

# AFRICAN DEVELOPMENT BANK GROUP



## PROJECT: POWER TRANSMISSION NETWORK REINFORCEMENT AND INTERCONNECTION PROJECT IN MADAGASCAR - PHASE II (PRIRTEM-II)

### COUNTRY: MADAGASCAR

#### PROJECT APPRAISAL REPORT

Date: October 2020

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## **MADAGASCAR**

### **POWER TRANSMISSION NETWORK REINFORCEMENT AND INTERCONNECTION PROJECT IN MADAGASCAR - PHASE II (PRIRTEM-II)**

**RDGS/PESD/COMG/RDGE**

November 2020

Translated document

## Table of contents

<a href="#">Table of Contents</a> .....	i
<a href="#">List of Tables</a> .....	i
<a href="#">Currency Equivalents</a> .....	i
<a href="#">Fiscal Year</a> .....	i
<a href="#">Weights and Measures</a> .....	i
<a href="#">Abbreviations and Acronyms</a> .....	ii
<a href="#">Project Information</a> .....	iv
<a href="#">Executive Summary</a> .....	v
<a href="#">Results-Based Logical Framework</a> .....	vi
<a href="#">1. STRATEGIC THRUST AND RATIONALE</a> .....	1
<a href="#">1.1. Project Linkages with Country Strategy and Objectives</a> .....	1
<a href="#">1.2. Rationale for the Bank’s Intervention</a> .....	1
<a href="#">1.3. Aid Coordination</a> .....	2
<a href="#">2. PROJECT DESCRIPTION</a> .....	3
<a href="#">2.1. Project Components</a> .....	3
<a href="#">2.2. Technical Solutions Adopted and Alternatives Explored</a> .....	4
<a href="#">2.3. Project Type</a> .....	4
<a href="#">2.4. Project Cost and Financing Arrangements</a> .....	4
<a href="#">2.5. Project Area and Beneficiaries</a> .....	6
<a href="#">2.6. Participatory Approach to Project Identification, Design and Implementation</a> .....	6
<a href="#">2.7. Bank Group’s Experience and Lessons Reflected in the Project Design</a> .....	7
<a href="#">2.8. Key Performance Indicators</a> .....	7
<a href="#">3. PROJECT FEASIBILITY</a> .....	7
<a href="#">3.1. Economic and Financial Performance</a> .....	7
<a href="#">3.2. Environmental and Social Impact</a> .....	9
<a href="#">3.3. Climate Change</a> .....	10
<a href="#">3.4. Gender</a> .....	10
<a href="#">3.5. Social</a> .....	11
<a href="#">3.6. Fragility and Resilience</a> .....	12
<a href="#">4. IMPLEMENTATION</a> .....	12
<a href="#">4.1. Implementation Arrangements</a> .....	12
<a href="#">4.2. Procurement Arrangements</a> .....	12
<a href="#">4.3. Financial Management and Disbursements</a> .....	13
<a href="#">4.4. Monitoring and Evaluation</a> .....	14
<a href="#">4.5. Governance</a> .....	14
<a href="#">4.6. Sustainability</a> .....	15
<a href="#">4.7. Risk Management</a> .....	15
<a href="#">4.8. Knowledge Building</a> .....	16
<a href="#">5. LEGAL FRAMEWORK</a> .....	16
<a href="#">5.1. Legal Instrument</a> .....	16
<a href="#">5.2. Conditions Associated with the Bank’s Intervention</a> .....	16
<a href="#">5.3. Compliance with Bank Policies</a> .....	19
<a href="#">6. CONCLUSION AND RECOMMENDATION</a> .....	19
<a href="#">Annex I. Comparative Socioeconomic Indicators</a> .....	I
<a href="#">Annex II. Table of AfDB Portfolio in the Country</a> .....	II
<a href="#">Annex III. Major Related Projects Financed by the Bank and Other Development Partners of the Country</a> .....	IV
<a href="#">Annex IV. Rationale for the Counterpart Funding Level of Less Than 10%</a> .....	V
<a href="#">Annex V. Summary Note on the Assessment of Drivers of Fragility and Recommendations for Building Madagascar's Resilience</a> .....	VII
<a href="#">Annex VI. Map of the Project Area</a> .....	XII
<a href="#">Annex VII: Environmental and Social Compliance Note</a> .....	XIII

## List of Tables

	Page
Table 2-1: Components of PRIRTEM-II	3
Table 2-2: Estimated Project Cost by Component	5
Table 2-3: Project Sources of Financing	5
Table 2-4: Project Cost by Expenditure Category	5
Table 2-5: Expenditure Schedule by Component	6
Table 3-1: Project Key Economic and Financial Data	8
Table 3-2: Sensitivity Test Results	8
Table 4-1: Risks Identified and Mitigation Measures	14

## Currency Equivalents

(October 2020)

UA 1 = MGA 5,464.24

UA 1 = EUR 1.20223

UA 1 = USD 1.40757

## Fiscal Year

1 January – 31 December

## Weights and Measures

1 kilovolt (kV)	=	1,000 Volts
1 kilovolt-Ampere (kVA)	=	1,000 VA
1 kilowatt (kW)	=	1,000 Watts
1 Megawatt (MW)	=	1,000 kW
1 kilowatt-hour (kWh)	=	1,000 Wh
1 Megawatt-hour (MWh)	=	1,000 kWh
1 Gigawatt-hour (GWh)	=	1,000 MWh

m	metre	KOE	kilogramme of oil equivalent
cm	centimetre = 0.01 metre	kV	kilovolt = 1,000 volts
mm	millimetre = 0.001 metre	KVa	kilovolt ampere (1,000 Va)
km	kilometre = 1,000 metre	KW	kilowatt = 1,000 watts
m <sup>2</sup>	square metre	GW	gigawatt (1,000,000 kW or 1,000 MW)
cm <sup>2</sup>	square centimetre	MW	megawatt (1,000,000 W or 1,000 kW)
km <sup>2</sup>	square kilometre = 1,000,000 m <sup>2</sup>	KWh	Kilowatt-hour (1,000 Wh)
ha	hectare = 10,000 m <sup>2</sup>	MWh	Megawatt-hour (1,000 KWh)
t (t)	metric tonne (1,000 kg)	GWh	Gigawatt-hour (1,000,000 KWh)

## Abbreviations and Acronyms

ADER	Rural Electrification Development Agency
ADF	African Development Fund
AFD	French Development Agency
AfDB	African Development Bank
APD	Detailed Preliminary Design
APS	Summary Preliminary Design
ARP	Abbreviated Resettlement Plan
CBDs	Competitive Bidding Documents
CoRP	Compensation and Resettlement Plan
CPIA	Country Policy and Institutional Assessment
CRP	Comprehensive Resettlement Plan
CSP	Country Strategy Paper
EIB	European Investment Bank
EIRR	Economic Internal Rate of Return
ENPV	Economic Net Present Value
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EU	European Union
FIRR	Financial Internal Rate of Return
FNPV	Financial Net Present Value
FSF	Fragile States Facility
GEF	Global Environment Facility
GoM	Government of Madagascar
GW	Gigawatt
GWh	Gigawatt-hour
IMF	International Monetary Fund
INSTAT	National Institute of Statistics
JIRAMA	Jiro sy rano Malagasy (Madagascar water and power utility)
MAHTP	Ministry of Planning, Housing and Public Works
MEDD	Ministry of Environment and Sustainable Development
MEF	Ministry of Economy and Finance
MEH	Ministry of Energy and Hydrocarbons
MPPSP	Ministry of Population, Social Protection and Women's Empowerment
MTTM	Ministry of Transport, Tourism and Meteorology
MW	Megawatts
MWh	Megawatt-hour
NPE	New Energy Policy

NPV	Net Present Value
OFID	OPEC Fund for International Development
ONE	National Environmental Agency
ORE	Electricity Regulation Agency
PACE	Economic Competitiveness Support Programme
PAH	Small Hydropower Projects
PAP	Project-Affected Persons
PCR	Project Completion Report
PEJAA	Programme to Promote Youth Entrepreneurship in Agriculture and Agro-Industry
PEM	Madagascar Emergence Plan
PIU	Project Implementation Unit
PND	National Development Plan
PPF	Project Preparation Facility
PRCA	Procurement Risk Capacity Assessment
PRSP	Poverty Reduction Strategy Paper
PSC	Project Steering Committee
RIA	Antananarivo Interconnected Network
RIT	Toamasina Interconnected Network
SSN	Social Safety Net
TFPs	Technical and Financial Partners
TSF	Transition Support Facility
UA	Unit of Account
WB	World Bank

## Project Information

### Client Information

<b>Borrower</b>	:	Republic of Madagascar
<b>Executing Agency</b>	:	Ministry of Energy and Hydrocarbons (MEH)

### Financing Plan

Source	Amount in UA million	Instrument
African Development Fund (ADF)	20.000	Loan
ADF Transition Support Facility (TSF (Pillar I))	10.000	Loan
European Investment Bank (EIB)	38.785	Loan (parallel)
Opec Fund for International Development (OFID)	9.237	Loan (joint)
Government of Madagascar (GoM)	5.960	Own Funds (counterpart funding)
<b>Total Cost</b>	<b>83.982</b>	

### ADF and TSF Loan Financial Information

Instrument	ADF	TSF
Loan currency	UA	UA
Interest rate	N/A	N/A
Commitment fee*	0.50%	0.50%
Other charges*	0.75% (Service charge)	0.75% (Service charge)
Tenor	40 years	40 years
Grace period	10 years	10 years
EIRR, ENPV (baseline scenario)	31%, EUR 170 million	
FIRR, FNPV (baseline scenario)	29%, EUR 162 million	

*\*if applicable*

### Timeframe – Key Milestones (expected)

Project approval by the Board	9 December 2020
Signing of the Loan Agreement	December 2020
Loan effectiveness	May 2020
Project completion	December 2025
Last disbursement	March 2026
Last reimbursement	December 2076

## Executive Summary

<p><b>Project Overview</b></p>	<p>The Power Transmission Network Reinforcement and Interconnection Project in Madagascar-Phase 2 (PRIRTEM-II) comprises: (i) the construction of a 135 km, 220 kV double-circuit interconnection line, with a capacity of 300 MW, between the Tana Sud 3 (TS3) and Vinaninkarena substations, via the Antanifotsy substation; (ii) the construction of the TS3 220/90/20 kV and Vinaninkarena 220/63/20 kV transformer substations; and (iii) the electrification of 19 villages in the Soanindrariny, Ambohidranandriana, Ambatomena and Ambohimiarivo municipal councils, representing 1,000 households. The expected outcomes of this investment operation are as follows: (i) increase in the coverage of the country's interconnected power grid; (ii) integration of major hydropower production facilities, in particular the future Sahofika power plant (192 MW); (iii) reduction of the harmful effects of fossil fuel-based power production on the environment; (iv) improved electricity access to the country and especially in the project area; and (v) job creation, knowledge transfer and capacity building for the power sector staff and particularly JIRAMA employees. The project is estimated to cost UA 83.982 million and will be implemented over 60 months (2021-2025).</p>
<p><b>Needs Assessment</b></p>	<p>Madagascar has a huge but under-developed renewable energy potential. Less than 3% of the country's hydropower potential (7,800 MW) is untapped. There is also great potential for the development of solar energy (around 2,800 hours of sunshine per year) and wind power (estimated at 2,000 MW). However, the national electricity access rate is only 15%. By helping to interconnect Madagascar's power grids, PRIRTEM-II will strengthen JIRAMA's power grid, thereby increasing the renewable energy transmission and evacuation capacity and providing access to more reliable and lower-cost energy. The new 220 kV line will allow the integration of the renewable energy that will be produced notably by the Sahofika hydropower plant. It is worth noting that in promoting this hydropower project, the Bank is involved in both the public and private sectors.</p>
<p><b>Project Impact</b></p>	<p>The implementation of PRIRTEM-II will help to reduce the power deficit of the Antananarivo interconnected network (RIA) through the integration of new power plants, including Sahofika with a capacity of 192 MW and an output of nearly 1,500 GWh per year. This power plant will help to prevent the emission of about 290,505 tonnes of CO<sub>2</sub>eq per year in the scenario without change in land use and 217,000 tonnes of CO<sub>2</sub>eq per year in the scenario with change in land use. The project will also electrify 19 villages in the Soanindrariny, Ambohidranandriana, Ambatomena and Ambohimiarivo municipal councils, providing electricity access to about 42,000 inhabitants of the area. Furthermore, the project will improve JIRAMA's financial situation thanks to the significant reduction in production costs that will be achieved by replacing very expensive thermal energy with renewable energies and by increasing the number of customers and sales. Lastly, PRIRTEM-II is expected to create more than 300 direct jobs, 20% of which will be held by women.</p>
<p><b>Bank's Value-Added</b></p>	<p>The Bank is the lead project donor. It financed all preparatory activities - feasibility studies, detailed preliminary project design (APD), environmental and social assessment - through the ADF Project Preparation Facility (PPF). The Bank has been involved in the sector since 2015 and actively participated in the preparation, structuring and mobilization of resources for PRIRTEM-I, which was approved by the Board of Directors in December 2019 and is being implemented. The Bank is best positioned to carry out this project because it is heavily involved in the power sector in Madagascar. Moreover, the Bank has extensive expertise in the development of power transmission and rural electrification infrastructure.</p>
<p><b>Knowledge Building</b></p>	<p>The Project Implementation Unit (PIU) will set up a monitoring and evaluation system to enable the Bank and other stakeholders to draw lessons from implementing the project. The Directorate General for Energy at the Ministry of Energy and Hydrocarbons (MEH), where the PIU is located, will make an inventory of and update the baseline data that will be used as performance indicators or flags in the quarterly progress reports. The project's main sources of information are the following reports: (i) monitoring and evaluation; (ii) Bank supervision missions; (iii) works supervision and monitoring missions undertaken by the Consulting Engineer; (iv) financial audits; and (v) environmental and social audits. The lessons and insights derived from the various reports will be used by the country and the Bank in designing and implementing future projects.</p>

