



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

Appraisal Stage | Date Prepared/Updated: 13-Oct-2019 | Report No: PIDISDSA24884

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

Country Madagascar	Project ID P166526	Project Name Connectivity for Rural Livelihood Improvement Project	Parent Project ID (if any)
Region AFRICA	Estimated Appraisal Date 07-Oct-2019	Estimated Board Date 12-Nov-2019	Practice Area (Lead) Transport
Financing Instrument Investment Project Financing	Borrower(s) REPUBLIC OF MADAGASCAR	Implementing Agency Ministère de l'Aménagement du Territoire, de l'Habitat, et des Travaux Publics	

Proposed Development Objective(s)

The Project Development Objective is to enhance transport connectivity in selected rural areas to improve access to social and economic opportunities of communities.

Components

Rehabilitation of Secondary Roads in Priority Regions
Improvement of Provincial, Communal, and Unclassified Roads in Priority Regions
Promotion of Digital Solutions in targeted Rural Communities
Capacity Building and Project Management
Contingency Emergency Response Component (CERC)

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

Total Project Cost	140.00
Total Financing	140.00
of which IBRD/IDA	140.00
Financing Gap	0.00

DETAILS



World Bank Group Financing

International Development Association (IDA)	140.00
IDA Credit	140.00

Environmental Assessment Category

A-Full Assessment

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Madagascar is the fourth largest island in the world with an area of approximately 578,000 km² and a rapidly increasing population of 25.68 million people¹.** The country is divided into 22 regions which in turn comprise 114 districts. Districts in turn are divided into communes. Madagascar has five geographical areas: the east coast characterized by narrow escarpments where the island's remaining tropical rainforest is located, the Tsaratanana Massif, the central highlands characterized by deforested hills, the west coast, and the southwest. Most of the population lives in areas along the eastern and western coasts and near the capital city of Antananarivo in the central highlands. About 20 percent of the population lives in urban areas.

2. **Madagascar remains on robust growth trajectory, despite headwinds.** Following a prolonged period of political instability and economic stagnation, growth accelerated over the last five years to reach an estimated 5.1 percent in 2018, its fastest pace in over a decade. The return to constitutional order in 2014 was instrumental to this economic revival, as it contributed to restore investor confidence, re-open access to key export markets, reinstate flows of concessional financing, and encourage structural reforms. Growth continued apace in 2019, although moderating slightly to an estimated 4.7 percent, amid weakening external demand and a slow execution of public spending following the presidential and parliamentary elections. A post-election rebound in public and private investments is expected to result in growth averaging 5.4 percent in 2020-21. However, risks to the outlook have intensified and the potential for higher and more inclusive growth continues to be held back by inadequate infrastructures, low human capital, and weak governance.

3. **The recent growth trajectory, however, has not translated into significant poverty reduction.** Madagascar has one of the highest rates of extreme poverty in the world. Close to 80 percent of Madagascar's population lives in rural areas, and rural poverty rates are more than twice as high as urban

¹ 2018 census.



poverty rates. About 16 million or 70 percent of the total population lives below the poverty line. Poverty is not only widespread it also runs deep: the average Malagasy consumes 32 percent less than a person living directly at the national poverty line. The most recent poverty analyses² show that Madagascar made little progress in improving the welfare of the poor between 2001 and 2012. The incidence of extreme poverty is higher among female-headed households, which make up one-fifth of all households.

4. **Poor rural connectivity and adverse government policies have led to a decline in agricultural returns.**³ The average time to reach food markets increased from almost two hours in 2005 to close to two and a half hours in 2010 for the poorest quintile and the average real price to transport goods (for example, a 50 kg bag of rice) rose by 42 percent. Many agrobusinesses do not operate in rural areas because of poor transport infrastructure. Improving transport connectivity is key to opening up market opportunities and reducing poverty in rural areas. Government policies aimed at stabilizing rice prices in the face of sharply rising world prices depressed the domestic producer price disproportionately, intensifying rural poverty. While these measures kept the price of rice relatively stable for urban-based consumers, producers—who were also increasingly cut off from demand centers—were largely unable to benefit from rising world prices.

Sectoral and Institutional Context

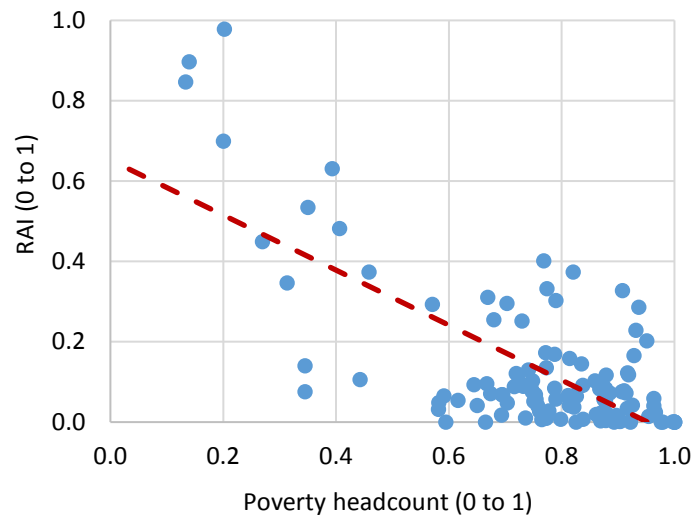
5. Although roads are the main mode of transport in Madagascar, road density is low. Nearly 17 million rural dwellers are disconnected from the network, leaving them isolated from markets and social services. The official classified road network totals 31,640 km and 19 percent of it is paved. Road⁴ density is only 5.4 km per 100 km² of land, which compares unfavorably to some neighboring countries (for example, 6.9 km per 100 km² in Zambia, 10 km per 100 km² in Tanzania, and 28.4 km per 100 km² in Kenya). The current definition of the official road network is narrow as there are several unclassified roads, the extent of which is unknown, that provide last-mile connectivity to people, especially in rural areas. Rural Access Index (RAI), defined as the share of the rural population who live within 2 km of an all-season road, is estimated at 11.4 percent, among the lowest in the region.

