Management Plan (PMP) and updated the Small Dam Safety Manual, all of which have been approved by the RSA in December 2016 remain valid for this additional financing. The same safeguards policies will apply to the AF and no additional safeguards policies will be triggered. These instruments have been tailored to the activities developed in the Parent Project. These instruments remain operational to manage the environmental and social risks and impacts that could be generated by these activities. However ESMF and RPF have been updated to include and address measures related to COVID 19 and GBV issues.

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 agriculture activities under the agribusiness component with the increasing of pesticide usages, 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 N°2004-167 (MECIE). This is fairly effective and institutional capacity has been developed during the implementation of the parent project 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 all safeguards instruments (ESMF, RPF). 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. Those instruments were prepared during parent project preparation and are updated to include additional considerations for Covid-19, GBV/SEA/SH and also for clarification of land acquisition, and mainly land donation process into the project.

Environmental and Social Management Framework (ESMF) has been prepared under the parent project, and updated



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 project team has also prepared 16 site-specific ESMP to date of good quality and consistent with the framework documents. The type and nature of ESMP anticipated for activities under the AF are consistent with those already prepared under the parent project. 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 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). 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 updated ESMF also consider measures and mitigation related to Gender based violence/Sexual Exploitation Abuse and sexual harassment (GBV/SEA-SH), and COVID 19. 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. During the implementation of the Parent project, the project's environmental management remains rated "satisfactory" with substantial to moderate environmental and social risks. Sub-projects have been prepared with robust E&S screening forms and ESMPs that are consistent with the project framework documents. Bidding documents and contractor contracts include appropriate environmental and social clauses. The proposed activities in this additional financing are similar to those under the Parent project. The updated ESMF will be disclosed prior appraisal both in-country and in the World bank web site.

Similarly, a Resettlement Policy Framework has been prepared for the parent project, and updated to guide the mitigation of safeguards issues around Involuntary Resettlement and also the RPF will be used to prepare a site-specific RAP. 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, Even though the project is under safeguard policy, guidance from the ESF on voluntary donations has been proactively included in the project. The Resettlement Policy Framework has been updated to guide subsequent preparation of site-specific RAP if there is a need. To date no RAP have been required and the activities proposed for the AF do not foresee the need for any. 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 has been prepared through the FCPF REDD+ Readiness Grant (P124655). The updated RPF will be disclosed prior appraisal both in-country and in the World bank web site.

For OP 4.36, the project activities are 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. The borrower will avoid impacts on cultural heritage. The Physical and Cultural Resources including archaeological relics, fossils, human graves, sacred trees or groves that may be encountered will follow Chance Finds Procedures as elaborated in the ESMF (mainly in annex 9), and will be considered into all subsequent ESMPs that will be prepared; they will also be included as a requirement in civil works bidding documents.



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. Under the Parent Project, training on the project's Integrated Pest and Pesticide Management Plan (IPMP) was conducted for farmer trainers, vendors, and regional technicians in five project intervention sites. The monitoring program and other training sessions on IPM activities prior to pesticide use are underway in manner satisfactory.

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, Livestock and Fisheries is the implementing agency. With the current Parent Project, the Project Implementation Unit is composed of operational and experienced Environmental and social safeguard specialist at central level and supported by an Environmental and social Specialist in each regional office. In the Parent Project, the screening of sub-projects has been done by the safeguard environmental and social Specialist, who is part of the Project Implementation Unit. The environmental and social specialist in the PIU is in charge of the preparation of all required safeguard instruments through the sample of ToRs proposed in the ESMF and RPF. The safeguard environmental and social specialist are responsible for the procurement of consultants to prepare them, supervise the consultants and it are responsible for the monitoring of the implementation of the ESMPS, PMPs and RAPs in the project areas. The safeguard specialists also 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. The environmental and social specialist 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. Under the Parent Project, the project's E&S institutional arrangement is operational, the Grievance redress Mechanism is also operational with a coherent environmental and social



monitoring system and a continued capacity building program for regional offices, consultant firms and enterprises on the implementation of the project's environmental and social instruments: from preparation to implementation.

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 the parent project project, intensive public consultations (with central and sectoral ministries, NGO, regional and local authorities in targeted areas, local communities) and participation have been held in selected project zones. For the Additional financing consultations were mainly conducted with stakeholder from the Ministry of Agriculture, Livestock and Fisheries, and the Ministry of Economy and finances. The 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 World Bank External website on January 09, 2017. The IPMP, and SDSM remain valid for this AF. The updated ESMF, and RPF will be disclosed in country and in World bank web site prior to appraisal.

**B. Disclosure Requirements (N.B. The sections below appear only if corresponding safeguard policy is triggered)****Environmental Assessment/Audit/Management Plan/Other**

Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
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**"In country" Disclosure****Resettlement Action Plan/Framework/Policy Process**

Date of receipt by the Bank	Date of submission for disclosure
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**"In country" Disclosure****Pest Management Plan**

Was the document disclosed prior to appraisal?	Date of receipt by the Bank	Date of submission for disclosure
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"In country" Disclosure

**C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting) (N.B. The sections below appear only if corresponding safeguard policy is triggered)**

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