## Results-Based Logical Framework

A PROJECT INFORMATION						
PROJECT NAME AND SAP CODE: Power Transmission Network Reinforcement and Interconnection Project in Madagascar - Phase 2 (PRIRTEM-II) - P-MG-F00-006				COUNTRY/REGION: MADAGASCAR/RDGS		
PROJECT OBJECTIVE: Strengthening and interconnection of Madagascar's power transmission networks						
PROJECT ALIGNMENT:	a) Country/regional strategy: CSP 2017 – 2021/N/A					
	b) Bank Priority/Sector Strategy: Development of energy and transport infrastructure to support inclusive growth/New Energy Deal for Africa (2016-2025) and the Bank's Long-Term Strategy (2013-2022) / Climate Change Action Plan for 2016 - 2020.					
	c) Alignment indicators: National electricity access rate (%); Production cost per kWh (EURc/kWh)					
B RESULTS MATRIX						
DESCRIPTION OF THE OUTCOME CHAIN AND INDICATORS	CMR INDICATOR	UNIT	BASELINE (2018)	TARGET AT COMPLETION (2026)	MEANS OF VERIFICATION	REPORTING FREQUENCY
<b>OUTCOME 1: Extension of the country's interconnected power network coverage</b>						
OUTCOME 1.1: Additional transmission capacity (RIA-Antsirabé)	<input type="checkbox"/>	MW	0	300	JIRAMA annual report/half-yearly supervision mission report	Annual/half-yearly
<b>OUTCOME 2: Improved electricity access in the project area</b>						
OUTCOME 2.1: Additional number of villages electrified	<input type="checkbox"/>	U	0	19	ADER annual report/supervision mission report	Annual/half-yearly
OUTCOME 2.2: Households with a new electricity connection (including % headed by women)	<input checked="" type="checkbox"/>	Thousands	0	1.00	ADER annual report/Supervision mission report	Annual/half-yearly
OUTCOME 2.3: Households with new electricity connection (% of women)	<input type="checkbox"/>	U	0	42,000 (49.99% of them women-headed)	ADER annual report/supervision mission report	Annual/half-yearly
<b>OUTCOME 3: Reduced adverse environmental impacts of power generation</b>						
OUTCOME 3.1: Integrated renewable electrical power	<input checked="" type="checkbox"/>	MW	0	192	JIRAMA annual report/supervision mission report	Annual/half-yearly
OUTCOME 3.2: Reduced net CO2 emissions (without change in land use) <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	tons/an	1,116,000	825495	JIRAMA annual report/supervision mission report	Annual/half-yearly
<b>OUTCOME 4: Job creation and capacity building</b>						
OUTCOME 4.1: Direct jobs created (% for women)	<input checked="" type="checkbox"/>	U	0	300 (20% for women)	JIRAMA annual report/supervision mission report	Annual/half-yearly

OUTCOME 4.2: Persons trained (% of women) ☒	☒	U	0	100 (30% of them women)	JIRAMA annual report/supervision mission report	Annual/half-yearly
<b>I OUTPUT 1: Power transmission line built</b>						
OUTPUT 1.1: Length of 220 kV lines built	☐	Km	0	135	JIRAMA annual report/supervision mission report	Annual/half-yearly
OUTPUT 1.2: 220 kV transformer substations built	☐	U	0	2	JIRAMA annual report/supervision mission report	Annual/half-yearly
OUTPUT 1.3: New or improved power transmission lines	☒	Km	2,803	3,112	JIRAMA annual report/supervision mission report	Annual/half-yearly
<b>I OUTPUT 2: Rural electrification networks constructed</b>						
OUTPUT 2.1: Additional length of 20 kV lines	☐	Km	0	45	ADER annual report/supervision mission report	Annual/half-yearly
OUTPUT 2.2: Additional length of LV lines	☐	Km	0	77	ADER annual report/supervision mission report	Annual/half-yearly
OUTPUT 2.3: Additional number of pole-mounted transformer substations	☐	U	0	18	ADER annual report/supervision mission report	Annual/half-yearly
OUTPUT 2.4: Additional number of prepayment meters	☐	U	0	1,250	ADER annual report/supervision mission report	Annual/half-yearly
OUTPUT 2.5: Additional number of efficient street lighting units	☐	U	0	800	ADER annual report/supervision mission report	Annual/half-yearly
OUTPUT 2.6: Additional number of low-energy lamps distributed	☐	U	0	10000	ADER annual report/supervision mission report	Annual/half-yearly
<b>I ACTIVITIES</b>			<b>I INPUTS</b>			
(i) Reinforcement and extension of the power transmission network (ii) Rural electrification (iii) Implementation of the ESMP and RAP (iv) Institution building (v) Project management			<b>Resources: UA 83.982 million</b> ADF (loan): 20.000 TSF (loan): 10.000 EIB (loan): 38.785 OFID (loan): 9.237 GoM (own funds): 5.960			

### Project implementation schedule

PRIRTEM-2 implementation schedule	2020				2021				2022				2023				2024				2025			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Approval of PCN																								
Negotiation of Loan Agreement																								
Approval of PAR																								
Loan Signature																								
Implementation																								
Official Project Launch																								
First Disbursement																								
Procurement																								
Bid evaluation																								
Contract Negotiation																								
Signing of Contracts																								
Component 1. Electricity Transmission Network Reinforcement																								
Component 2. Rural Electrification																								
Component 3. Institutional Support																								
Component 5. Implementation of the ESMPs and PAR																								
Supervision Mission																								
Audit																								
Mid-term Review																								
Works Completion																								
Completion Report																								

# **BANK GROUP MANAGEMENT'S REPORT AND RECOMMENDATION TO THE BOARD OF DIRECTORS CONCERNING A PROPOSED LOAN TO FINANCE THE SECOND PHASE OF THE POWER TRANSMISSION NETWORK REINFORCEMENT AND INTERCONNECTION PROJECT IN MADAGASCAR (PRIRTEM-II)**

Management hereby submits this report concerning a proposal to grant an ADF loan of UA 20 million and a TSF Pillar I loan of UA 10 million to finance the second phase of the Power Transmission Network Reinforcement and Interconnection Project in Madagascar (PRIRTEM-II).

## **1. STRATEGIC THRUST AND RATIONALE**

### **1.1. Project Linkages with Country Strategy and Objectives**

1.1.1. Since 2015, Madagascar has had a New Energy Policy (NPE) that promotes the use of renewable energy sources, particularly for power generation. The development of renewable energy-powered plants (hydropower, solar, biomass, etc.) by 2030 is one of the priority objectives of this energy transition. In addition, the Emerging Madagascar Plan (PEM), developed by the Government of Madagascar (GoM), aims to double power production capacity and achieve a national electrification rate of 50% by 2023. The extension and reinforcement of the power transmission and distribution networks - the focus of PRIRTEM-II - constitute an essential step towards the integration of future power production infrastructure and the achievement of the country's ambitious electrification objectives.

1.1.2. One of the main strategic objectives of GoM in the sector is to develop the national power grid and secure the power supply in order to improve electricity access, while contributing to the financial recovery and the sustainability of the activities of *Jiro sy Rano Malagasy* (Madagascar's National Water and Electricity Company) (JIRAMA). PRIRTEM-II aligns squarely with this vision since it will enable the integration of new renewable power production capacity (such as the 192 MW Sahofika hydropower plant, which can produce electricity at competitive costs) into JIRAMA's power grid, while reducing the country's dependence on fossil fuel imports. The significant reduction in electricity costs will have a positive impact on both JIRAMA's financial situation and the country's households and businesses, both of which will have better access to clean and more affordable electricity.

1.1.3. The project aligns fully with Pillar 1 of the Bank's Country Strategy Paper (CSP) 2017-2021 for Madagascar, which focuses on the development of energy and transport infrastructure to support the country's inclusive growth, as well as with the National Energy Policy (NPE) and the Emerging Madagascar Plan (PEM). The project is also in line with the Bank's New Deal on Energy for Africa 2016-2025 and particularly with the objective of achieving universal electricity access on the continent by 2025, as it is with the Bank's Climate Change Action Plan, especially the mitigation aspects. Furthermore, it is in tune with the Bank's High 5s, particularly "Light up and Power Africa" and "Improve the quality of life for the people of Africa". Lastly, this operation plugs into the objectives of the Bank's Long-Term Strategy 2013-2022, particularly in connection with infrastructure development, including in the energy sector, with a view to promoting inclusive growth.

### **1.2. Rationale for the Bank's Intervention**

1.2.1. As the energy sector's lead donor, the Bank is already actively engaged in several transformative energy sector projects in Madagascar, including PRIRTEM-I and the Sahofika Hydropower Plant Project, which is intricately linked to PRIRTEM-II. The 220 kV interconnection line between Antananarivo and Antsirabé, which is part of the PRIRTEM-II project, will help to feed the power generated by the Sahofika plant into the national grid. The Sahofika project, for which the Bank is arranging a private loan of EUR 800 million, has already been approved twice by the Bank's Board of Directors. The arrangement concerns: (i) an ADF loan of UA 3.22 million approved on 13 May 2020 to enable the State of Madagascar to acquire a stake in the capital of *Nouvelle Energie Hydroélectrique*

*de l'Onive* (NEHO); and (ii) an ADF Partial Risk Guarantee of EUR 100 million approved on 13 December 2019. The Sahofika project will have a positive impact on the sector since it will significantly reduce power production costs, increase the share of renewable energy in the energy mix and improve JIRAMA's financial stability.

1.2.2. Despite Madagascar's huge energy resources (hydropower, solar and wind power), the country's electricity access rate in 2019 was extremely low, at only 15% nationally and 6% in rural areas. PRIRTEM-II will strengthen the capacity to transport and feed power into the Antananarivo Interconnected Network (RIA) by building a new line linking the country's two main industrial cities, the capital Antananarivo and Antsirabé. Thus, the implementation of PRIRTEM-I and PRIRTEM-II will eventually connect Madagascar's three major power consumption centres (Antananarivo, Toamasina and Antsirabé). Power generation from renewable sources will experience a significant boost, enabling the population to have access to clean, reliable and affordable energy, thereby improving their living conditions. The availability of reliable and affordable energy will lead to the emergence of new economic opportunities, the development of industrialization, increased business competitiveness and job creation.

1.2.3. The Bank is the lead project donor and, at Government's request, has financed all preparatory activities - feasibility studies, detailed preliminary project design, environmental and social assessment – with resources from the ADF Project Preparation Facility (PPF) approved in 2017. The Bank has been involved in the sector since 2015 and actively participated in the preparation, structuring and mobilisation of resources for PRIRTEM-I, approved in December 2019 and ongoing. The Bank is best positioned to carry out this project because it is heavily involved in the power sector in Madagascar. Lastly, the Bank has extensive expertise in the development of power transmission and rural electrification infrastructure.

### **1.3. Aid Coordination**

1.3.1. In addition to the Bank, the main development partners involved in Madagascar's power sector are the World Bank (WB), German International Cooperation (GIZ), the European Investment Bank (EIB), the European Union (EU) and the United Nations Development Programme (UNDP). Development partners' activities are coordinated through a consultation platform and defined in accordance with the respective country strategy papers.

1.3.2. The EU, EIB and OFID have expressed their intention to participate in PRIRTEM-II financing. As the lead project partner, the Bank coordinates activities in terms of project preparation/appraisal (including resource mobilisation) and monitoring.

1.3.3. The World Bank is financing two infrastructure projects that are complementary to PRIRTEM-II: (i) the Least-Cost Electricity Access Development Project (LEAD<sup>1</sup>); and the Power Sector Operations and Governance Improvement Project (PAGOSE). The LEAD project aims to maximise the number of new connections and plans to supply electricity to at least 1.7 million people, 10,000 businesses and 750 health centres. For its part, the PAGOSE project plans to build several structures to strengthen the Antananarivo Interconnected Network (RIA), including 63 kV transmission lines linking the Tana North and Ambodivana substations (9 km) to the Tana North and Tana South substations (23 km), as well as the extension and/or improvement of the voltage plan for five source substations (Ambohimanambola, Ambodivona, Tana North, Tana South, and Tana West). This project also comprises the upgrading of the 5 or 5.5 kV networks to 20 kV to improve supply network capacity in Mahajanga, Toamasina, Antsirabé, Morondava and Fianarantsoa regions. Moreover, the World Bank is preparing a Performance-Based Programme for the implementation of the action plan developed in 2019, which particularly aims to improve JIRAMA's operational performance.

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<sup>1</sup> *Least-Cost Electricity Access Development*

1.3.4. The GIZ supports GoM in improving the statutory framework of the power sector, especially in the area of rural electrification. GIZ's support comprises the establishment of an energy information system (EIS), the new Grid Code and its implementing instruments, a rural electrification monitoring system, the digitalisation of the activities of the Rural Electrification Development Agency (ADER) and the Electricity Regulation Agency (ORE), support for the reform of ORE (subsequently renamed ARELEC - *Autorité de Régulation de l'Électricité*), the establishment of the National Sustainable Energy Fund (FNED) for financing PPP rural electrification projects, and the launch of a bid invitation for energy-powered mini-grid projects, among others.

