Project Information Document/
Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 26-Apr-2018 | Report No: PIDISDSC23962
### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madagascar</td>
<td>P166526</td>
<td></td>
<td>Madagascar Road Connectivity Project (P166526)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRICA</td>
<td>Mar 18, 2019</td>
<td>Oct 28, 2019</td>
<td>Transport &amp; Digital Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>REPUBLIC OF MADAGASCAR</td>
<td>Autorité Routière de Madagascar, Ministère des Transports et de la Météorologie, Ministère des Travaux Publics</td>
</tr>
</tbody>
</table>

#### Proposed Development Objective(s)

The Project Development Objective is to enhance Road connectivity in selected areas in support of economic growth and livelihood of communities and to provide immediate response to an eligible crisis or emergency as needed.

### PROJECT FINANCING DATA (US$, Millions)

#### SUMMARY

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project Cost</td>
<td>140.00</td>
</tr>
<tr>
<td>Total Financing</td>
<td>140.00</td>
</tr>
<tr>
<td>of which IBRD/IDA</td>
<td>140.00</td>
</tr>
<tr>
<td>Financing Gap</td>
<td>0.00</td>
</tr>
</tbody>
</table>

#### DETAILS

**World Bank Group Financing**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>International Development Association (IDA)</td>
<td>140.00</td>
</tr>
<tr>
<td>IDA Credit</td>
<td>140.00</td>
</tr>
</tbody>
</table>
B. Introduction and Context

Country Context

1. **Madagascar is the fourth largest island in the world with an area of approximately 578,000 square kilometers and a rapidly increasing population of 24 million people.** The country is divided into 22 regions which in turn are comprised of 114 districts. Districts in their 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 high highlands characterized by deforested hills, the west coast, and the southwest. Most of the total population of 24 million lives in areas along the eastern and western coast and near the capital city of Antananarivo in the center. About 20 percent of the population live in urban areas.

2. **After a period of economic stagnation following the 2009-2013 political crisis, Madagascar is on a growth trajectory. However, growth has not translated into significant poverty reduction.** Following a GDP decline of 3 percent in 2009-12, the trend was reversed so that average GDP growth was 2.6 percent in 2011-2015 and reached 4.2 percent in 2016, putting GDP per capita back on a positive path.\(^1\) Key growth drivers included construction activities related to the scale-up of public investment and textiles exports following the reinstatement of eligibility to the African Growth and Opportunities Act.\(^2\) Growth is expected to accelerate to more than 5 percent per annum in the medium run, supported by a robust scale-up of private investment. Madagascar has one of the world’s highest rates of extreme poverty. Eighty percent of the Malagasy population earns less than US$1.90 a day (PPP). Nearly 60 percent of the population lives on less than the market price for 2100 calories/day, a common estimate of minimum daily food intake.

3. **According to the findings of the World Bank financed Spatial Analysis of Transport Connectivity\(^3\) (the Spatial Analysis), there is a strong association between poverty rates, rural connectivity, crop/fishery production, and agribusiness development.** Rural farmers, who are mostly the poor\(^4\), do not have good access (Figure 1), resulting in minimal productivity in the agriculture sector. Several agribusinesses are emerging, though the sector is still thin. They are still highly concentrated in a few major cities where access to market is good. It is important to connect farmers, agribusinesses and markets. Fishery landing sites especially in the southern and northern coastal areas are not well connected to local towns or major cities because of the poor condition of both trunk and community roads.