Figure 1: RAI and Poverty Rates at District Level in Madagascar

² World Bank. 2016. "Recent Trends and Analytical Findings on the Causes of Madagascar's Persistent Poverty." It uses household survey data from ENSOMD 2012 and EPM 2001, 2005, and 2010. Also see: World Bank. 2014. "Face of Poverty in Madagascar: Poverty, Gender, and Inequality Assessment."

³ Country Partnership Framework (CPF) for the Republic of Madagascar, Report No. 114744-MG.

⁴ Primary roads connect regional capitals and Antananarivo. Secondary roads connect primary roads and important ports and economic poles. The tertiary roads of the classified network connect district centers and villages.



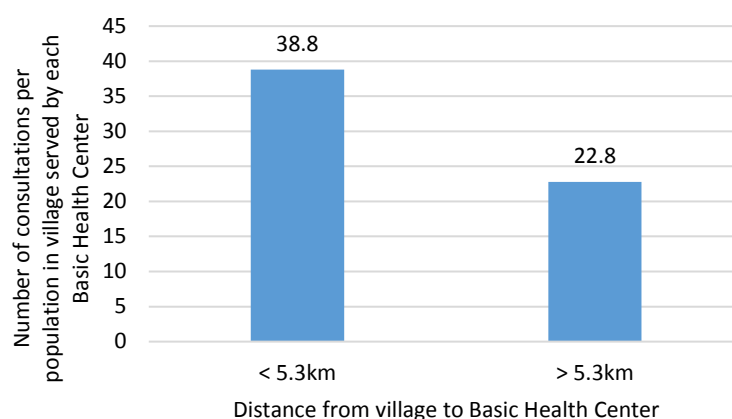
Source: World Bank. 2018. *Madagascar Spatial Analysis of Transport Connectivity and Growth Potential*. Final report.

6. **The secondary road network—which is critical for linking primary trunk roads with rural roads—has long been neglected, resulting in low rural access.** While 70 percent of primary roads are in good condition, about two-thirds of secondary roads are estimated to be in poor condition.⁵ The non-primary network (that is, secondary roads, provincial roads [*routes provinciales* RPs], and communal roads [*routes communales* RCs]) is in very poor condition. Most non-primary roads need to be repaired and rehabilitated to bring them to maintainable standard.

7. **Poor rural connectivity is a contributing factor to low access to health care services in rural areas of Madagascar.** Basic health centers are poorly connected to villages where people live because of poor rural roads. About half of the *fokontany* (villages) are located more than 10 km away from basic health centers. In addition, a quarter of the country's 3,600 basic health centers are disconnected from the official or main road network, which is critical to ensure the timely delivery of medical supplies. Currently, many primary health facilities experience a stock-out of medical supplies during the rainy season (October to April) when many roads are impassable.

Figure 2. Number of Patients per 100 Persons in Villages Served by a Basic Health Center

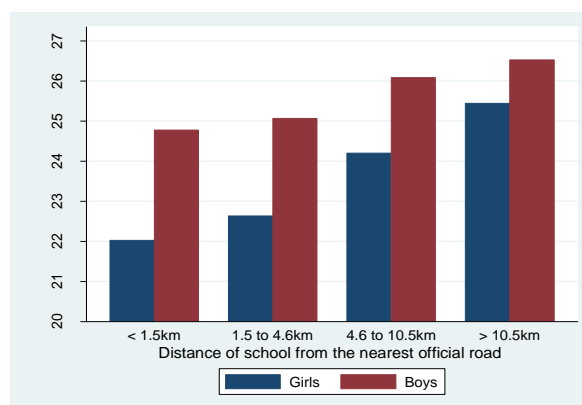
⁵ World Bank. 2015. *Appui à la Stratégie Sectorielle des Transports*.



Source: World Bank. 2018. *Madagascar Spatial Analysis of Transport Connectivity and Growth Potential*. Final report.

8. **Among other factors, the lack of road connectivity is a constraint to improved education outcomes.** The network of schools in Madagascar is quite extensive (more than 34,000 schools). However, more than half of them are completely disconnected from the road network. Further, repetition rates are very high with 20 percent of students repeating the same grade in primary schools. Recent data have shown that repetition rates significantly increase with distance to a well-functioning road (figure 3). From a supply perspective, the Madagascar Spatial Analysis of Transport Connectivity and Growth Potential has shown that teacher recruitment and retention could be improved through better connectivity. This is corroborated by several case studies.⁶ For example, in India, improved rural connectivity significantly reduced teacher absences (teachers often lived outside the village and, without all-weather roads, were forced to be absent due to poor weather).

Figure 3. Repetition Rate and Distance from Road



Source: World Bank. 2018. *Madagascar Spatial Analysis of Transport Connectivity and Growth Potential*. Final report.

⁶ Asim et al. (2017); Bell and Van Dillen (2012); Starkey (2007); and Levy (2004).