## 2. PROJECT DESCRIPTION

### 2.1. Project Components

2.1.1. PRIRTEM-II will consist of the components described in Table 2-1 below:

*Table 2-1: Components of PRIRTEM-II*

No.	Component Name	Component Description	EUR Million	UA Million
1	Strengthening and extension of the power transmission network	Construction of a 135-km 220 kV double-circuit interconnection line with a capacity of 300 MW linking the Tana Sud 3 (TS3) and Vinaninkarena substations via the Antanifotsy substation (included in the Sahofika project). Construction of the TS3 220/90/20 kV substation with 5x45 MVA for the 220/90 kV section and 3x25 MVA for the 90/20 kV section. Construction of the 220/63/20 kV substation at Vinaninkarena with 2x45 MVA for the 220/63 kV section and 2x25 MVA for the 63/20 kV section.	79.685	66.282
2	<u>Rural electrification</u>	Electrification of 19 villages in the Soanindrariny, Ambohidranandriana, Ambatomena and Ambohimiarivo municipal councils, comprising the construction of a 45-km MV line, a 77- km LV line and the installation of 18 pole-mounted transformers, the connection of 1,000 households and 250 miscellaneous customers, the installation of 1,250 prepayment meters, installation of 800 efficient public lighting units and distribution of 10000 low-energy light bulbs	1.711	1.423
3	Institutional support	Gender equality support activities (raising awareness on gender issues and promotion of income-generating activities), awareness-raising on the productive use of electricity and energy efficiency in rural areas, a study for the reform of JIRAMA's health, safety and environment policy as well as feasibility studies for power grid extension projects.	1.300	1,081
4	Project management	The functioning of the PIU, works control and supervision, including the monitoring of the ESMP, the monitoring and evaluation of the RAP implementation, the monitoring and evaluation of project socio-economic impacts, the external audit of project financial statements, project procurement audit, the annual audit of the ESMP implementation, the RAP completion audit and the drafting of the project's administrative and financial procedures manual.	2.577	2.144
5	RAP implementation	This component will be financed by GoM and will cover the compensation of project-affected persons, measures in support of vulnerable households and persons, and resettlement or agricultural production assistance. Non-Governmental Organisations (NGOs) will be mobilised for non-recurrent activities.	6.514	5.418

Total project cost (excluding contingencies)	91.787	76.348
Physical contingencies (5%)	4.589	3.817
Price escalation (5%)	4.589	3.817
Total project cost	100.965	83.982

## 2.2. Technical Solutions Adopted and Alternatives Explored

2.2.1. Based on the technical studies and project cost estimates, the characteristics of the power line are as follows: A double-circuit 220 kV line with a capacity of 300 MW, consisting of one (1) ASTER 570 aluminium alloy (“almélec”) conductor per phase. The installation corridor of the 220 kV line is forty (40) metres wide. Several alternative solutions were considered during the study of the high-voltage line: (i) A 138 kV line – this solution did not allow the transportation of the energy produced by the Sahofika hydropower plant; (ii) A 400 kV line - the cost of this option was deemed too high.

2.2.2. For the rural electrification component, a single-circuit, three-phase line with one conductor per phase, consisting of "homogenous aluminium alloy" conductors (AAAC), based on the IEC 60104 standard, was selected. The conductor cross-sections recommended by JIRAMA for the harmonisation of the rural electrification networks operated in the country were taken into account. For the rural electrification component, a decentralised biomass mini-grid alternative was considered but rejected due to the non-availability of fuel. A solution involving a decentralised small hydropower mini grid was also rejected due to the high cost.

## 2.3. Project Type

PRIRTEM-II is an investment project in line with GoM's action programme. It will be financed with an ADF loan and a TSF loan granted to the Republic of Madagascar under the conditions indicated in Section 5 (Legal Framework) of this report, as well as with joint OFID funding, and parallel funding from the EIB, which will mobilize European Union.

## 2.4. Project Cost and Financing Arrangements

2.4.1. The overall cost of PRIRTEM-II net of taxes is currently estimated at EUR 100.965 million (UA 83.982 million). This cost includes a 5% provision for physical contingencies and a 5% provision for price escalation. Technical Annex B2 provides the detailed project costs.

2.4.2. The Bank will finance 35.7% of the overall project cost. The EIB will contribute 46.2% and OFID 11%. OFID's financing will be administered by the Bank. The counterpart funding will cover the cost of the resettlement action plan (RAP) and its implementation, representing about 7.1% of the overall project cost.

Table 2-2: Estimated Project Cost by Component (in UA Million)

	<b>Components</b>	<b>Foreign Exchange (F.E.)</b>	<b>Local Currency</b>	<b>Total</b>	<b>F.E. %</b>
1.	Strengthening and extension of the power transmission network	56.339	9.943	66.282	85
2.	Rural electrification	0.857	0.566	1.423	60
3.	Institutional support	0.757	0.324	1.081	70
4.	Project management	0.800	1.344	2.144	37.3
5.	RAP implementation	0.000	5.418	5.418	0
	Total project cost (excluding contingencies)	58.752	17.594	76.348	77
	Physical contingencies (5%)	2.938	0.880	3.817	77
	Price escalation (5%)	2.938	0.880	3.817	77
	<b>Total project cost</b>	<b>64.628</b>	<b>19.354</b>	<b>83.982</b>	<b>77</b>

Table 2-3: Project Sources of Financing (in UA Million)

<b>Sources of Financing</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total</b>	<b>F.E. %</b>
AfDB	15.469	4.531	20.000	77.3
TSF	8.422	1.578	10.000	84.2
EIB	32.872	5.913	38.785	84.8
OFID	7.851	1.386	9.237	85.0
GoM	0	5.960	5.960	0.0
<b>Total project cost</b>	<b>64.614</b>	<b>19.368</b>	<b>83.982</b>	<b>76.9</b>

Table 2-4: Project Cost by Expenditure Category (in UA Million)

	<b>Expenditure Categories</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total</b>	<b>F.E. %</b>
1.	Works	57.196	10.508	67.704	84.5
2.	Services	1.544	6.821	8.365	18.5
3.	Goods	0.000	0.125	0.125	0
4.	Operations	0.000	0.154	0.154	0
	Total project cost (excluding contingencies)	58.740	17.608	76.348	77
	Physical contingencies (5%)	2.937	0.880	3.817	77
	Cost escalation (5%)	2.937	0.880	3.817	77
	<b>Total project cost</b>	<b>64.614</b>	<b>19.368</b>	<b>83.982</b>	<b>77</b>

Table 2-5: Expenditure Schedule by Component (in UA Million)

	Components	2021	2022	2023	2024	2025	Total
1	Strengthening and extension of the power transmission network	0.729	8.020	22.602	22.602	18.956	72.909
2	Rural electrification	0.00	1.096	0.470	0.00	0.00	1.565
3	Institution support	0.119	0.238	0.357	0.357	0.119	1.190
4	Project management	0.236	0.472	0.589	0.589	0.472	2.358
5	RAP implementation	1.788	4.172	0.00	0.00	0.00	5.960
	<b>Total project cost</b>	<b>2.872</b>	<b>13.997</b>	<b>24.018</b>	<b>23.548</b>	<b>19.547</b>	<b>83.982</b>

## 2.5. Project Area and Beneficiaries

2.5.1. PRIRTEM-II crosses two regions (Analamanga and Vakinankaratra), five districts, 20 municipal councils and 65 *Fokontany*. The project area is predominantly rural. Agriculture, livestock farming, and fishing are the dominant activities. The main annual crops grown along the corridors are mostly for food purposes, and comprise rice (47%), cassava (24%) and maize (12%). Housing mostly comprises mud or brick structures with roofs of sheet metal or plant material in the Highlands. The population is poorly educated (69% of women affected by the project stopped schooling at the end of primary cycle or before, compared with 73% of men) and lacks health facilities.

2.5.2. Access to electricity is quite limited in the project area. Surveys conducted during the studies show that no affected *Fokontany* admits having full access to the JIRAMA power grid. Other sources of energy in use are batteries, candles, solar panels, paraffin lamps, flashlights and generators. Cooking is done with firewood and charcoal. The need for rural electrification is crucial. Madagascar is one of the countries with the lowest modern energy access rates in the world. One of the main beneficiaries of PRIRTEM-II is JIRAMA, which will be responsible for the operation and maintenance of the 220kV power line, the substations and distribution networks. The project will help not only to generate additional revenue for JIRAMA due to the increased number of customers, but also to reduce the power company's overall production costs through the integration of future power plants - such as Sahofika – that produce electricity at more competitive rates. Significant gains in terms of energy supply security, increased access to electricity and reduced power production costs are expected. These improvements will notably benefit urban and rural communities as well as businesses and government departments.

## 2.6. Participatory Approach to Project Identification, Design and Implementation

2.6.1. Public consultations were held between 31 August 2019 and 15 October 2019 in all *fokontany* or municipal councils affected by the project. They made it possible to present the project, obtain and incorporate the views and concerns of the various stakeholders into the project design, as well as identify the mitigation measures.

2.6.2. Overall, the project has been very well received. The municipal councils and *fokontany* want to have access to electricity but are generally concerned about the modalities of financial compensation for resettlement and measures taken to prioritise the hiring of local labour. They also expressed specific concerns about measures to mitigate adverse environmental and social impacts. These are detailed in the ESMP and RAP, and will be implemented during the construction and execution phase.

2.6.3. Consultation and collaboration with all stakeholders, including project-affected persons (PAPs) and NGOs, are an ongoing process that will be pursued throughout the project duration. A grievance mechanism has been put in place to ensure that any potential complaints that may arise during project implementation are quickly addressed.

## **2.7. Bank Group's Experience and Lessons Reflected in the Project Design**

2.7.1. Since the start of its operations in Madagascar in 1977 to October 2020, the Bank has approved 112 operations for a cumulative amount of UA 1.47 billion. As of end-October 2020, the Bank's active portfolio in Madagascar comprised 21 public sector operations including 14 projects, 6 studies, and one (1) emergency grant. Of the 21 projects, there were 20 national projects and 1 regional project. Current commitments amount to UA 404.23 million. The portfolio covers the three main priority sectors of the Country Strategy Paper (CSP): transport (33.9%), agriculture (30.1%), and energy (25.5%). Other sectors of Bank involvement are governance (9.9%), water and sanitation (0.4%), the environment (0.2%) and the social sector (0.1%). There are no problematic or potentially problematic projects in the portfolio. The low disbursement rate of 31.5% is due to the fact that 10 new operations became effective during the past two years.

2.7.2. The main lessons from the Bank's interventions in Madagascar are the need to reduce the delays related to the: (i) ratification of loan/grant procurement agreements; (ii) establishment of steering committees and project implementation units; (iii) opening of accounts at the Central Bank; and (iv) mobilisation of the counterpart funding.

2.7.3. The above challenges as well as lessons from implementing energy and infrastructure projects in Madagascar were taken into account in designing this project: (i) the delays related to the ratification of loan/grant agreements are factored into the project planning, (ii) the delays related to procurement are addressed through careful project preparation, (iii) the Steering Committee and the Project Implementation Unit have already been set up under PRIRTEM-I, (iv) the account at the Central Bank will be opened by the existing PIU, and (v) the counterpart funding will be provided for in the 2021 Budget Act.

## **2.8. Key Performance Indicators**

2.8.1. The key performance indicators of PRIRTEM-II are as follows: (i) length of the 220kV power line and distribution line provided; (ii) number of transformer substations provided; (iii) number of connections made in the project area, including the percentage of women owners of electricity meters; (iv) integrated renewable energy generation capacity; and (v) number of direct jobs created during project implementation.

2.8.2. Acting through the Project Implementation Unit (PIU), the executing agency will monitor progress towards achievement of project outcomes. Data on output and outcome indicators will be provided in: (i) the periodic progress reports that will be prepared by the consulting engineers in charge of works control and supervision; (ii) the quarterly project progress reports that will be prepared by the PIU and communicated to donors including the Bank; (iii) annual progress reports of JIRAMA and ADER; (iv) the reports of donor supervision missions; and (v) the Borrower's and the Bank's project completion reports. Indicators will be analysed to measure their progress and make any adjustments required to achieve the target values. Project impact indicators will be provided in the national reports prepared by the MEH, JIRAMA and ADER.

## **3. PROJECT FEASIBILITY**

### **3.1. Financial and Economic Performance**

3.1.1. The financial internal rate of return (FIRR) and the economic internal rate of return (EIRR) as well as the financial net present value (FNPV) and economic net present value (ENPV) were calculated using the cost-benefit method for a period of 15 years starting from the commissioning of the transmission line.

3.1.2. The project will: (i) lead to the introduction of cheaper sources of renewable power generation, particularly hydropower; and (ii) contribute to the reduction of power grid losses. Without the project: (a) supply to existing and future customers will be based on the current energy mix where thermal generation (HFO and Gasoil) – costly and dependent on hydrocarbon imports - accounts for about 45% of the power produced annually in the country; and (b) the transmission network transit capacity will remain limited and energy losses will continue to be high.

3.1.3. The main advantage of the project will be the avoided cost, i.e. the difference between the cost of the existing energy mix and the cost of the energy mix resulting from the existence of the power interconnection line between Antananarivo and Antsirabé. The project will enable the introduction of hydropower into the power grid, whose average rate in Madagascar is 5 to 6 times lower than that of power generated from heavy fuel oil and diesel. The other advantage will consist in better stability and quality of the network, as measured by the reduction in power grid losses.

3.1.4. The main costs are net of tax and include: the capital cost (CAPEX), costs relating to the upkeep and maintenance of new infrastructure (OPEX) and additional distribution.

3.1.5. **Financial performance** - At a 10% discount rate, the FIRR is 29% and the NPV amounts to EUR 162 million. These results are strongly linked to the significant gains made from the reduction in power generation costs due to the increased hydrogeneration at a competitive rate.