4. **Poor connectivity and adverse government policies have led to a decline of agricultural returns\(^5\).** First, the poor became more isolated from markets and services as transport conditions worsened. The average time to reach food markets increased from almost two hours (2005) to close to two and a half hours (2010) for the poorest quintile and the

---

\(^1\) Population growth was 2.7 percent per annum in 2016.
\(^2\) AGOA is a United States Trade Act that enhances market access for countries in SSA, which improve the rule of law, human rights, and respect for core labor standards. Madagascar lost AGOA eligibility in 2009 and regained it in 2014.
\(^3\) The World Bank in collaboration with the Government of Madagascar has conducted a Spatial Analysis of Transport Connectivity study (the spatial analysis) that aims at providing necessary analytics and data to identify key connectivity constraints to poverty reduction as well as contributing to better knowledge of the country’s priority investment needs for improved transport connectivity and sustained growth.
\(^4\) The vast majority of rural households (89 percent) is highly dependent on subsistence farming, which is characterized by extremely low levels of productivity.
average real price to transport goods (e.g. a 50-kg bag of rice) rose by 42 percent. Second, government policies aimed to stabilize 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.

Figure 1: RAI and Poverty rates at district level in Madagascar

Source: Madagascar Spatial Analysis of Transport Connectivity draft report, the World Bank (2017)

5. In the health sector, the Spatial Analysis identified poor road connectivity as one of the main reasons for people’s low access to health care services. 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 care centers are disconnected from the official road network, which is critical to ensure the timely delivery of medical supplies. Currently, many primary health facilities are experiencing a stock-out of medical supplies during the rainy season (October to April) when many roads are impassable.

6. Madagascar’s extreme vulnerability to climate change may exacerbate transport connectivity and poverty situation. Almost every year, the country suffers from extreme climate events, such as cyclones and flood, causing significant economic losses. Under-designed or under-maintained transport infrastructures are particularly vulnerable and easily washed away, causing extra recovery 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 (e.g. cyclones, floods, droughts, locust infestations, plant diseases) that adversely affected their economic well-being.

Sectoral and Institutional Context

7. In Madagascar, limited transport connectivity is a common constraint across all sectors of the economy. The country possesses important transport infrastructure, including roads, railways and ports. However, their conditions are generally poor due to the past underinvestment and under-maintenance. A well-functioning transport infrastructure is among the most important fundamentals to sustain economic growth. The literature is generally supportive of the following: Better transport connectivity contributes to stimulating agricultural growth and job creation, improving access to social facilities, such as health centers and schools, and therefore reducing poverty.


8. **Road connectivity.** The road\(^8\) density is low at only 5.4 km/100 km\(^2\) of land, which compares unfavorably to some neighboring countries (for example, 6.9 km/100km\(^2\) in Zambia, 10 km/100 km\(^2\) in Tanzania, and 28.4 km/100 km\(^2\) in Kenya). It means that the official road network is currently defined too narrowly, while there are several unofficial roads that provide last-mile connectivity to people, especially in rural areas. The non-primary network (i.e., secondary, provincial and community roads) is in very poor condition. While 70 percent of primary roads are in good condition, about two-thirds of secondary and tertiary roads are estimated to be in poor condition.\(^9\) This has long been a matter of concern in Madagascar, hampering mobility of people and goods particularly in rural areas. Most non-primary roads need to be repaired and rehabilitated to bring them to maintainable standard. Consequently, the Rural Access Index (RAI), defined as the share of the rural population who live in within 2 km of the nearest road in good condition, is estimated at 11.4 percent among the lowest in the region. This means an estimated 17 million rural dwellers are unconnected to the road network.

9. **Road safety is an emerging challenge.** As the economy picks up, car ownership is likely to increase rapidly. Without proper road safety measures, traffic fatalities would increase. No official statistics on road safety is available in Madagascar. In theory, the Ministry of Transport has the responsibility for coordinating all relevant ministries, such as Ministries of Health and Education and Land Transport Agency, but the Government recognizes that there is an urgent need to develop road safety policies, implementation mechanisms, and monitoring systems. But technical and financial supports are still needed.