9. **Rural livelihood is severely constrained by the lack of affordable transport services linking populations to economic opportunities and human capital services.** In rural areas of Madagascar, the few existing transport services are provided by informal entrepreneurs using *taxi brousse* (buses and trucks). Operating costs of vehicles are very high due to the poor condition of the feeder road network and the low vehicle-operating speeds. This is severely impeding the development of rural transport services and thus adversely impacting access to markets and human capital services for the rural population.
10. **Madagascar faces significant risk due to an increasingly variable and changing climate.** Almost every year, the country suffers from extreme climate events such as cyclones and floods, causing significant economic losses. These events are becoming increasingly frequent and intense. Under-designed or under-maintained transport infrastructures are particularly vulnerable and easily washed away, causing reconstruction costs as well as disruption costs to the economy. In 2010, about 60 percent of extremely poor households suffered a catastrophic event or a combination of catastrophic events (for example, cyclones, floods, droughts, locust infestations, plant diseases) that adversely affected their economic well-being.
11. **Madagascar has among the highest road fatality rates in the world, ranking 152 out of 175 countries/regions.⁷** There were 340 road fatalities in 2016, or 28.6 per 100,000 people, higher than the 26.8 average for all of Africa.⁸ As the economy picks up, car ownership is likely to increase rapidly. Without proper road safety measures, traffic fatalities would increase. The main risk factors for injuries include reckless driving, drunken driving, poor road surfaces, inadequate signage, lack of protection for pedestrians, poor speed regulation, inadequate traffic law enforcement, and weak governance. In theory, the Ministry of Transport and Meteorology (MTM) has the responsibility for coordinating all relevant ministries such as the Ministries of Health and Education and the Land Transport Agency, but there is no capacity in practical terms. The Government recognizes that there is an urgent need to develop road safety policies, implementation mechanisms, and monitoring systems. But technical and financial support are still needed.
12. **Public expenditure on road rehabilitation and maintenance is extremely limited.** During the last decade (2005–2016), the Government spent only US\$19 million per year on road improvement, which is barely enough to improve 80 km of main roads or 0.3 percent of the total network per year. This is by no means enough to sustain the quality of the current road network. It is equally important to develop a proactive strategy and increase resilience of transport infrastructure in vulnerable areas, rather than spending significant resources on emergency works.
13. **Under the current decentralization framework, local authorities are responsible for the RP and RC networks.** However, they neither have the capacity nor the resources to manage them. There have been very few interventions on these networks due to the lack of financial resources in the Road Maintenance Fund (*Fonds d'Entretien Routier* FER). As a result, these roads have deteriorated and require significant resources to bring them to maintainable standards. Furthermore, local authorities both at the provincial and communal levels lack the necessary structural, technical, and financial capacity to manage the networks.

⁷ World Health Organization (WHO). Global Status Report on Road Safety 2018. Geneva. WHO.

⁸ World Health Organization (WHO). Global Status Report on Road Safety 2018. Geneva. WHO.



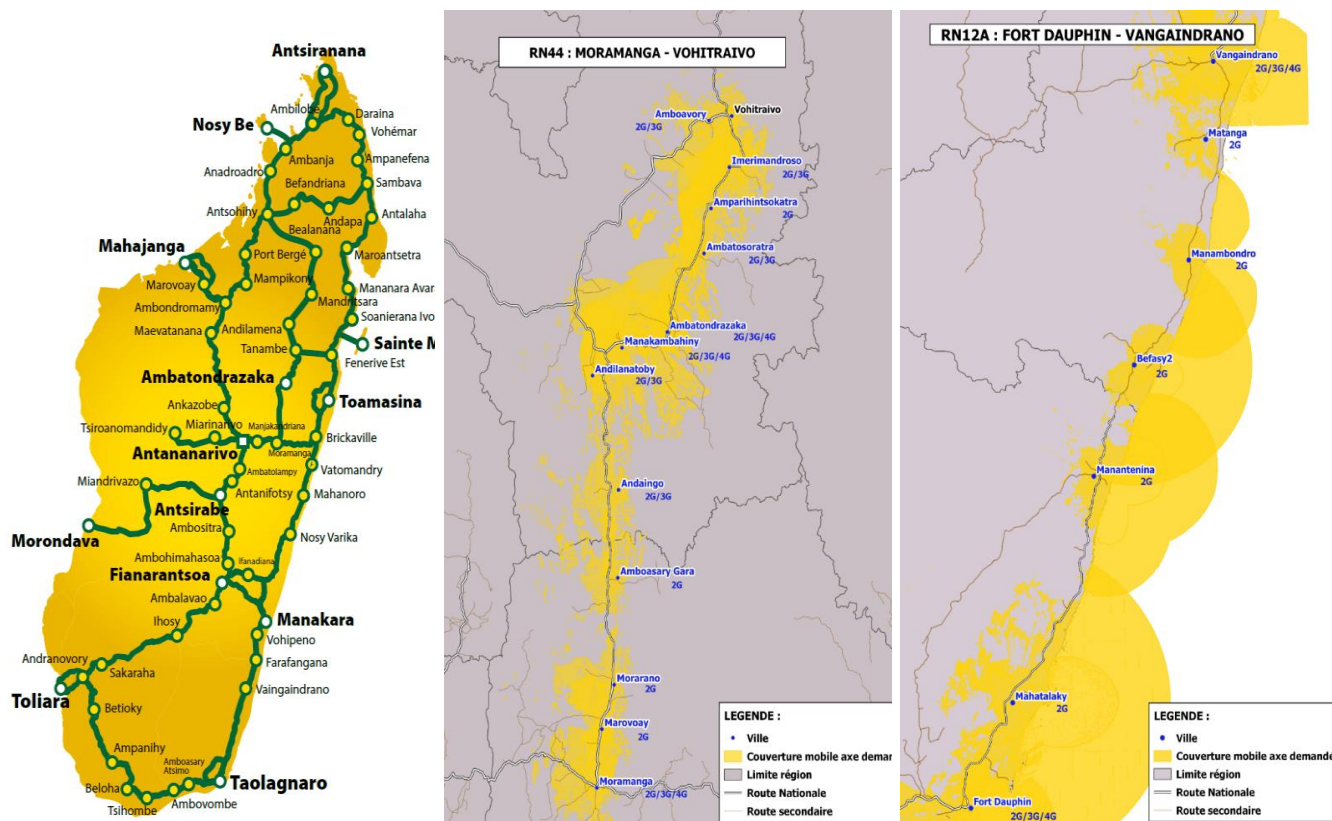
14. **The fragmented institutional setup is the main challenge in implementing road programs.** Responsibility for the management of the national road (*route nationale* RN) network is currently split between the Ministry of Spatial Planning, Housing, and Public Works (MAHTP) and the Road Authority of Madagascar (ARM), despite existing laws entrusting the ARM with management responsibility over the entire RN network. Indeed, only 40 percent of RNs have been effectively transferred from the MAHTP to the ARM. The MAHTP's continuing involvement in network management creates confusion and makes it difficult to plan, monitor, and coordinate road sector investments and maintenance. Furthermore, it delays the materialization of the MAHTP's own internal reform to refocus its prerogatives on technical oversight and supervision as well as technical support to local authorities for the management of their road networks.
15. **A new institutional setup is in place since June 2019.** Two presidential ordinances were issued on June 18, 2019, to abrogate the ARM and the FER and replace them with the Road Agency (RA) and the Road Fund (*Fonds Routier* RF), respectively.
16. **The decree creating the RA also sets its organization, operation, and responsibilities.** The newly created RA is a public institution with an economic vocation and is responsible for: (a) carrying out management, investment, development, maintenance, and operation of road networks and related structures and equipment; (b) assisting in the programming of road projects including construction, rehabilitation, and periodic and routine maintenance, in accordance with the guidelines and strategic planning established by the Government; (c) promoting lower investment and maintenance costs for the RN network and improving service to users; and (d) ensuring better preservation and conservation of the RN asset.
17. **The newly created RF is a public institution classified as a national fund and subject to the rules governing administrative public institutions.** Its main tasks are to: (a) contribute to the direction and implementation of the RN policy in both investment and maintenance and (b) ensure the collection and management of resources that can be allocated to the achievement of the objectives of policies and strategies for the development and safeguarding of the RN asset. Major innovations made by the decree include: (a) widening the field of activities of the RF to cover construction, rehabilitation, management, and operation of road networks, while previously the FER was limited to maintenance only and (b) changing the Road Maintenance Orientation Board (COER) of the FER to the Board of Directors and Orientation (COA) and increasing membership to 13 directors.
18. **With the recent increase in penetration of information and communication technology (ICT)⁹ services, there is an opportunity to leverage low-cost digital solutions for connectivity and rural livelihood improvement.** With support from an International Development Association (IDA) credit, the Communications Infrastructure Project (CIP, P094103) was implemented between November 2007 and December 2015 in three main areas covering nine regions, mostly in rural areas and in locations that are difficult to access. Successful implementation of the project has resulted in significant growth in the penetration of ICT services in certain regions. Internet service penetration improved from negligible at the time of project approval in 2007 to 13.4 percent at the end of the project in 2015, tripling the targeted goal. At the same time, the volume of international traffic reached 32 Gigabytes per second at the end of the project, exceeding the intended goal by almost 50 percent. This growth included remote populations