3.1.6. **Economic performance** - The results of the economic performance analysis show that the project has many benefits for the national community. At a 10% discount rate, the EIRR is 31% and the NPV amounts to EUR 170 million. In the economic analysis, the benefits and costs considered in the financial analysis are also taken into account and adjusted with economic coefficients. Furthermore, the economic analysis includes the economic valuation of the use of the additional quantity of electricity resulting from the project by the customers.

Table 3-1: Project Key Economic and Financial Data

Baseline scenario	FIRR	29%
	FNPV	EUR 162 million
	EIRR	31%
	ENPV	EUR 170 million

3.1.7. **Sensitivity analysis** - The results of the sensitivity tests show that the project’s financial and economic sustainability will remain unchanged in the event of: (i) a 10% increase in project costs; (ii) a one-year delay of the project; and (iii) a 20% decrease in the benefits stemming from the introduction of hydropower production.

Table 3-2: Sensitivity Test Results

	10% increase in project cost	One-year delay of the project	20% decrease in benefits stemming from the introduction of hydropower generation
FIRR	27%	24%	27%
FNPV	EUR 153 million	EUR 125 million	EUR 139 million
EIRR	29%	26%	29%
ENPV	EUR 162 million	EUR 133 million	EUR 147 million

## 3.2. Environmental and Social Impact

3.2.1. **Categorisation and publication of environmental and social assessments** documents- The programme's is confirmed as Category 1 in accordance with Malagasy legislation and the Bank's Integrated Safeguard System (ISS). JIRAMA commissioned all documents related to environmental and social (E&S) safeguards, including the Environmental and Social Impact Assessment (ESIA), the Environmental and Social Management Plan (ESMP) and the Resettlement Action Plan (RAP). The draft versions of the ESIA, ESMP and RAP were updated in July 2020 to reflect the new project's scope. These documents were reviewed by the Bank and approved for disclosure by the National Environment Agency (ONE). They were disclosed on JIRAMA's website and by the Bank on 4 August 2020 in accordance with the requirements of the ISS.

3.2.2. **Public consultations** - Considering the COVID-19 context, the findings of the ESIA/ESMP and RAP were made available to the population at the *fokontany* level along with the registers. The consultations were conducted in smaller groups in accordance with the restrictions in force at the time. Evidence of the conduct of the final consultations deemed satisfactory by the Bank and ONE shall be submitted prior to the start of works in line with national requirements. Submission of this evidence will be one of the conditions for Bank financing.

3.2.3. **Major environmental and social impacts and risks** - The impacts are diverse and concern : (i) loss of property and income for individuals (807 households, or a total of 3,512 persons) and communities affected by the project (38 community assets); (ii) loss of 7 ha of essential habitats for 7 species along the transmission line route; (iii) loss of 90 ha of forest habitats, localised loss of surrounding buffers and habitat fragmentation; (iv) disruption and risk of wildlife mortality during the works and operation; (v) health and safety risk for workers and neighbouring communities during the works and operation.

3.2.4. **Mitigation measures for identified negative impacts and risks** - Environmental, hygiene, health and safety clauses have been drawn up and will be included in the standard bidding documents (SBD) for procurement of works of the power line, substations and the rural electrification component. A Biodiversity Action Plan (BAP) and a resettlement action plan have also been drawn up. *International Conservation* (an NGO), which has a delegated management mandate for two protected areas in the project area, will participate in the BAP implementation. The implementation of the entire ESMP will be accompanied by a Stakeholder Engagement Plan (SEP). Regarding the works, specific management plans related to the identified risks and impacts will be prepared as part of each contractor's site ESMP (CESMP) in accordance with the applicable requirements of the works contract.

3.2.5. **Monitoring the ESMP implementation** - For the implementation and monitoring of the ESMP, each contractor will have an E&S Officer responsible for implementing the ESMP measures for the lot(s) under his/her responsibility. He/she will be supported by his/her supervising engineer counterpart in charge of the supervision and control of the works. At the Ministry of Energy, the ESMP implementation will be monitored by the following PIU members: an environmentalist, a health and safety specialist and a social development specialist. They will also be responsible for preparing and submitting quarterly monitoring reports on the ESMP implementation to the Bank. An independent consultant will be recruited for the annual environmental and social audit. The National Environment Agency (ONE) will receive quarterly ESMP implementation reports and will participate in the monitoring process in accordance with the national regulations in force.

3.2.6. **Occupational health and safety capacity building** - Notwithstanding the foregoing arrangements, the capacity of JIRAMA (which will operate the line) needs to be strengthened at several levels. Provisions have been made for: (a) support to improve the health and safety policy as well as the environmental and social management system; (b) training and equipment support for the assessment and management of occupational health and safety risks for HV line works (this 220 kV line is the first of its kind in the country); and (c) occupational health and safety upgrades for staff.

### 3.3. Climate Change

3.3.1. Madagascar is an Indian Ocean country with a tropical climate. The country is severely and frequently affected by extreme weather events despite its extremely low institutional and infrastructural adaptive capacity (DRMKC<sup>2</sup>, 2020). In 2018, it ranked fourth among countries in the world hardest hit by climatic hazards and suffered losses and damages estimated at about USD 568 million or 1.32% of its GDP (Germanwatch, 2020). A number of project areas, particularly the Analamanga and Vakinankaratra regions, are prone to extreme events such as cyclones (high); flash floods (high); forest fires (moderate) and floods (moderate) (Global Facility for Disaster Reduction and Recovery - GFDRR), 2017).

3.3.2. By 2050, the country could experience an increase in mean temperature ranging from 1.5°C to 2°C, heat waves, a rise in extreme rainfall and strong winds, but no major change in the frequency of cyclones and their impact (GERICS<sup>3</sup>2016; MTTM<sup>4</sup>2019). These phenomena could raise the power transmission technical losses, which currently stand at around 7%, as well as the demand for electricity, particularly at peak hours. Furthermore, floods can promote soil erosion and, when combined with strong winds and cyclones, lead to the deterioration of infrastructure and thus lead to additional maintenance costs.

3.3.3. Based on the Bank's climate risk assessment system, the project is classified in Category 2. Potential risks were taken into account in the sizing, location and technical characteristics of the equipment (location of substations in areas with lower temperatures, poles made of galvanised steel trusses with anti-water erosion bases, installation of lightning conductors, felling of trees that could damage the transmission line.)

3.3.4. The country's target by 2030 is to reduce its Intended Nationally Determined Contribution (INDC) by 1.7 Mteq CO<sub>2</sub> in the energy sector through the development of renewable energies and energy efficiency. The analysis of the GHG emission levels of PRIRTEM-II reveals a net annual reduction of 290,505 tonnes of CO<sub>2</sub> equivalent per year in the scenario without change in land use and a net emission of 217,000 tonnes of CO<sub>2</sub> equivalent per year in the scenario with change in land use by 2025-2030. While the rural electrification component will lead to a reduction in GHG emissions, power transmission (7%) and distribution (35%), energy losses and tree felling, or deforestation operations will be real sources of GHG emissions. To reduce energy losses, energy efficiency measures are planned under the electrification component, such as the installation of smart prepaid meters, low-energy streetlamps, and low-energy light bulbs. In addition, to reduce emissions resulting from changes in land use, land clearing and tree felling will be highly selective. Thus the activities of strengthening and extension of the electricity transmission network, rural electrification and capacity building will contribute 69.10% to climate financing for mitigation, while those of resettlement (RAP) will contribute 6.45% to adaptation financing. This represents a total climate financing of 75.55%, i.e. UA 63.448 million (see Table 2 Technical Annexes on Climate Change and Green Growth).

3.3.5. Lastly, the project will promote the implementation of the objectives of the Bank's Policy and Strategy on Climate Change and Green Growth and its Action Plan 2021-2025 (PACC3 2021-2025).

### 3.4. Gender

3.4.1. The project is classified in Category II of the Bank's gender marker system. Women are more severely affected by energy poverty than men. Many women spend hours fetching firewood for cooking, cook on inefficient stoves that emit high levels of smoke with a negative impact on their health, or perform their daily chores under poor lighting conditions. Access to a reliable and good quality source of electricity will be particularly beneficial to women, given the traditional division of roles and responsibilities between women and men in the society. Inequitable access to energy is a cause of gender-based violence in households.

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<sup>2</sup> Joint European Research Centre/Disaster Risk Management Knowledge Centre

<sup>3</sup> Climate Service Centre, Germany

<sup>4</sup> Malagasy Ministry of Transport, Tourism and Meteorology (MTTM)

3.4.2. Electricity will enable several women in the direct project area to perform these tasks more efficiently, particularly with the use of household appliances such as refrigerators and freezers, which reduce the frequency of trips to the market. Access to energy can improve the lives of women, freeing up time for girls to go to school and for women to participate in economic activities and/or training. Several studies have demonstrated the positive impact of access to mass media on fertility, knowledge, career and training opportunities, and attitudes about gender roles. Currently, the woman's role in terms of control, management and decision-making is still limited.

3.4.3. To address these challenges, the project will undertake a number of activities, including (i) connecting households, many of which are headed by women; (ii) creating direct employment for women; (iii) building the capacity of both women and men; (iv) promoting women's micro-entrepreneurship; (v) developing, within JIRAMA, a social energy policy that enables access to energy for single-parent households, including those headed by women; (vi) developing and implementing gender-sensitive ESMPs and RAPs; (vii) setting up a programme to support entrepreneurship and local economic development in municipal councils and *Fokontany* of the project area; (viii) building staff capacity by and for JIRAMA's "environment" staff on gender issues, gender-based violence (GBV) and sexually transmitted diseases (STDs); (ix) mainstreaming the gender perspective in the Government's land policy and in the policies of the DGE and JIRAMA; and (x) setting up a coaching and mentoring system to ensure the proper use of electricity by families. A gender specialist, working in conjunction with the Ministry of Population, Social Protection and Women's Empowerment, will support the PIU for implementing the Gender Action Plan provided in Annex B8.9.

### 3.5. Social

3.5.1. **Resettlement:** The project requires a right-of-way clearance of 20 metres on either side of the line, adding up to a total of 40 metres for the entire line. The required right-of-way adds up to a total of approximately 495.03 ha, broken down as follows: (i) 480 ha for the corridor; (ii) 10.6 ha for all the pylons; and (iii) 4.43 ha for the substations. The release of this right-of-way will result in temporary or permanent loss of assets as follows: (i) 23 residential houses; (ii) 848 agricultural plots; and (iii) 38 community assets. The total number of affected households is 807 (88 of them headed by women) for a total of 3,512 persons.

3.5.2. The RAP was developed by JIRAMA and validated for disclosure by the Ministry in charge of Environment. This RAP was also disclosed by the Bank. All project-affected persons (PAPs), including vulnerable persons, were consulted when the RAP was being developed. The total cost of the RAP, excluding contingencies and unforeseen expenses, stands at EUR 6.53 million, broken down as follows: (i) EUR 2,947,041 in compensation for land-use restrictions (corridor and pylons); (ii) EUR 2,952,805 in compensation for loss of perennial and annual crops; (iii) EUR 241,695 in compensation for loss of land (or for land acquisition) relating to transformer substations; (iv) EUR 120,000 for the RAP implementation; (v) EUR 143,643 in compensation for buildings and land; (vi) EUR 56,876 for support measures targeting vulnerable households and individuals; (vii) EUR 40,678 for the conduct of PAP awareness-raising and training activities by an NGO; (viii) EUR 18,000 for the conduct of RAP implementation audit by an independent consultant; and (ix) EUR 10,175 for various forms of assistance and aid.

3.5.3. The RAP will be financed with the GoM's contribution and Bank funding (mainly for the RAP audit). The RAP will be implemented by the PIU in conjunction with all the concerned ministries (Lands, Finance, etc.), the Administrative Evaluation Commission and Municipal Council Coordination Units. To the RAP implementation expenses should be added the cost of recruiting an NGO to monitor and manage complaints for the entire project. These costs are factored into those of the ESMP.

### 3.6. Fragility and Resilience

The Bank's 2018 assessment of Madagascar's resilience and fragility underscores the urgent need to support the country's economic and social resilience in order to successfully strengthen institutional and political stability. With the exception of social cohesion and the country's capacity to respond to regional spill-over effects, the indicators of the Country Resilience and Fragility Assessment (CRFA) tool for measuring resilience and fragility point to a weakness in addressing the various pressures facing the nation in general, and the Government in particular. The project will address the challenges in the energy sector while contributing to improving the quality of life for the people. The project will also help to improve access to basic public services such as education, health, water and sanitation, among others, and will promote the creation of income-generating activities.

## 4. IMPLEMENTATION

### 4.1. Implementation Arrangements

4.1.1. *Project implementation and coordination arrangements:* PRIRTEM-II will have the same institutional arrangement as PRIRTEM-I. The PIU of PRIRTEM-I will be responsible for implementing the project. It is attached to the Ministry of Energy and Hydrocarbons (MEH) and comprises thirteen (13) members: a Project Coordinator, a Civil Engineer, an Electro-mechanical Engineer, an Overhead Line Engineer, a Biodiversity and Environmental Protection Specialist, a Gender and Social Development Specialist, a Health, Safety, Environment and Quality Specialist, a Legal Officer, an Administrative and Financial Officer, an Accountant, a Procurement Officer, a Procurement Assistant and a Monitoring and Evaluation Officer.

4.1.2. To capitalise on the feedback, JIRAMA and ADER will support the PIU in implementing the project by providing specialists whose travel and mission expenses will be covered by PRIRTEM 2. These specialists are as follows:

- JIRAMA: A High Voltage Substation Specialist, an High Voltage Powerline Specialist, a Civil Engineer, a Control- Command Specialist and a Telecommunication Specialist;
- ADER: A Rural Electrification Specialist.