10. **Port connectivity.** Port traffic is concentrated on Toamasina, which handles 65 percent of total general cargo and 85 percent of total containerized cargo. However, four other ports of national importance (Antsiranana, Ehoala/Tolagnaro, Toliary, Mahajanga) could have contributed more to the country’s external trade movements. Poor inland connectivity limits the potential of Madagascar ports. According to the spatial analysis, only 14 percent of the population have less than one-hour access to a port in Madagascar (c.f., 48 percent in Liberia). The combination of available port capacity for traffic growth and availability of regular shipping services connecting to mainlines for every port of national significance suggests that in the short to medium term, optimizing traffic distribution across all ports is preferable to concentration of flows on Toamasina, since systematic transshipment outside Madagascar means no real prospects for economies of scale leading to freight rates reduction.

11. **Inland Water Transport through the Canal des Pangalanes.** The Canal des Pangalanes originally stretched along 665 km between Toamasina and Faranafagana, but after its rehabilitation during the 80’s only the 420-km section linking the port of Toamasina to Mananjary is open to navigation. However, the lack of regular maintenance and dredging is limiting the scope of potential operations along the canal. A full survey of the canal would be required to assess the economic feasibility of a possible canal rehabilitation program, but a few suggestions can still be proposed. It would depend on the required costs to restore the canal to its original mission, i.e. a proxy to cabotage services South of Toamasina. Even though the full rehabilitation work cannot be economically justified, some limited improvements are still needed to ensure rural accessibility in the communities along the canal. The inland water system is the only possible connectivity to them.

12. **Railways.** Madarail\(^10\) is economically and financially viable if infrastructure is properly invested and maintained. Madarail operates since 2003 a 40-year concession encompassing a network of three lines with a total length of 673 km, the main axis being the 372 km of the Antananarivo-Toamasina line connecting the capital city to the East Coast. The financial operation was getting close to break even before the political crisis hit in 2009. Today, provided required

---

\(^8\) The classified road network measures 31,640 km, out of which 5,600 km or 18 percent of roads are paved. 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.


\(^10\) Madarail is the company managing the Antananarivo-Toamasina rail line under a 40-year concession, renewable every 10 years.
investments in track and rolling stock are timely implemented and maintenance duly carried out, the financial viability of the line, although still weak, offers reasonably promising prospects, owing to the significant price differential it enjoys over the road transport alternative (US$8.3 per ton). The line carried over 430,000 tons in 2010, but traffic has since declined to 220,000 tons in 2015 due to track deterioration and hurricane damage. With adequate rehabilitation and proper maintenance, the operator anticipates reaching again 400,000 tons in 2020 and increasing container traffic to 600,000 tons in 2023, equivalent to a 60 percent market share on the Toamasina-Antananarivo connection. The Fianarantsoa-Côte Est (FCE) railway is currently not operational.

13. **Urban connectivity.** According to the spatial analysis, Antananarivo is the country’s most important primary market in the country. Accessibility to Antananarivo is found to be critical for the rest of the economy (Figure 2). More and more businesses are emerging around Antananarivo–Antsirabe Area (Figure 3). When more firms are agglomerated, the city’s attractiveness is also further amplified. Thus, Antananarivo will continue growing as an important driving force for economic growth in Madagascar.

14. Given the rapid urbanization process, medium to long term measures are needed to support people’s efficient mobility. The current traffic congestion in Antananarivo is already ranked one of the worst among the global cities. The “stress” level is almost the same as Bangkok and Jakarta, which are among the most congested cities in the developing world. The poor in the city tend to suffer more because they do not own a vehicle and they do not have good access to public transport. The public transport costs are a heavier burden on poor households. In addition, public transport is not safe. Around Antananarivo, 10,590 traffic accidents were reported in 2016, of which about 35 percent involved city taxis or buses. It is urgent to explore an efficient, safe and affordable transport system in the city.

**Figure 2. Market Access Index (0 to 1)**  
**Figure 3. Firm location by district**

15. **Systematic planning and prioritization mechanisms need to be restored in the transport sector.** Especially, financial and technical sustainability of road maintenance is crucial to Madagascar. Currently, there is no sustainability in road maintenance. The Road Maintenance Fund (FER) is malfunctioning, because of the lack of resources, weak management system, and political interference. During the last decade (2005-16), the Government spent only US$19 million per year on road improvement, which could improve 80 km of main roads or 0.3 percent of the total network per

---

11 163 km rail line connecting Fianarantsoa to Manakara in the southeast of Madagascar.