⁹ In Madagascar, ICT falls under the Ministry of Posts, Telecommunications, and Digital Development.



in more than 660 rural communities, including in the project areas, who now have access to ICT. Furthermore, private telecommunications service providers have started to deploy cost-effective broadband connectivity solutions to schools in remote rural areas.

Figure 4: Fiber and Mobile Data coverage in project areas



Source: Telma

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

19. The Project Development Objective (PDO) is to enhance transport connectivity in selected rural areas to improve access to social and economic opportunities of communities.

Key Results

- (a) Rural population with access to an all-season road in the project areas;
- (b) Travel time between origin and destination (Marovoay to Vohidiala and Fort-Dauphin to Vangaindrano);
- (c) Quantity of litchi from the project areas (South-East) transported to markets;
- (d) Number of schools in the project areas with improved road access; and
- (e) Number of health centers in the project areas with improved road access.



D. Project Description

The project components are detailed hereafter.

Component 1: Rehabilitation of Secondary Roads in Priority Regions (estimated cost US\$108.0 million equivalent financed by IDA)

20. **Component 1 primarily focuses on the secondary road network, the ‘missing middle’ which is critical for continuity and connecting rural roads with the main network, thus connecting rural areas to secondary cities.** It supports rehabilitation of 148 km of secondary roads selected using the prioritization method described in section IV. It covers: (a) the rehabilitation of a 113 km¹⁰ section of RNS44 which is the only connection between the rice basin of Ambatondrazaka and the main trunk network in the Alaotra Mangoro region; (b) the rehabilitation of a section of about 35 km of RNS12A which is the only road that provides access to the poorest districts in the country located in the regions of Anosy and Atsimo-Atsinanana; and (c) construction of the Manambondro bridge on RNS12A to replace the existing ferry crossing.

21. The works interventions will include, among other things, construction of bridges, rehabilitation or reconstruction of hydraulic structures, rehabilitation of roads and their pavements, and improvement of related road safety facilities¹¹. These works will be informed with consideration of risks of natural disasters and climate change impacts.

Component 2: Improvement of Provincial, Communal, and Unclassified Roads in Priority Regions (estimated cost US\$20.0 million equivalent financed by IDA)

22. **This component will finance improvement works on sections of RPs, RCs, and unclassified roads totaling 500 km to enhance road accessibility and climate resilience in selected communes of the targeted regions, including design studies and supervision of works.** These roads will improve access to markets and human capital services, including schools and health centers. The types of interventions include, among others, reconstruction or rehabilitation of hydraulic structures, graveling, and surface treatment.

Component 3: Promotion of Digital Solutions in Targeted Rural Communities (estimated cost US\$4.0 million equivalent financed by IDA)

23. **The project provides a strong opportunity to support the development of Digital Solutions, capitalizing on the high-capacity fiber optic cables already lined up along the secondary roads (RNS44 and RNS12A) to be rehabilitated under component 1.** The project will leverage existing digital connectivity solutions to deliver digitally enabled transport and agricultural services to the rural communities that are the beneficiaries under components 1 and 2. The digital kiosks manned by trained community members will complement users of smartphones and feature phones on 2G+ networks in farmer groups or cooperatives to provide a suite of applications and services that will enhance climate resilience and help reduce information asymmetry between farmers and the markets. Using the

¹⁰ Out of the 113 km, a first stretch of 40 km, from Marovoay to Amboasary, is being constructed by GOM using IDA retroactive financing mechanism (see annex 1).

¹¹ Horizontal and vertical signage, traffic calming measures, guardrails, etc.