4.1.3. The Steering Committee will be the same as that of PRIRTEM-I. However, the Ministry of Labour will sit on it to ensure that the project takes into account the requirements of the country's Labour Code on quality, hygiene, safety and environment (QHSE). The Ministry of Population, Social Protection and Women's Promotion will also be involved to ensure that the country's policy on the promotion of gender equality is followed.

4.1.4. A firm will be hired to assist the PIU in works control and supervision. The activities under consideration are: preparation/finalization of the bidding documents, assistance to the procurement, construction works supervision up to commissioning, monitoring of the implementation of the ESMP implementation, study for the reform of JIRAMA's health, safety and environmental policy and finally feasibility studies for power grid extension projects. The activities will be determined exhaustively by the PIU. The staff of the firm will be defined accordingly in the terms of reference.

### 4.2. Procurement Arrangements

4.2.1. *Procurement Arrangements: Procurement of goods* (including non-consultancy services), works and consultancy services, financed or administered by the Bank under the project, will be carried out in accordance with the Procurement Framework for Operations Financed by the Bank Group, October 2015 edition, and the provisions set out in the Financing Agreement. More specifically, procurement will be carried out in accordance with:

- The Borrower's Procurement System (BPS): The procurement methods and procedures (PMPs) under the Borrower's procurement system governed by Law No. 2016-055 of 25 January 2017 on the Public Procurement Code (CMP) will be applied, using national standard bidding documents (NSBDs) or any other competitive bidding documents as approved during project negotiations and generally for standard contracts relating to works of low complexity and goods that are available on the national market, as well as for functional activities planned under the project.
- Bank Procurement Methods and Procedures (BPMP): The Bank's procurement methods and procedures, based on the relevant standard bidding documents (SBDs), will be used for the procurement of larger and more complex works and consultancy services deemed most appropriate and in the event that the use of the Borrower's procurement system (BPS) is not appropriate for a given activity or set of activities in view of the high risks identified that could hinder the effective implementation of project activities.

4.2.2. ***Procurement Risk and Capacity Assessment*** – The risk assessment at country, sector and project levels as well as the procurement capacity of the executing agency (EA) was carried out and the results were used to guide the decision on the choice of which country procurement system to be used for part of the project procurement. Appropriate risk mitigation measures will be included in the action plan indicated in the paragraph B.5.9 of Annex B5.

4.2.3. ***Co-financing*** – The EIB and OFID will provide the project co-financing. OFID's contribution will be in the form of joint financing administered by the Bank. For its part, the EIB will participate in the parallel financing of (i) substation construction works, (ii) activities in support of gender equality, (iii) awareness-raising activities on the productive use of electricity and energy efficiency in rural areas, and (iv) communication and visibility activities. To accommodate the specific conditions of the EIB, procurement will be organized in separate lots to facilitate procurement administration and disbursements. EIB-funded procurement will be carried out in accordance with the EIB's own procurement methods and procedures.

### **4.3. Financial Management and Disbursements**

4.3.1. In accordance with the provisions of the Paris Declaration on Aid Effectiveness, the Bank, like most development aid partners, has agreed to maximize the use of country systems for project and programme management to the extent possible, including in financial management. However, given the current context of Madagascar's national public finance management (PFM) system, it will not be effective to use the system for the project's financial management. Consequently, the Bank and Madagascar have agreed that the project resources be managed using a system that is autonomous from the PFM circuit. In this regard, the project will be implemented by a Project Implementation Unit attached to the MEH.

4.3.2. The Administrative and Financial Officer (AFO) and the Accountant of the current PIU will be responsible for the financial management of the project under the supervision of the Project Coordinator. The AFO will be responsible for coordinating all project administrative, financial and accounting tasks, defining accounting principles and methods, implementing the project administrative and financial procedures manual, budgeting and monitoring budget execution, processing disbursements and preparing project financial reports. The PIU will develop an administrative, accounting and financial procedures manual for the project. The project would also purchase accounting software to enable the processing of transactions and the production of financial reports.

4.3.3. ADF and TSF loan resources will be disbursed in accordance with the provisions of the Bank's Disbursement Handbook as follows: (i) the direct payment method (for the payment of contracts for services, goods and works); (ii) the reimbursement method in case of the counterpart's pre-financing of expenses chargeable to the Bank's resources as previously authorized and approved by the Bank; and

(iii) the special account method for operating expenses. In this regard and in accordance with the regulations in force in the country, a special account in local currency shall be opened with the Central Bank of Madagascar for the ADF loan. A second account (sub-account) will be opened in a commercial bank acceptable to the Bank for payments relating to project operating expenses.

4.3.4. In accordance with Bank rules, project accounts will be audited annually by a private, independent, external firm. The external audit will be tailored to the specific risks of the project and the terms of reference of the audits agreed with the Bank. The PIU will be responsible for recruiting the auditor and submitting audit reports to the Bank, with the involvement of the Madagascar's public finance control body. The audit report for each financial year will be submitted to the Bank latest six months following the end of the audited fiscal year.

#### **4.4. Monitoring and Evaluation**

4.4.1. The Directorate General for Energy at the MEH will be responsible for monitoring and evaluating the progress and impact of the project. Data on the trend of the project impact and outcome indicators will be collected, analysed and communicated regularly through the quarterly project progress reports. The PIU will include a Monitoring and Evaluation Officer who will monitor the indicators. The main indicators shall be aligned with specific key sector parameters generated and monitored on a monthly basis.

4.4.2. The Bank will monitor the project during its implementation through regular supervision missions (at least twice a year), the review of project progress reports, audit reports of financial statements and environmental and social audit reports. It will carry out a project mid-term review approximately 18 months following the project approval by the Board of Directors. Within six months of project completion, the Bank will prepare a project completion report. The Bank will also conduct annual portfolio performance reviews in addition to the regular monitoring by its Project Manager.

#### **4.5. Governance**

4.5.1. Regarding governance, fraud and electricity theft persist in Madagascar. In recent years, the public authorities have made efforts to improve the legal and institutional framework for combating corruption in general. Thus, an anti-corruption unit (specialised in prosecuting and trying corruption cases) was set up in 2018. The Government also adopted a law in 2018 to combat money laundering and terrorism financing. Despite some progress, the corruption perception level has not yet improved because of the limited resources allocated to anti-corruption institutions (BIANCO, SAMFIN, etc.). According to the ranking of Transparency International's Corruption Perception Index (CPI), Madagascar slipped two spots with a score of 24/100, which means that the level of corruption remains endemic. Also, the country ranked 158<sup>th</sup> out of the 180 countries surveyed in the 2019 report, with a score of 26/100, and 145<sup>th</sup> out of the 176 countries surveyed in the 2016 report. On the Mo Ibrahim Index for 2018, Madagascar ranked 31<sup>st</sup> out of the 54 countries considered, with a score of 49/100.

4.5.2. PRIRTEM-II provides for support to build the institutional capacity of actors, including the reduction of governance risks associated with project implementation. Thus, the governance structures put in place, the financial management, procurement procedures and monitoring systems built around the project implementation take into account the specific context of the sector and will help to address governance challenges relating to the project implementation. The PIU will be required to produce periodic project progress reports and financial statements audited by external auditors. The Bank will follow up on governance issues by monitoring annual budgets, progress reports, supervision missions, procurement plans and audit reports.

## 4.6. Sustainability

4.6.1. The sustainability of the energy infrastructure is guaranteed by the fact that the technical design will be prepared in accordance with international standards. In addition to this design, the structures will be constructed in compliance with professional best practice and international standards. The environmental and social impact assessment will entail the holding of public consultations, which will facilitate the buy-in of PAPs. In the context of PRIRTEM-I, the capacity of JIRAMA and MEH staff will be built on the new technologies resulting from the project to promote the proper operation and maintenance of the structures. The operation and maintenance of the structures will also be supported by the financial resources generated by JIRAMA's energy sales, especially as the company's financial situation has steadily improved with the reforms.

## 4.7. Risk Management

4.7.1. The main risks identified, the mitigation measures and those responsible for monitoring them are summarised below:

*Table 4-1: Risks Identified and Mitigation Measures*

<b>Risks</b>	<b>Risk Description</b>	<b>Risk Rating</b>	<b>Mitigation Measures</b>	<b>Responsible for Monitoring</b>
Delay in project start-up due to the COVID pandemic	The pandemic is expected to affect the country's macroeconomic situation. Moreover, the loss of jobs and income due to the effects of the crisis could exacerbate social tensions in the country. The Covid-19 pandemic could also affect project start-up, even its implementation.	High	The implementation of the multisector COVID-19 emergency response plan, which is supported by the partner community, should help to mitigate this risk.	-GoM
Delay in the implementation of the environmental and social components of the project	Delay in the payment of compensation resulting in a delay in works implementation	Substantial	MEH and the MEF will submit to the Bank: (i) evidence of the inclusion of the compensation amount in the 2021 Finance Bill before the Council; (ii) an action plan for mobilizing the resources required for the compensation, factoring in all the main activities.	-MEH -Bank
Poor maintenance of structures due to JIRAMA's low capacity	Low capacity in the operation of the structures that will be built coupled with the introduction of new technologies and related equipment in JIRAMA: PRIRTEM will introduce a new operating voltage (220 kV) in JIRAMA's electrical system. The infrastructure will come with new generation equipment, especially digital.	Moderate	The project will include training activities for the operation and maintenance of the new infrastructure and review JIRAMA's organisational structure. Similar activities are planned under PRIRTEM-I.	- JIRAMA

Risks	Risk Description	Risk Rating	Mitigation Measures	Responsible for Monitoring
Implementation delay due to the limited capacity of the road transport network to move heavy equipment	Limited capacity of the road transport network that may delay the transportation of the project's heavy equipment: Limited capacity of the road transport network that may delay the movement of the project's heavy equipment: The capacity of the road network is limited to 50 tonnes, which restricts the weight of some equipment, particularly power transformers.	Moderate	In sizing the installations and preparing equipment specifications, the studies recognize the fact that the road network capacity is limited to 50 tonnes.	-MEH -JIRAMA -Bank

#### 4.8. Knowledge Building

4.8.1. Under PRIRTEM-I, the stakeholders will benefit from training sessions provided through the support of engineering consulting firms, designed to enable them to rapidly acquire works supervision expertise. Subsequently, this knowledge will also be used in the context of PRIRTEM-II as a basis for ensuring adherence to best practice in the construction of overhead power lines and transformer substations, as well as for coping with the realities of major infrastructure projects. Training in Bank rules and procedures for procurement, disbursement and financial management, and E&S management will also be provided to PIU staff under PRIRTEM-I and could be leveraged under PRIRTEM-II. In addition, under this project, awareness campaigns on electrical safety and consumption control, targeted at the population concerned by the project, will be organised during and after works implementation.

4.8.2. The knowledge gained under the project will be disseminated through the various reports produced (progress, financial audit, and procurement audit). The Bank will also produce supervision reports, a completion report and an evaluation report. Lessons from project implementation will enable the Bank to better structure its future operations in the country and the sector.

### 5. LEGAL FRAMEWORK

#### 5.1. Legal Instrument

The financing instruments adopted are:

- a. a Loan Agreement between the ADF and the Republic of Madagascar (the "Borrower") for a loan of UA 20 million.; and
- b. a Loan Agreement for UA 10 million from TSF resources under the Supplementary Support Window (Pillar I) concluded between the ADF and the Bank acting as Trustees of the TSF, on the one hand, and the Republic of Madagascar, on the other hand.

#### 5.2. Conditions Associated with the Bank's Intervention

5.2.1. *Conditions precedent to effectiveness of the Loan Agreements* - The effectiveness of the loan agreements shall be subject to fulfilment by the Borrower, to the satisfaction of the Fund, of the conditions set forth in Section 12.01 of the General Conditions Applicable to Loan Agreements and Guarantee Agreements of the African Development Fund.

5.2.2. **Conditions precedent to first disbursement** - In addition to the effectiveness of the loan agreements, the first disbursement of the resources of these loans shall be subject to fulfilment by the Borrower, to the satisfaction of the Fund, of the following conditions:

- a) Submission of documents supporting the inclusion in the Finance Act of the Borrower's counterpart funding for 2021; and
- b) Submission of evidence that the PIU established for implementing PRIRTEM-I is mandated to execute PRIRTEM-II.

5.2.3. **Conditions precedent to disbursement for works involving resettlement** - The Fund's obligation to disburse loan resources for works involving resettlement shall be subject to fulfilment by the Borrower, to the satisfaction of the Fund, of the following additional conditions:

- a) Submission of evidence satisfactory to the ONE and the Fund of the holding of final public consultations in accordance with the relevant national requirements;
- b) Submission of a works and compensation schedule prepared in accordance with the Comprehensive Resettlement Plan (CRP) and the Fund's Safeguards Policies, satisfactory to the Fund in form and substance, detailing: (i) each project works area; and (ii) the timeframe for compensation and/or resettlement of all PAPs for each area;
- c) Submission of satisfactory evidence that all PAPs in the works area have been compensated and/or resettled in accordance with the ESMP, the CRP and/or the Works and Compensation Schedule as agreed, and in line with the Fund's Safeguards Policies, prior to the commencement of such works and, in any event, before the displacement and/or acquisition of the land and/or related assets belonging to PAPs; or
- d) If the compensation and/or resettlement could not be carried out in accordance with paragraph (b) above, submission of satisfactory evidence that the resources allocated for the compensation and/or resettlement of PAPs have been deposited in a dedicated account acceptable to the Fund or deposited with a trusted third party acceptable to the Fund, where the Borrower can prove to the satisfaction of the Fund that the compensation and/or relocation of PAPs, pursuant to paragraph (b) above, could not be carried out in whole or in part, for the following reasons:
  - The identification of PAPs by the Borrower is not feasible or possible;
  - There are ongoing disputes involving PAPs and/or affecting the compensation and/or resettlement exercise; or
  - Any other reason beyond the Borrower's control, as discussed and agreed with the Fund.
- e) Submission of evidence that final consultations, satisfactory to the Fund and the National Energy Agency (ONE), were held.