Community Information Kiosks as digital aggregation points, the project will extend the digital services to those who do not own a mobile phone or have access to mobile data service. **This component will not invest in the expansion of broadband connectivity but rather focus opportunistically on the development of digital services targeted to the local communities. Specifically, this component will support the emergence of a digital innovation ecosystem aimed at providing local content, applications, and services for rural development in the areas targeted by the project.** It will include, among others, the following activities: (a) provision of relevant close-to-real-time agroclimatic data and forecasts via mobile phones and smartphones, access-to-market pricing and commodity futures trading information via mobile phones and smartphones through cloud-based dissemination platforms to small-scale farmers for increased productivity, and climate data and local and regional market information through the deployment of Community Information Kiosks; (b) promotion of rural transport services through the use of ICT-based solutions to connect key services, the marketplace, and end users in a reliable and cost-effective manner; and (c) financing of necessary equipment and materials for the digital platform and services, including smartphones, GPS equipment, solar panels, computers, software, and so on.

24. The project will ensure that interventions under this component are benefiting from lessons learned from, and in alignment and implemented in coordination with relevant ongoing and planned activities in the Agriculture, Finance, Competitiveness and Innovation, and Digital Governance sectors. Specifically, while the deployment of warehouses to be co-located with the Community Information Kiosks will be coordinated with Integrated Growth Poles of Agroindustry Project in the South of Madagascar funded by AfDB, the introduction of digital payments for Transport and Agricultural services in the target areas will be informed by the scope of Integrated Growth Poles and Corridors 2.2 (P164536) and MG-Digital Governance and Identification Management System Project- PRODIGY (P169413) projects.

Component 4: Capacity Building and Project Management (estimated cost US\$8.0 million equivalent financed by IDA)

25. This component will finance capacity building and institutional-strengthening activities, among other things, in the following areas: (a) strengthening the institutional capacity of the MAHTP and the newly created RA and RF, including, among others, improving road asset management at the national and subnational levels; (b) building capacity for ensuring road safety; (c) building capacity for the inclusion of climate resilience in the planning and management of road infrastructure; (d) supporting MAHTP for building skills in geo-spatial planning and analysis in Madagascar; and (e) supporting the main public engineering university on civil engineering and digital technology. This component will also provide support and build capacity for the management, implementation, supervision, and audit of the project and social and environmental safeguards; identification and mitigation of gender disparities¹²; and mainstreaming of citizen engagement in the road sector.

26. This component will also finance activities designed to prevent and mitigate Gender-Based Violence including Sexual Exploitation and Abuse (SEA) risks linked to project civil works sites, as well as their monitoring. These activities will be implemented together with a specialized NGO with extensive experience in working on GBV matters in Madagascar. Recognizing that there is a significant risk of GBV in the project areas, the project has developed an approach based on the World Bank's 'Good Practice Note for Addressing Gender Based Violence in Investment Project Financing (IPF) involving Major Civil

¹² Currently, there is no diagnostic that analyzes gender disparities in the road sector in Madagascar.



Works'. Annex 3 provides details of the GBV Prevention and Service Provision Action Plan. **The budget of safeguard monitoring activities is included under component 4 and estimated at US\$ 1,000,000.**

Component 5: Contingency Emergency Response Component

27. This component will facilitate access to rapid financing by allowing reallocation of uncommitted project funds in the event of a natural disaster, either by a formal declaration of a national emergency or upon a formal request from the GOM. Component 5 will use IDA Immediate Response Mechanism.

E. Implementation

Institutional and Implementation Arrangements

28. **The project will be housed within the MAHTP.** The institutional arrangements for project preparation and implementation of its activities are described below.

29. **Project Steering Committee.** A steering committee (SC) will be chaired by a representative of the MAHTP and will include, among others, representatives of the following ministries: Transport and Meteorology, Interior and Decentralization, Finance and Budget, Agriculture, Health, Education, ICT, and the Minister of Population, Social Protection and Gender. The SC will ensure that throughout the life of the proposed project, there is adequate strategic direction, overall oversight, and coordination with other line ministries. The SC will meet at least once a year and as may be needed.

30. **Project Technical Committee.** A technical committee (TC) will be chaired by the Project Coordinator (PC) and will include designated technical experts from the MAHTP; the RA; the RF; the Directorate of Land Transport of the MTM; the Ministry of Agriculture; the regions of Alaotra Mangoro, Anosy, and Atsimo-Atsinanana; and the Integrated Growth Pole Program. The TC will convene as needed and ensure technical oversight, review annual work plans and budget (AWPs&B), and ensure that the proposed project meets its overall objectives.

31. **Project Coordinating Unit.** The Project Coordinating Unit (PCU), which will be strengthened for project management, technical, and fiduciary aspects, will be housed in the MAHTP under the Secretary General of the ministry and will be responsible for: (a) preparation and consolidation of AWPs&B; (b) implementation, contract management, coordination, and monitoring of all project-related activities; (c) production of periodic implementation reports; (d) maintenance of records and accounts for all transactions related to the PCU and the project; (e) execution of the annual audit of the entire project and preparation of consolidated annual financial statements and Implementation Financial Reports (IFRs); (f) monitoring of the various activities supported under the project, including management of the environmental and social safeguards aspects and preparation of quarterly Activity Progress Reports; (g) monitoring and consolidation of the monitoring and evaluation (M&E) criteria as agreed with the Borrower; (h) procurement and financial management (FM); and (i) preparation and organization of the SC and TC meetings and the required documentation for the meetings.

32. **Implementing Agency (IA).** The implementing entity for the project is the PCU, on behalf of the MAHTP. The implementation capacity of the PCU will be strengthened through hiring of a qualified PC, Social safeguard specialist, GBV Specialist, Environmental specialist, FM officer, internal auditor,



procurement officer, and other relevant technical specialists. All contracts for PCU staffing and project implementation (works contractors, goods suppliers, consultants, and consulting firms) will be signed by the Secretary General of the MAHTP. Relevant national technical entities, through their active involvement, will support the PCU in the implementation of the project through arrangements with the PCU as indicated below.

33. **The RA (formerly ARM) will be technically involved in Component 1.** RNS44 and RNS12A are secondary roads falling under the RA's responsibility. The RA will provide technical input in procurement of contractors for works and consultants for supervision of works (contractors and consultants are recruited by the PCU). The RA will also actively take part in the commissioning of works as it will take over the secondary roads once rehabilitated under the project.

34. **Local authorities (districts and communes) in Alaotra Mangoro, Anosy, and Atsimo-Atsinanana will be technically involved in Component 2.** With the support of the regional directorates of the MAHTP, local governments will be actively involved in planning the interventions on the RP and RC networks under Component 2. This arrangement will promote decentralization and build capacity in local government entities.



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

The proposed project will enhance road connectivity in the priority regions of Alaotra Mangoro, Anosy, and Atsimo-Atsinanana through climate-resilient interventions on secondary, provincial, and communal road networks and promote the use of ICT for rural development and transport services.

G. Environmental and Social Safeguards Specialists on the Team

Paul-Jean Feno, Environmental Specialist

Andrianjaka Rado Razafimandimby, Social Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
		This policy is triggered since the rehabilitation and improvement of secondary, provincial and communal roads may result in both transient and non-transient environmental and social impacts.
Environmental Assessment OP/BP 4.01	Yes	The EA category for this project is A. The project will entail economic and physical displacements of PAPs along the ROWs, labor influx, health and safety issues related to construction and labor influx, volume and sources of construction materials, which could entail opening new quarry and borrow pit



areas and their environmental and social impacts, among others.

Specifically, works would involve upgrading of a total of 148 km of roads to asphalt standard, construction of one (1) major bridge, reconstruction of drainage structures to make them climate-resilient (side drainage, culverts, and small bridges) within existing RoW, which would entail extraction of high volume of construction materials, more labor force and influx, PAPs to be affected and more health & safety issues.

Site specific ESIA and ESMP have been prepared for Secondary roads (RNS44, and RNS12A) to be rehabilitated (Component 1), consulted upon, approved and disclosed. All the civil works contracts for road rehabilitation will include provisions on how to address environmental and social mitigation and monitoring aspects during works. For Component 2, where the location is not yet known, an ESMF and RPF have been prepared and disclosed prior to appraisal.

The influx of labor, in the rural setting where Secondary and Tertiary Roads are to be improved, may engender with social conflict, increased crime inter-community migration (“followers”), impacts on community dynamics, increased competition for public service provision, Gender Based violence (GBV), Sexual Exploitation and Abuse (SEA), Child labor and school dropout, local inflation, increased



		<p>pressure on accommodations and rents and other services, increase in traffic and its related accidents, and increased risk of communicable diseases and burden on both the communities and local health services. Risk/impact assessment of social impacts (e.g. GBV, community health and safety, population influx) are part of the ESIA's, and will cover both construction and operational phases of the project. These risk assessments have informed the mitigation measures included in the ESMPs/CESMPs and have recommended measures that were fed into the design of the project, and institutional arrangements for implementing agencies or other parties. The ESMP has identified additional plans that are required (e.g. OHS plan; community health and safety; waste disposal plan, labor management and influx plan, and emergency response plans).</p>
Performance Standards for Private Sector Activities OP/BP 4.03	No	N.A
Natural Habitats OP/BP 4.04	Yes	<p>This policy is triggered given the scope of rehabilitation and improvement works on secondary and provincial roads, and the potential opening of new areas for quarry and borrow pits that could affect natural habitats. Civil works alone could affect nearby river systems and could induce impacts on nearby forests and other natural habitats. Some of the tertiary roads that will be identified during implementation may cross natural forests and grasslands and hence cause disturbance for wildlife.</p>
Forests OP/BP 4.36	Yes	<p>Tertiary roads that may be identified during the implementation phase may cross forest reserves.</p>



		The ESMF includes screening for impacts and measures to mitigate them.
Pest Management OP 4.09	No	The activities are not expected to involve pest management, so this policy is not triggered.
Physical Cultural Resources OP/BP 4.11	Yes	No Physical Cultural Resource is expected to be impacted by the Project. However, civil works may uncover and destroy archeological artifacts if appropriate measures are not put in place during implementation. The ESMF and the ESIA provide a comprehensive “chance find procedure” to include in enterprise contracts for a proper handling of such issue if case arises.
Indigenous Peoples OP/BP 4.10	No	There are no ethnic minorities in Madagascar that meet the criteria defined under the policy. The policy is thus not triggered.
Involuntary Resettlement OP/BP 4.12	Yes	The policy is triggered because the rehabilitation of the proposed roads will require land acquisition which will induce loss of goods (crops), assets, and resources. Economic displacement is also expected, but physical resettlement is not likely to occur, as rehabilitation will remain within existing Right of Way (RoW). To date, for both RNS12A and RNS44, 1,105 households are expected to be affected by project activities. To reduce these risks and to meet safeguard policy requirements, the Borrower has prepared: (i) Resettlement Action Plans (RAP) for RNS12A and RNS44; and (ii) a detailed Resettlement Policy Framework (RPF) for roads not yet identified, mainly Communal and Provincial roads.
Safety of Dams OP/BP 4.37	No	The Project is not financing any activities related to dams. This policy is not triggered.



Projects on International Waterways OP/BP 7.50	No	This policy is not triggered as Madagascar is an Island country that does not share international waters with neighboring countries
Projects in Disputed Areas OP/BP 7.60	No	This policy does not apply.

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

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

The Project is classified as Category “A” because of the potential negative environmental and social impacts and risks related to (i) the temporary and permanent land acquisition and economic displacement of affected households; (ii) community health and safety risks such as risks to increase HIV/AIDS transmission; (iii) risks related to GBV, community health and safety, labor influx, and Sexual Exploitation and Abuse (SEA); (iv) accident risks during construction; and (v) nuisances such as noise, dust, vibration during construction. Other impacts include the destruction of trees because of the enlargement of the right-of-way in some areas, including sandpits and quarries and the nuisances caused by waste generated on the construction and civil works sites.

Most of the resettlement aspects are economical and temporary displacement during the works. No impact on natural habitat or national parks is anticipated.