5.2.4. **Other Undertakings**

- a) Maintain for the duration of the Project the PIU with its staff whose qualifications and terms of reference must have been deemed satisfactory by the Fund.
- b) Maintain for the duration of the Project the Steering Committee composed of representatives of MEH, MEF, MEDD, MAHTP, MPPSP, Ministry of Labour and

## JIRAMA

- c) The Borrower shall contribute an amount equivalent to five million nine hundred and sixty thousand Units of Account (UA 5,960,000) as a counterpart (the "Counterpart") to participate in the costs of the Project and for this purpose shall ensure that the counterpart is included in the national budget in accordance with the Organic Law on Finance Laws and shall submit to the Fund no later than March 31 of each year a copy of the national budget.
- d) Provide the Fund, latest by 31 December 2021, with evidence that the project's administrative, financial and accounting procedures manual, satisfactory to the Fund, has been prepared;
- e) Procure and configure an integrated accounting management software package and train PIU financial management staff in the use of this software latest by 31 December 2021;
- f) Provide, latest by 31 December 2021, evidence of the recruitment of all PIU staff whose qualifications and terms of reference are approved by the Fund;
- g) Provide, latest by 31 December 2021, a copy of the contract concluded between the PIU and the firm responsible for assisting the PIU in managing and supervising the project and of the study for the reform of JIRAMA's health, safety and environmental policy [*condition relating to paragraph 4.1.5*];
- h) Provide, latest by 31 December 2021, a copy of the cooperation agreement between the PIU and JIRAMA concerning the provision of JIRAMA experts, the integration of health and safety policy and the implementation of the environmental and social management system.

### 5.2.5 Undertaking on Environmental and Social Safeguards

The Borrower undertakes, and shall ensure that the Executing Body, the Executing Agency, each of their contractors, subcontractors and agents do same, to:

- (i) Implement the project in accordance with the ESMP, RAP and/or the works and compensation schedule, the Bank's Safeguards Policies and applicable national legislation in a manner satisfactory to the Fund, in form and substance;
- (ii) Prepare and submit to the Fund quarterly ESMP and RAP implementation reports, including identified weaknesses and remedial measures taken to address them;
- (iii) Refrain from any action that would prevent or hinder the implementation of the ESMP and RAP, including any modification, suspension, waiver and/or cancellation of any provision of the ESMP or RAP, in whole or in part, without the prior written consent of the Bank; and
- (iv) Cooperate fully with the Bank in the event that the implementation of the project or any change in its scope unexpectedly results in the displacement and/or resettlement of people, and not commence works in areas affected by the project implementation unless all PAPs present in the area affected by the project implementation have been compensated in accordance with the RAP and/or the works and compensation schedule.

### **5.3. Compliance with Bank Policies**

The project complies with all applicable Bank policies.

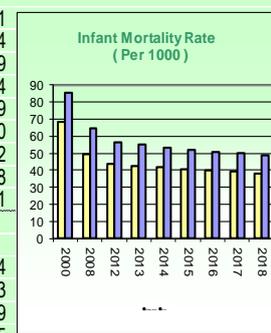
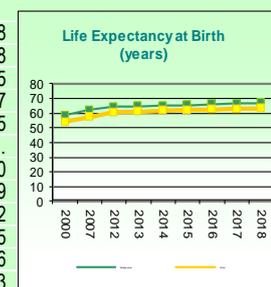
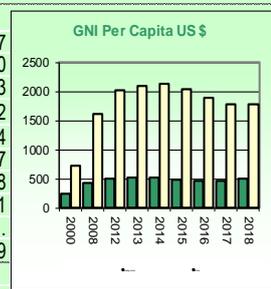
## **6. CONCLUSION AND RECOMMENDATION**

Management recommends that the Boards of Directors approve the proposed grant of an ADF loan of UA 20 million and a TSF Pillar I loan of UA 10 million to the Republic of Madagascar to finance the Power Transmission Network Reinforcement and Interconnection Project in Madagascar - Phase II, under the conditions set forth in this report.

## Annex I. Comparative Socioeconomic Indicators

A table of comparative socioeconomic indicators should be developed for this annex (if possible, the main indicators should be gender-disaggregated).

	Year	Madagascar	Southern Africa	Africa	Developing Countries
<b>Basic Indicators</b>					
Area ('000 Km <sup>2</sup> )	2019	582	6 571	30 067	94 797
Total Population (millions)	2019	27,0	208,4	1 306,3	6 384,0
Urban Population (% of Total)	2019	37,9	49,5	43,3	50,3
Population Density (per Km <sup>2</sup> )	2019	46,4	32,1	44,5	69,2
GNI per Capita (US \$)	2018	510	2 804	1 783	4 844
Labor Force Participation *- Total (%)	2019	86,1	71,1	63,2	60,7
Labor Force Participation ** - Female (%)	2019	83,4	67,2	54,6	45,8
Sex Ratio (per 100 female)	2019	99,5	96,7	99,8	107,1
Human Develop. Index (Rank among 189 countries)	2018	162	...	...	...
Popul. Living Below \$ 1.90 a Day (% of Population)	2007-18	77,6	45,3	35,6	11,9
<b>Demographic Indicators</b>					
Population Growth Rate - Total (%)	2019	2,7	2,3	2,7	1,2
Population Growth Rate - Urban (%)	2019	4,5	3,3	3,6	2,3
Population < 15 years (%)	2019	40,4	39,1	40,6	27,6
Population 15-24 years (%)	2019	20,6	19,3	19,3	16,4
Population >= 65 years (%)	2019	3,0	3,5	3,5	7,2
Dependency Ratio (%)	2019	76,7	74,4	78,7	54,6
Female Population 15-49 years (% of total population)	2019	24,6	25,1	24,2	25,2
Life Expectancy at Birth - Total (years)	2019	67,0	63,4	63,5	70,8
Life Expectancy at Birth - Female (years)	2019	68,7	66,2	65,3	73,0
Crude Birth Rate (per 1,000)	2019	32,4	30,7	33,0	20,2
Crude Death Rate (per 1,000)	2019	5,9	7,9	8,0	7,3
Infant Mortality Rate (per 1,000)	2018	38,2	41,4	48,7	31,3
Child Mortality Rate (per 1,000)	2018	53,6	56,8	70,2	42,0
Total Fertility Rate (per woman)	2019	4,0	3,8	4,4	2,6
Maternal Mortality Rate (per 100,000)	2017	335,0	245,8	432,3	230,0
Women Using Contraception (%)	2019	47,1	49,9	39,1	61,7
<b>Health &amp; Nutrition Indicators</b>					
Physicians (per 100,000 people)	2010-18	18,1	48,0	33,4	121,8
Nurses and midwives (per 100,000 people)	2010-18	14,6	102,1	107,8	240,8
Births attended by Trained Health Personnel (%)	2010-17	44,3	68,4	61,7	78,5
Peop. Using at least basic drinking water services (% of Pop.)	2017	54,4	69,5	66,3	87,7
Peop. Using at least basic sanitation services (% of Population)	2017	10,5	44,6	40,3	68,5
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2018	0,3	12,2	3,4	...
Incidence of Tuberculosis (per 100,000)	2018	233,0	389,2	202,3	154,0
Child Immunization Against Tuberculosis (%)	2018	70,0	84,4	81,4	84,9
Child Immunization Against Measles (%)	2018	62,0	73,6	76,1	85,2
Underweight Children (% of children under 5 years)	2010-17	...	11,7	17,5	14,5
Prevalence of stunting	2010-17	...	35,1	34,0	23,6
Prevalence of undernourishment (% of pop.)	2017	44,4	25,3	18,5	12,3
Current health expenditure (% of GDP)	2016	6,0	6,8	5,3	5,4
<b>Education Indicators</b>					
Gross Enrolment Ratio (%)					
Primary School - Total	2010-19	142,5	115,7	100,1	104,1
Primary School - Female	2010-19	143,1	113,5	98,0	104,4
Secondary School - Total	2010-19	36,5	62,5	52,6	71,9
Secondary School - Female	2010-19	37,1	61,5	50,4	71,4
Primary School Female Teaching Staff (% of Total)	2010-18	53,5	59,4	48,6	62,9
Adult literacy Rate - Total (%)	2010-18	74,8	77,5	66,9	84,0
Adult literacy Rate - Male (%)	2010-18	...	82,7	70,8	88,2
Adult literacy Rate - Female (%)	2010-18	72,4	73,2	60,0	79,8
Government expenditure on Education (% of GDP)	2010-17	2,8	5,4	4,3	4,1
<b>Environmental Indicators</b>					
Land Use (Arable Land as % of Total Land Area)	2016	6,0	6,1	8,0	11,4
Agricultural Land (as % of land area)	2016	71,2	55,7	38,2	38,3
Forest (As % of Land Area)	2016	21,4	30,9	13,2	31,9
Per Capita CO2 Emissions (metric tons)	2014	0,1	3,1	1,2	3,5



Sources : AfDB Statistics Department Databases; World Bank: World Development Indicators;

last update :

April 2020

UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports.

Note : n.a. : Not Applicable ; ... : Data Not Available. \* Labor force participation rate, total (% of total population ages 15+)

\*\* Labor force participation rate, female (% of female population ages 15+)

## Annex II. Table of AfDB Portfolio in the Country

No.	Project Name	Date Approved	Date Completed	Amount Approved	Disbursement Rate	Fund	Performance	Age
1	PROJECT FOR AN INTEGRATED AGRO-INDUSTRIAL GROWTH POLE IN THE SOUTH (PICAS)	11/10/2017	12/31/2020	1,000,000.00	71.8	[ADF]	NA	2.9
2	MID-WEST NASCENT RURAL ENTERPRISES PROJECT (PROJERMO)	9/23/2015	12/31/2021	16,610,000.00	50.2	[ADF]	NPPP	5.0
		9/23/2015	12/31/2021	8,000,000.00	11.3	[TSF]		5.0
3	AGRO-INDUSTRIAL PROCESSING ZONE DEVELOPMENT PROJECT IN THE SOUTH-WEST REGION OF MADAGASCAR (PTASO)	9/29/2020	1/15/2024	20,000,000.00	0.0	[TSF]	NA	0.0
4	PROGRAMME FOR PROMOTING YOUTH ENTREPRENEURSHIP IN AGRICULTURE AND AGRO-INDUSTRY (PEJAA) – P1	1/11/2018	12/31/2021	700,000.00	74.8	[ADF]	NPPP	2.7
		1/11/2018	12/31/2021	4,300,000.00	51.2	[TSF]		2.7
5	BAS MANGOKY REHABILITATION AND EXTENSION PROJECT - PHASE II (PEPBM II)	11/26/2014	5/31/2021	16,140,000.00	62.7	[ADF]	NPPP	5.9
		11/26/2014	5/31/2021	24,000,000.00	67.4	[TSF]		5.9
6	SOUTH-WEST AGRICULTURAL INFRASTRUCTURE REHABILITATION PROJECT (PRIASO)	6/19/2013	9/30/2021	18,300,000.00	86.6	[ADF]	NPPP	7.3
		6/19/2013	9/30/2021	6,500,000.00	84.6	[NTF]		7.3
		6/19/2013	9/30/2021	4,447,974.58	68.4	[GEF]		7.3
7	MADAGASCAR - AFRICA DISASTER RISKS FINANCING (ADRIFI)PROGRAM	5/30/2019	12/31/2023	1,500,000.00	31.1	[TSF]	NA	1.4
<b>Total Agriculture</b>				<b>121,497,974.58</b>				
8	STUDY ON THE PROTECTED AREA AND ECOTOURISM MANAGEMENT PROJECT	5/24/2018	6/30/2021	1,000,000.00	26.3	[ADF]	NPPP	2.4
<b>Total Environment</b>				<b>1,000,000.00</b>				
9	MADAGASCAR SME BUSINESS LINKAGES PROGRAM (BLP)	5/15/2020	12/31/2023	1,000,000.00	0.0	[TSF]	NA	0.4
10	INVESTMENT PROMOTION SUPPORT PROJECT (PAPI)	7/9/2015	12/31/2020	4,000,000.00	32.9	[ADF]	NPPP	5.2
		7/9/2015	12/31/2020	3,000,000.00	40.7	[TSF]		5.2
11	CAPACITY BUILDING AND BLUE ECONOMY PROMOTION SUPPORT PROJECT	3/25/2019	12/31/2021	1,000,000.00	7.0	[TSF]	NA	1.5
12	PUBLIC REVENUE MOBILIZATION SUPPORT	4/12/2019	12/31/2021	1,000,000.00	6.9	[TSF]	NA	1.5
13	MULTI-COUNTRY COVID-19 RESPONSE PROGRAMME	7/22/2020	7/31/2021	30,000,000.00	0.0	[TSF]	NA	0.2
<b>Total Multi-Sector</b>				<b>40,000,000.00</b>				
14	SAHOFIKA HYDRO PROJECT-GOM EQUITY IN NEHO	5/13/2020	1/1/2028	3,213,000.00	0.0	[ADF]	NA	0.4
		5/13/2020	1/1/2028	7,000.00	0.0	[ADF]	NA	0.4
15	PPF - FEASIBILITY STUDY ON THE POWER TRANSMISSION NETWORK REINFORCEMENT AND INTERCONNECTION	11/21/2017	12/31/2020	1,000,000.00	72.4	[ADF]	NA	2.9