Five environmental and social Safeguard Policies are triggered by this operation: Operational Policy OP 4.01 (Environmental Assessment), OP 4.04 (Natural Habitat), OP 4.36 (Forests), OP 4.11 (Physical Cultural Resources), and OP 4.12 (Involuntary Resettlement). To that effect, the borrower has prepared: (i) framework documents– ESMF and RPF for the improvement of Provincial and Communal roads for which scope and designs are not fully defined at the time of appraisal; (ii) standalone social and environmental assessments (ESIAs with ESMPs) for each secondary road to be rehabilitated, namely, RNS12A, and RNS44, and (iii) Resettlement Action Plans (RAPs) for RNS12A and RNS44.

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

The proposed project is not expected to have long term adverse environmental and social impacts in the project areas. Overall project impacts are considered generally substantial, with the most significant related to land use during rehabilitation of secondary roads. The Project also has the potential to have a positive impact on people in the project's target areas, especially the Agriculture sector. It is expected to improve access to markets



and exchanges of goods in the project areas.

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

There are no alternatives to the present project design. Civil works will be undertaken within the existing rights-of-way so as to minimize involuntary resettlement. The approved ESIA for the two secondary roads (RNS12A, and RNS44) have demonstrated that the most viable technical options, from an environmental, social, technical and economic point of view, were adopted.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The PCU housed within the MAHTP under the Secretary General of the Ministry is the implementing agency of the Project. The client has been actively responsive in addressing environmental and social aspects. At the national level, Madagascar has a legislative and regulatory framework which is conducive to good environmental management. In addition, Madagascar has signed a number of international treaties and conventions to ensure sound environmental management. The Malagasy Environmental law mentions that Environmental assessment for both private and public development is regulated under Décret N°2004-167 (MECIE). This is fairly effective but institutional capacity needs to be developed to ensure more widespread application and improved monitoring. The national environmental law will be reinforced by the World bank safeguard policies for this proposed project.

The Borrower prepared an ESIA and a RAP for the known project roads (RNS44, and RNS12A). For the unknown locations, an ESMF and a RPF have been prepared. All activities for which the location will be known during project implementation will be subject to environmental and social screening to minimize the potential negative impacts of these activities.

Environmental and Social Management Framework (ESMF): In compliance with OP 4.01 (Environmental Assessment), since the precise locations and potential impacts of future investments on Communal and Provincial roads cannot be identified prior to appraisal, an Environmental and Social Management Framework (ESMF) has been prepared to be used to screen sub-project proposals for environmental, social, gender, and health and safety impacts by using the Environmental and Social Screening Form (ESSF) checklist. The ESMF, which includes a generic Environmental and Social Management Plan (ESMP), has taken into account the environmental and social profiles in the project target area.

The ESMF also outlines the importance of developing an operational grievance redress mechanism which will capture and address environmental, social, governance, and other grievances and negative impacts of the project. Prior to its commencement, and as soon as the implementation sites are identified, each sub-project/activity will be screened per the ESSF procedures detailed in the ESMF. The screening outcomes will determine the need to prepare an Environmental and Social Impact Assessment (ESIA), and a freestanding Environmental and Social Management Plan (ESMP); whereas the Resettlement Policy Framework (RPF) will determine the need for preparation of additional Resettlement Action Plans (RAPs).



Since the project is rated a Category A project, all specific environmental and social ToRs for identified sub-projects under Component 2 during implementation will be submitted for the Bank's approval before launching environmental and social studies. The works of these selected sub-projects will be executed with the environmental and social clauses in the contracts and with the required Contractor Environmental and Social Management Plans (CESMP) included after the specific ESIA's are approved by the Bank. The screening of the sub-projects will be done by the safeguard staff of the PCU (one environmental specialist, one social safeguard specialist, and one GBV specialist). The safeguard specialists will ensure that all contractor contracts include environmental and social clauses (including a worker code of conduct, specific grievance redress mechanism, specific measure regarding gender-based violence), which are attached as an annex to the ESMF and will also be developed in the specific ESIA for the selected sub-project sites during implementation in order to ensure adequate environmental and social management practices during construction and operation.

Environmental and Social Impact Assessments (ESIA): In compliance with OP 4.01 (Environmental Assessment), stand-alone Environmental and Social Impact Assessments (ESIA) have been prepared for RNS44, and RNS12A, including an ESMP and a RAP. These instruments have been approved by the Bank during project preparation phase. The environmental and social review of each selected sub-projects has noted that the selected activities could cause directly or indirectly impacts at the main work sites, without any major environmental impacts. Further to sites visits and public consultations, it was determined that no natural habitat or archaeological vestiges will be impacted by the works which will be contained within existing rights-of-way. The ESMP outlines solid and coherent environmental and social measures to manage and reduce in acceptable level the identified impacts and risks of the identified sub-projects. All contractor bidding documents will include specific environmental and social clauses to be strictly implemented. Supervising engineer (Bureau de contrôle) contracts will include provisions for overseeing the implementation by the contractors of the environmental and social clauses. For the selected secondary roads (RNS12A, and RNS44), ESIA's EHS guidance that could be applied are:

General

https://www.ifc.org/wps/wcm/connect/00dbdb8048855b7588f4da6a6515bb18/010_General%2BGuidelines.pdf?MOD=AJPERES&CACHEID=00dbdb8048855b7588f4da6a6515bb18

Toll Roads

https://www.ifc.org/wps/wcm/connect/4c4c238048855590b71cf76a6515bb18/048_Toll%2BROADS.pdf?MOD=AJPERES&CACHEID=4c4c238048855590b71cf76a6515bb18

Labor influx

<http://pubdocs.worldbank.org/en/497851495202591233/Managing-Risk-of-Adverse-impact-from-project-labor-influx.pdf>

EHS guidelines on construction and decommissioning

<https://www.ifc.org/wps/wcm/connect/7d708218-2a9e-4fcc-879d-9d5051746e7d/4%2BConstruction%2Band%2BDecommissioning.pdf?MOD=AJPERES&CVID=Is62NKq>

Directive on Occupational Health and Safety



<https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=Is62x8I>

Resettlement Policy Framework (RPF) : In compliance with OP 4.12 (Involuntary Resettlement), since the precise locations of Communal and Provincial roads are not yet defined, an RPF has been developed that takes into account the socio-economic context of the resettlement. Indeed rehabilitation will affect various elements of the rural environment and are likely to generate land acquisitions that would result in loss of land, property, assets and/or socio-economic activities among the affected communities, including their possible involuntary resettlement. Therefore the RPF has (i) described the way for the development of potential RAP to be developed after identification of specific activities of the project, (ii) outlined eligibility criteria for PAPs, (iii) defined specific compensation matrix for the project, (iv) outlined consultation process for the future PAR, (v) defined the grievance redress mechanism (GRM) which will be developed into the project and which will capture all complaints related to the project but not only those from resettlement issues, and (vi) proposed the institutional arrangement for resettlement implementation as well as the M&E approach for resettlement.