No.	Project Name	Date Approved	Date Completed	Amount Approved	Disbursement Rate	Fund	Performance	Age
	PROJECT							
16	MADAGASCAR - SAHOPIKA 192 MW HYDROPOWER PROJECT PARTIAL RISK GUARANTEE	12/13/2019	12/31/2025	70,917,962.10	0.0	[ADF]	NA	0.8
17	THE POWER TRANSMISSION NETWORK REINFORCEMENT AND INTERCONNECTION PROJECT (PRIRTEM-I)	12/16/2019	12/31/2024	9,650,000.00	0.0	[ADF]	NA	0.8
		12/16/2019	12/31/2024	18,170,000.00	0.0	[TSF]		0.8
	<b>Total Energy</b>			<b>102,957,962.10</b>				
18	GRANT TO COMBAT THE MEASLES EPIDEMIC	4/4/2019	6/30/2020	354,589.81	100.0	[SSN]	NA	1.5
	<b>Total Social</b>			<b>354,589.81</b>				
19	ROAD INFRASTRUCTURE DEVELOPMENT PROJECT (RN9, BEFANDRIANA AND POMAY BRIDGES) (PAIR)	10/18/2013	12/31/2020	29,092,700.00	99.99	[ADF]	NPPP	7.0
		10/18/2013	12/31/2020	77,889.11	100.00	[ADF]		7.0
		12/14/2012	12/31/2020	12,765,233.18	54.1	[OFID]		7.8
20	MADAGASCAR - INDIAN OCEAN - PROJECT TO DEVELOP CORRIDORS AND FACILITATE TRADE (PACFC)	11/27/2018	12/31/2024	8,450,000.00	0.0	[TSF]	IPR not yet approved	1.9
		11/27/2018	12/31/2024	22,680,000.00	0.0	[ADF]		1.9
		11/27/2018	12/31/2024	31,250,000.00	0.4	[ADF]		1.9
		11/27/2018	12/31/2024	32,609,057.33	0.0	[EU-Africa Infrastructure]		1.9
	<b>Total Transport</b>			<b>136,924,879.62</b>				
21	URBAN SANITATION MASTER PLAN OF MADAGASCAR (SDAUM)	12/24/2015	12/31/2021	1,500,266.20	62.4	[AWF]	NPPP	4.8
	<b>Total Water and Sanitation</b>			<b>1,500,266.20</b>				
	<b>Grand Total</b>			<b>404,235,672.31</b>	<b>31.50</b>			<b>2.29</b>

### **Annex III. Major Related Projects Financed by the Bank and Other Development Partners of the Country**

<b>PROJECT NAME</b>	<b>FINANCING</b>
POWER SECTOR OPERATIONS AND GOVERNANCE IMPROVEMENT PROJECT (PAGOSE)	WORLD BANK (Initial Financing and Additional Financing)
LEAST-COST ELECTRICITY ACCESS DEVELOPMENT (LEAD)	WORLD BANK
JIRAMA ANDEKALEKA HYDRO EXPANSION	EUROPEAN INVESTMENT BANK

## **Annex IV. Rationale for the Counterpart Funding Level of Less Than 10%**

This Note presents the financing parameters for the Power Transmission Network Reinforcement and Interconnection Project in Madagascar – Phase 2 (PRIRTEM-II), based on the Bank’s Policy on Expenditure Eligible for Bank Group Financing (ADB/BD/WP/2007/106/Rev. 2, May 2008) and the memorandum of 10 December 2014, issued by the First Vice-President of the Bank on guidelines for justification of costs proposed for Bank financing. This policy allows the Bank to finance with its resources expenditure necessary for attainment of project development objectives. The Note presents the framework for assessment of risks pertaining to public finance sustainability to ensure that Bank resources are used appropriately and in accordance with the terms of its mandate. PRIRTEM-II proposes a Government contribution of less than 10% of the total eligible ADF contribution on the following grounds:

### **Country’s Commitment to Combating Poverty**

Since the election of Andry Nirina Rajoelina as the new President of the Republic of Madagascar in 2019, he has committed to fighting poverty in the country. According to available data, the level of poverty remains very high overall, standing at 73.7% nationwide and at 79.6% and 50.3% in urban and rural areas, respectively. Thus, the new President embarked on formulating the Emerging Madagascar Plan (PEM) 2019-2023, aimed at laying the foundation for an emerging economy. This plan, which will serve as a benchmark for the country's development policy, is based on three fundamental sustainable development pillars: (i) developed human capital; (ii) accelerated, inclusive and sustainable economic growth; and (iii) Green Island Madagascar. The plan considers good governance as a cross-cutting linchpin of the three fundamental pillars. It places transparency, participation, efficiency, inclusiveness, accountability, respect for the rule of law and social justice at the heart of public action. PEM lays emphasis on providing the country with emergence-enabling infrastructure and enhancing energy production and access.

### **Macroeconomic Context**

Madagascar's economy is recovering gradually after a long political crisis that lasted from 2009 to 2013. However, with a very poorly developed industrial sector, the economy is still largely based on agricultural activities and services that are not very productive. Therefore, the country's economy remains highly vulnerable to fluctuations in commodity prices (falling prices of nickel, cobalt and vanilla, and rising prices of oil and imported goods). It is also frequently affected by climatic shocks (drought, floods, cyclones). The COVID-19 crisis is an additional challenge for Madagascar. Prior to the pandemic, the country was on a favourable growth trajectory. Projections were based on a real GDP growth rate of 5.3% in 2020, following an average annual performance of 4.4% over the period 2015-2019. The COVID-19 crisis should bring this growth momentum to a halt. Thus, as a result of the slowdown in the secondary (textiles and mining) and the tertiary sector (trade, transport and tourism), real GDP in 2020 would contract by 3% if the pandemic continues until December. On the demand side, the slowdown will be exacerbated by the contraction of public and private investment due to the likely delay in the implementation of public investment projects (ports, roads) and the freeze and/or postponement of foreign direct investment (FDI). The COVID-19 crisis will probably affect the level of Central Bank reserves and contribute to the depreciation of the national currency. Against this backdrop, the inflation rate is expected to rise to around 7.2% in 2020 from 5.6% in 2019. Export companies (textile and clothing sector, the mining sector) are the hardest hit by the COVID-19 crisis. The current account balance is expected to deteriorate sharply with a deficit of 5.9% of GDP in 2020, compared with 1.1% in 2019.

### **Fiscal Situation and Debt Sustainability**

The COVID-19 crisis should significantly affect the public finance situation both in terms of public revenue mobilisation and public expenditure re-allocation. The budget deficit is projected to widen to 5.3% of GDP in 2020 from 1.8% in 2019. As far as debt is concerned, with onset of the COVID-19 crisis, macroeconomic indicators have deteriorated significantly and Madagascar has moved from a situation of low risk of external debt overhang in 2019 to a moderate risk situation in 2020, according to the IMF's latest sustainability analysis (August 2020). The public debt-to-GDP ratio has worsened and is projected to reach 44.8% in 2020, with external debt and domestic debt accounting for 32.6% and 12.2%, respectively. In response to the COVID-19 crisis, the public authorities have adopted a Multisector Emergency Plan (PMU). This plan comprises three (3) pillars: (i) Improving governance for

the management of the pandemic and the security component at all levels; (ii) Strengthening social protection measures; and (iii) Supporting emergency economic recovery and protection. The total cost of the plan stands at USD 826.09 million. The plan is supported by the community of partners.

## Portfolio

As of 6 October 2020, the Bank Group's active portfolio in Madagascar comprised 21 public sector operations including 14 projects, 6 studies and one (1) emergency grant. Outstanding commitments amounted to UA 404.23 million. The average portfolio age was 2.29 years with a disbursement rate of 31.5%. The portfolio does not contain any problematic project (PP) or potentially problematic project (PPP). However, with the effects of the COVID-19 crisis, the portfolio performance is likely to be affected by the suspension of some works on the ground and the slowdown of public administration activities.

## Cost Sharing

Due to the difficult budgetary context, characterized by high economic vulnerability and fiscal pressures stemming from the COVID-19 crisis, budgetary margins and the Government's capacity to provide counterpart contribution for Bank-financed operations should remain very limited. However, to promote national ownership of projects, it is recommended that the principle of cost sharing be maintained, including the possibility of an in-kind contribution from the country under PRIRTEM-II. Thus, the financing parameters for PRIRTEM-II is summarised in the table below.

### PRIRTEM-II Financing Parameters: Rationale for an ADF Contribution Exceeding 90% of the Total Project Cost

Expenditure	Parameters	Explanations/Remarks
<b>Cost sharing</b> Maximum proportion of project costs that the Bank can finance	95% (maximum level)	In view of the country's continuing economic fragility and financial constraints, exacerbated by the COVID-19 crisis, it is recommended that the Bank contribute up to 95% of the financing of expenditure relating to PRIRTEM-II, with the possibility of in-kind contribution from the country.
<b>Financing of recurrent costs</b>	No threshold	The Bank may finance certain recurrent costs of PRIRTEM-II.
<b>Financing of costs in local currency</b>	Yes	Costs in local currency are eligible for Bank financing. These costs are specified in the project appraisal report.
<b>Taxes and duties</b>	100%	There are no unreasonable taxes and duties. However, there is a low probability that the Malagasy government will borrow to pay duties and taxes under PRIRTEM-II.

## **Annex V. Summary Note on the Assessment of Drivers of Fragility and Recommendations for Building Madagascar's Resilience**

### **1- Country Context**

**1.1 Physical geography:** Located in the Indian Ocean, Madagascar is the fourth largest island in the world, with an area of 587,041 km<sup>2</sup>. The country is separated from Africa by the Mozambique Channel. The island status, the nature of the relief and exposure to sudden changes in rainfall and temperatures make the country vulnerable to a series of major natural hazards (cyclones, floods, silting, drought and locust invasion of unprecedented proportions).

**1.2 Governance and political situation:** Madagascar has experienced repeated political and economic crises (1972, 1981, 1991, 2002 and 2009), characterized by what is now known as "the Malagasy ritual of power change in the streets, through the streets and by violence", with the support of the Defence and Security Forces (DSF). Out of 12 accessions to the high office of President, six were by coups d'état and one was due to the indisposition of the incumbent. The crises are often sudden, brutal and short-lived. The last one, which occurred in 2009, lasted five years until 2013. The Malagasy political class has benefited from the support of the international community, including the African Union (AU), the Southern African Development Community (SADC) and the International Contact Group (ICG), which enabled the adoption of a crisis roadmap, signed on 17 September 2011. The roadmap contributed to the return to constitutional order on 25 January 2014, the date of inauguration of the new President elected in a peaceful political atmosphere. To date, all the country's institutions are in place (Prime Minister, Government, National Assembly and its Bureau and various commissions).

**1.3 Economic and financial context:** Madagascar's economy is characterized by low, slow and unstable growth. The weak real GDP growth rate that has for long stood at 1.6% (reflecting a decline in real GDP per capita) is due to the under-performance of the 1972-1996 period and the deep crises of 2001-2002 and 2009-2013, which caused significant regression: 12.1% (1981); -9.1% (1991); -15.3% (2002) and -6.8% (2009). These results are also attributable to the country's unattractiveness, characterized by a low investment rate (12% of GDP) and a decline in total factor productivity. The graphs in the annexes show the GDP trend over time and the country's relative position compared to countries of its cohort.

**1.4 Demographics, poverty and inequality:** The population was estimated at 22.3 million in 2011, with an annual growth rate of 2.9%. Young people under 20 account for 53% of the population. The fertility rate is high at 5.6 children per woman. The human development index (HDI) ranks Madagascar in the bottom quintile (148<sup>th</sup> out of 174). In absolute terms, the population structure generates a pressing social pressure, compounded by the challenge of increasing poverty: 92% of the population has an income of less than USD 2 a day and over 53% live in extreme poverty. Poverty is exacerbated by the scale of inequalities and the weak development of social safety nets: the relationship between extreme percentile consumption stood at 9 points at 20% and 15 points at 10%.

### **2- Determinants, Explanatory and Constituent Factors of Fragility**

Madagascar was declared a fragile State from 2013 and a thorough evaluation of its fragility was launched in January 2014 by the Bank. Four categories of factors were analysed: (i) physical geography (ecology and environment); (ii) political (and institutional and security) factor; (iii) economic and financial factor; and (iv) social factor (poverty and inequality). The effects of external factors considered exogenous are included in the four categories of endogenous factors.

## 2.1 Physical Geography

The low capacity of the State relative to the size of its territory makes it impossible to deploy administrative and Government offices in a manner that ensures equitable delivery of State services. The fragility of the State, the regions and grassroots communities is perpetuated by three sources of weakness:

- (a) The weak presence of the State at the grassroots level as a result of devolution has not been offset by the decentralization process, which has remained a dead letter. Apart from urban municipal councils that have legitimate resources and elected officials, the decentralization process has marked time and failed to provide regional and local authorities (CTDs) with the appropriate resources required to perform their duties and assist the State in its sovereign functions. It has created lawless areas where people are exposed to influence peddling and insecurity risks (the practice known as *dahalo* or zebu rustling), and have to cope with isolation and frustrations (farmers are often dispossessed of their land). The illegal exploitation of natural resources is estimated at nearly USD 746 million<sup>5</sup> annually, according to the World Bank, in addition to the destruction of the ecosystem. The influence of external factors is just as important and in particular concerns the demand for raw materials emanating from the world market, and more specifically from emerging countries (China, India, Brazil and South Africa), as well as demand falling within the geo-strategy of foreign powers.
- (b) The island status of Madagascar is a major factor that has deprived the country of regional or multi-national physical projects and assets (roads, bridges and various other items). The permanence of natural disaster undermines agricultural and food production, infrastructure and facilities, and poses a threat to human lives: a quarter of the population is exposed to natural hazards. The overall cost (economic, social and financial) is estimated at almost 4% of GDP, representing a loss of over USD 700 million.

## 2.2 Political, Institutional and Security Factors

- (a) The country's recurrent crises stem from the instrumentalization of justice, the streets and the security forces, as well as from the manipulation of the fundamental law and electoral laws in a semi-presidential or semi-parliamentary system where the nascent democratic process is still weak, and especially in a context where politicians, public authorities and the ruling elite pursue parochial interests and seek privileges. The weakness of the democratic process is mainly caused by the absence of constructive political and social dialogue between the ruling coalitions, fuelled by a high sense of ego. The behaviour of the teams in power, the political class and political and military elites reflects a lack of leadership and vision and weakens the institutions and the State.
- (b) A State that is weakened at the central and decentralized level does not always have a monopoly on legitimate force. The lack of political balance and consensus results in the fragmentation of power and whittles down the capacity to control and bring together security forces under one command. For want of resources, the State's authority and legitimacy are compromised, in the face of Defence and Security Forces that are poorly paid and have to ensure security in urban areas and the regions. Such a situation perpetuates a vicious circle of insecurity, lawlessness and corruption, which is detrimental to the interests of the State and the people. The situation prompted an eminent political figure to comment that "seizing power in Madagascar is easier than keeping it."

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<sup>5</sup> The World Bank

## 2.3 Economic and Financial Factors

- (a) The initial development conditions and past economic choices have for long sustained the country's economic decline. The economic reforms implemented from the late 1980s, in a context of political, institutional and regional fragility, did not have enough impact to accelerate the economic catch-up and adjustment process. Structural reforms are still inadequate to stimulate sustainable growth in sectors with spill-over effects such as agriculture, agribusiness, energy, small- and medium-sized industries and support services (transport and trade). Growth and productivity are still low in these sectors.
- (b) The low attractiveness of the country in a context of insecurity, instability and corruption in the justice sector has led to the concentration of investments in the new information and communication technology (NICT) sector where risk is low and domestic demand high; and in the highly capital intensive mining sector, which constitutes an enclave within the national economy. While it is not obvious that taking resources from these areas to invest in agriculture would be an effective means of reviving the latter, the non-transparent management of mining royalties and dividends remains a major challenge.
- (c) The conditions for a lasting improvement in total factor productivity are far from being met, despite the positive - albeit artificial - developments of the period 1997-2008, resulting from direct investment in the mining sector and the delegated management of the sector. Except for the criteria for setting up and establishing enterprises, the country is still ranked in the lower quintiles due to the poor performance of the business facilitation, competitiveness and logistics indicators. The deficit in infrastructure is significant: the density of paved roads (per thousand km<sup>2</sup>) stands at 9.7 km in Madagascar compared with 31 km in Africa South of the Sahara (ASS) and 134 km – the average for low-income countries. Forty-four per cent (44%) of national roads are in poor condition and 31% in good condition. Only the Thomasine Port is operational in terms of handling large vessels. The railway network is obsolete.

## 2.4 Social Factors, Poverty and Inequality

- (a) The high poverty rate poses a challenge in orienting consumption and investment to meet the need to accelerate growth. The country needs USD 400 million annually to lift 53% of the population out of extreme poverty<sup>6</sup>. The depth of poverty is such that it takes up 2% of GDP, whereas a growth rate of 1% of GDP would help to reduce the incidence by 1%. The poverty gap is considerable and social indicators continue to point to an increasingly precarious food security situation, which jeopardizes the attainment of the Millennium Development Goals (MDGs) by 2015.
- (b) The intensity of poverty affects demand as well as supply, through its weak contribution to improving productivity. The poor population as well as the low education and health indicators combine to weaken growth drivers (quality of labour and competitiveness). Poverty and inequalities are sources of tension and insecurity, which could fuel the illegal exploitation of natural resources and increase insecurity for investors.

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<sup>6</sup> World Bank and UNDP

### **3- Energy Sector Challenges**

Madagascar is emerging from several years of turmoil, following the most recent political crisis in 2009. Government's plans to expand access to electricity have been constrained in recent years by the slow expansion of the power grid. The country is ranked in the bottom quintile in terms of Doing Business regarding the difficulty, delay and cost of accessing electricity. With an increasingly deteriorating power infrastructure and a shrinking workforce, JIRAMA (the State-owned power utility) is facing operational and financial difficulties and struggling to keep the lights on.

The limited access to adequate and reliable energy has been a major impediment to Madagascar's economic and social development. It makes it difficult to deliver basic social services or do business, which negatively affects the country's investment climate. Only 15% of the population has access to electricity. In addition, infrastructure is outdated, and existing generation, transmission, and distribution facilities are not able to meet growing demand. With frequent power outages, the Government has been responding to emergencies by providing expensive thermal generators, running mainly on diesel.

### **4- Resilience-Building Options**

Although electricity alone cannot create all the conditions for economic growth, it is obviously essential for creating a favourable environment to meet the basic needs of the population and facilitate the development of economic activities. Thanks to the Power Transmission Network Reinforcement and Interconnection Project in Madagascar, electricity access, particularly in rural areas affected by the project, will improve socioeconomic conditions by impacting the essential components of poverty, such as health, education, income and the environment

In these rural areas, lack of access to energy, especially electricity, has been identified as one of the main obstacles to economic development. Rural poverty and lack of electricity access are strongly correlated, as electricity is a prerequisite for productive activities. There is no doubt that access to a power grid and better electricity services will enable project beneficiaries to improve productivity by using more efficient electricity-based means of production, and allow households to save time and work longer by increasing their access to markets. In addition, the project will help to reduce air pollution since electricity will replace paraffin as a source of energy for lighting in rural areas, and to increase study time at home for school-age children.

The particular feature of the areas affected by this project is that they are disadvantaged in terms of electricity access. Owing to the high cost of connecting sparsely populated, isolated and inaccessible areas to the grid and the low electricity consumption, rural power grids are generally more expensive to install than urban ones. In addition, the price of electricity can be a barrier to access for some rural households given their low income. Moreover, long distances result in higher power losses and higher customer service and equipment maintenance costs.

There is a need to empower these populations, especially women and young people, taking into account activities that will strengthen human capital, promote literacy and boost the local economy. The recommendations below are valid for each of the 19 villages covered by the project:

- Related activities should focus on improving the socio-economic environment by integrating a range of income-generating activities such as:
  - o The creation of a small community centre in each village covered by the project, with vocational training facilities for out-of-school girls and women (sewing machines,

local soap making machines, agricultural and agro-processing machinery);

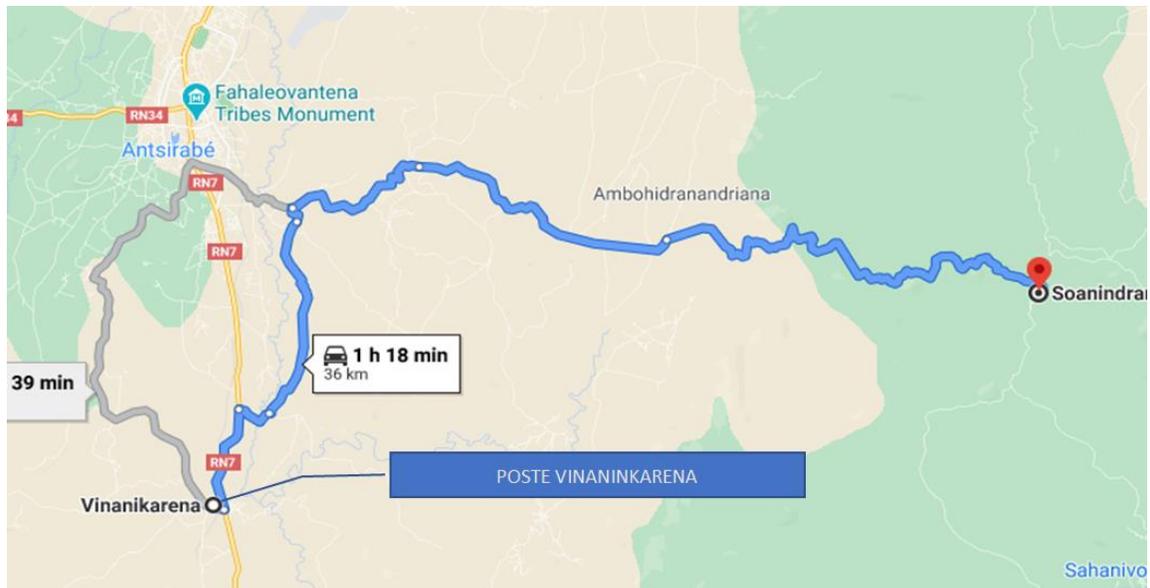
- The development of marketing infrastructure for agricultural products, including the construction of sheds for promoting small local markets;
- Construction of boreholes for water access;
- Modernisation of existing local schools through the supply of basic computer hardware, and upgrade/development of primary school playgrounds;
- Involvement, as much as possible and to the extent permitted by skills availability, of local youth and women in the project implementation;
- As part of the capacity-building process, selection of local youth from villages covered by the project for training during the technician training phase. These young people will be used by customer service centres, either as full-time staff or as contractors;
- Construction of a health outpost for first aid interventions (for villages located 3 to 5 km from a health centre).

However, the effective implementation of these measures requires a significant improvement in governance, including the acceleration of the anti-corruption fight, transparency in public procurement, streamlining of the management of public finance in general and project resources in particular. The country is at a turning point; public expectations remain high and the Government has yet to communicate effectively with the population to allay fears that the country could slip back into crisis.

## Annex VI. Map of the Project Area



Transmission line 220 kV - TS3 substation –Vinaninkarena substation



Rural electrification

## Annex VII: Environmental and Social Compliance Note

### A. Basic Information<sup>7</sup>

<b>Project Title:</b> Project to strengthen and interconnect electrical energy transmission networks in Madagascar - Phase II (PRIRTEM-II)		<b>Project SAP code:</b> P-MG-F00-006
<b>Country:</b> Madagascar	<b>Lending Instrument<sup>8</sup>:</b> DI <input checked="" type="checkbox"/> FI <input type="checkbox"/> CL <input type="checkbox"/> BS <input type="checkbox"/> GU <input type="checkbox"/> RPA <input type="checkbox"/> EF <input type="checkbox"/> RBF <input type="checkbox"/>	
<b>Project Sector:</b> PESD	<b>Task Team Leader:</b> Moussa KONE	
<b>Appraisal date:</b> 21-28/09/2020	<b>Estimated Approval Date:</b> 09/12/2020	
<b>Environmental Safeguards Officer:</b> Modeste KINANE		
<b>Social Safeguards Officer:</b> Edith KAHUBIRE		
<b>Environmental and Social category:</b> 1	<b>Date :</b> 30/07/2020	<b>Operation type:</b> SO <input checked="" type="checkbox"/> NSO <input type="checkbox"/> PBO <input type="checkbox"/>
<b>Is this project processed under rapid responses to crises and emergencies?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>Is this project processed under a waiver to the Integrated Safeguards System?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

### B. Disclosure and Compliance Monitoring

#### B.1 Mandatory disclosure

<b>Environmental Assessment/Audit/System/Others (specify: .....)</b>	
Was/Were the document (s) disclosed <i>prior to appraisal</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Date of "in-country" disclosure by the borrower/client	[04/08/2020]
Date of receipt, by the Bank, of the authorization to disclose	[03/08/2020]
Date of disclosure by the Bank	[04/08/2020]
<b>Resettlement Action Plan/Framework/Others (specify: .....)</b>	
Was/Were the document (s) disclosed <i>prior to appraisal</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Date of "in-country" disclosure by the borrower/client	[04/08/2020]
Date of receipt, by the Bank, of the authorization to disclose	[03/08/2020]
Date of disclosure by the Bank	[04/08/2020]
<b>Vulnerable Peoples Plan/Framework/Others (specify: .....)</b>	
Was the document disclosed <i>prior to appraisal</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Date of "in-country" disclosure by the borrower/client	[04/08/2020]
Date of receipt, by the Bank, of the authorization to disclose	[03/08/2020]
Date of disclosure by the Bank	[04/08/2020]
<b>If in-country disclosure of any of the above documents is not expected, please explain why: NA.</b>	

#### B.2. Compliance monitoring indicators

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Have costs related to environmental and social measures, including for the running of the grievance redress mechanism, been included in the project cost?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Is the total amount for the full implementation for the Resettlement of affected people, as integrated in the project costs, effectively mobilized and secured?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>

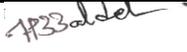
<sup>7</sup> Note: This ESCON shall be appended to project appraisal reports/documents before Senior Management and/or Board approvals.

<sup>8</sup> DI=Direct Investment; FI=Financial Intermediary; CL=Corporate Loan; BS=Budget Support; GU=Guarantee; RPA=Risk Purchase Agreement; EF=Equity Financing; RBF=Results Based Financing.

**C. Clearance**

Is the project compliant to the Bank's environmental and social safeguards requirements, and to be submitted to the Board?

Yes  No

<i>I. Prepared by:</i>	<i>Name</i>	<i>Signature</i>	<i>Date</i>
Environmental Safeguards Officer:	Modeste KINANE		17/11/2020
Social Safeguards Officer:	Edith KAHUBIRE		17/11/2020
Task Team Leader	Moussa KONE		17/11/2020
<i>Submitted by:</i>			
Sector Director:	Henry Paul B. BALDEH		17/11/2020
<i>Cleared by:</i>			
Director SNSC:	Maman-Sani ISSA		19/11/2020