Resettlement Action Plan (RAP): In compliance with OP 4.12 (Involuntary Resettlement) Resettlement Action Plans have been developed to address all aspects related to land acquisition, temporary, or permanent involuntary resettlement, and loss of livelihoods during rehabilitation of RNS12A and RNS44. The RAPs have identified 1,105 households which will be directly or indirectly impacted by the project. The RAPs outline variable compensation and resettlement support for households and PAPs, without exclusion even though some PAPs are irregular occupants. The RAPs also define a grievance redress mechanism (GRM) which will capture all complaints related to the project including those from resettlement issues. Also a clear and coherent implementation plan, including the necessary institutional arrangement is included in the RAPs. The total budget of the RAPs is approximately \$ 1.646.423 which will be financed by the government.

Environmental and Social Capacity Building: The capacity assessment conducted as part of the ESMF and the RPF concluded that the Project Coordinating Unit (PCU) will be strengthened for monitoring the management of environmental and social safeguards aspects of the project. The following staff are being recruited: (i) an Environmental specialist; (ii) a social safeguard specialist; and (iii) a GBV specialist. The above-mentioned staff shall be fully responsible for compliance with all environmental and social safeguards as well as communications requirements during implementation of Project activities as per the legal and policy framework of GoM and the World Bank policies. They shall also manage the necessary handling of grievances / complaints including preparing reports on such grievances and will produce on a quarterly basis reports on the compliance with the safeguard documents.

The Bank Team will continue to provide hands on training in management of environmental and social safeguards risks, including the new Environmental and Social Framework (ESF). The ESMF and RPF include institutional arrangements outlining the roles and responsibilities for the various stakeholder groups involved, for screening and approval of activities, as well as implementation and monitoring of their mitigation measures



and capacity building activities needed. The safeguards training workshops will be iterative and open to other key stakeholders including beneficiary communities, private sector (consultant firms, CSOs, etc.) with the aim of reinforcing the grounding of public consultation and participation to foster more engagement, and the ownership and social accountability for the sustainability of project implemented activities.

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

Key public stakeholders of the project include: MAHTP, RA, Regional authorities, the municipalities and the local communities. Key Private sector stakeholders include Contractors and suppliers of goods and services. Project preparation has adopted a participatory approach which will continue during implementation. During preparation, the project preparation team in close coordination with the concerned Municipalities and sectorial Ministries have conducted public consultations and meetings on proposed project activities in the project areas.

Further, extensive public consultations were conducted during the preparation of safeguard instruments to take into account the local communities inputs on the project design and impacts. During implementation the PCU will consult all relevant stakeholders, project-affected groups, and local nongovernmental organizations regarding all environmental and social aspects of the project and will take their views into account. The PCU will initiate these public consultations as early as possible and will provide all relevant material in a form and language(s) that are understandable and accessible to the groups being consulted in a timely manner prior to consultation. All the Safeguard instruments (ESIAs, ESMPs, RAPs; RPF and ESMF) have been approved by the Bank and disclosed in-country and to World Bank's External Website before appraisal.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
16-Jul-2019	05-Aug-2019	17-Oct-2019

"In country" Disclosure

Madagascar
27-Jul-2019



Comments

Draft versions of all instruments were first published in-country on July 27, 2019. Every single draft instrument was subsequently replaced (at all publication sites in-Country) by the final version immediately upon approval by the Bank

Resettlement Action Plan/Framework/Policy Process

Date of receipt by the Bank

16-Jul-2019

Date of submission for disclosure

27-Jul-2019

"In country" Disclosure

Madagascar

27-Jul-2019

Comments

Draft versions of all instruments were first published in-country on July 27, 2019. Every single draft instrument was subsequently replaced (at all publication sites in-Country) by the final version immediately upon approval by the Bank.

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

OP/BP/GP 4.01 - Environment Assessment

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

Yes

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

Yes

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

Yes



OP/BP 4.04 - Natural Habitats

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

No

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

NA

OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?

Yes

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

Yes

OP/BP 4.12 - Involuntary Resettlement

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

Yes

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

Yes

OP/BP 4.36 - Forests

Has the sector-wide analysis of policy and institutional issues and constraints been carried out?

NA

Does the project design include satisfactory measures to overcome these constraints?

NA

Does the project finance commercial harvesting, and if so, does it include provisions for certification system?



NA

The World Bank Policy on Disclosure of Information

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

Yes

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

Yes

All Safeguard Policies

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

Yes

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

Yes

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

Yes

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

Yes

CONTACT POINT

World Bank



Papa Mamadou Fall
Senior Transport Specialist

Raman V. Krishnan
Senior Digital Development Specialist

Borrower/Client/Recipient

REPUBLIC OF MADAGASCAR

Implementing Agencies

Ministère de l'Aménagement du Territoire, de l'Habitat, et des Travaux Publics
Haja Randrianandrasana
Directeur des Ponts et Chaussées
dgtp.mahtp@gmail.com

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>



APPROVAL

Task Team Leader(s):	Papa Mamadou Fall Raman V. Krishnan
----------------------	--

Approved By

Safeguards Advisor:	Nathalie S. Munzberg	13-Oct-2019
Practice Manager/Manager:	Maria Marcela Silva	14-Oct-2019
Country Director:	Marie-Chantal Uwanyiligira	15-Oct-2019