13 According to the 2017 Global Least & Most Stressful Cities Ranking.

14 Partly because of accumulated arrears of fuel levy payments by oil companies.
year. This is by no means sufficient 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 for emergency works.

Relationship to CPF

16. The proposed Transport Connectivity Project supports the Bank’s twin goals of reducing extreme poverty and enhancing shared prosperity, as it will target areas of Madagascar where the poor are concentrated and where extreme poverty is pervasive. The project is fully aligned with the World Bank’s new Country Partnership Framework (CPF) for FY17-21 which aims to build on the current relative political stability to help address structural fragilities that hamper sustainable human and economic development in Madagascar. The project supports the two focus areas of the CPF: (i) increase resilience and reduce fragility; and (ii) promote inclusive growth. The proposed project is aligned with the GOM’s 2015-19 National Development Plan which promotes development through inclusive and sustainable growth while taking into account the spatial dimension.

17. The proposed project will coordinate and leverage upon the investments being made by other projects in rural provinces of Madagascar, especially with the Integrated Growth Poles and Corridor Project (IGPCP). IGPCP will implement diverse components in stimulating enterprises and smallholder agriculture, marketing and resource conservation, including components of market center facilities in selected regions of the south and the north of Madagascar.

18. As per the CPF, the proposed project will maximize synergies with other development partners (geographically, in scope and type of support) to ensure maximum consistency and impacts. The proposed project will leverage investments by other development partners, including the European Union (EU), in the targeted regions. Key relevant interventions include the EU funding of the rehabilitation of National Road 13 (RN13) in the south and rehabilitation and spot improvement of sections of RN12A along the eastern coast of Madagascar.

C. Proposed Development Objective(s)

19. The Project Development Objective is to enhance Road connectivity in selected areas in support of economic growth and livelihood of local communities and to provide immediate response to an eligible crisis or emergency as needed.

Key Results (From PCN)

15. The proposed key results indicators are:
   • Reduced travel time on project roads (minutes);
   • Increase in rural accessibility in the project areas;
   • Number of direct project beneficiaries (of whom are women) – required indicator

D. Concept Description

20. The proposed project’s main focus will be on improving the efficiency of movement of people and goods along targeted secondary and tertiary roads, in support of agricultural growth and poverty reduction, through supporting both physical transport infrastructure improvement and institutional strengthening in the transport sector. As fragmented and isolated feeder road interventions tend to result in diminishing investment returns, the project will adopt a holistic network-based approach. Prioritization and complementarities are important to maximize benefits and ensure sustainability.

21. The priority regions for connectivity improvements. Despite significant unmet needs for transport infrastructure, available resources are limited. Thus, systematic prioritization is a must. The recently completed Spatial Analysis of Transport Connectivity has identified key emerging priority geographical areas where improvements in transport connectivity could yield considerable reduction in poverty. These clusters were prioritized using the following criteria: (i)
incidence of poverty; (ii) rural access index; (iii) rice production; (iv) agribusinesses (per 1,000 farmers); and (v) distance to basic health centers. A list of priority transport network, including Primary and Secondary roads, is identified as critical to improve connectivity, crop/fishery production and agribusiness development in the priority regions (Figure 4 and Table 1).

**Table 1: Priority regional clusters for connectivity improvements**

<table>
<thead>
<tr>
<th>Regional clusters/areas</th>
<th>Localization</th>
<th>Priority transport network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofia – Analanjirofo</td>
<td>North</td>
<td>RN32; RN31; RN5; Antsiranana Port</td>
</tr>
<tr>
<td>Alaotra Mangoro – Toamasina</td>
<td>Center-East</td>
<td>RN2; RN44; RN23A; MADARAIL; Toamasina Port</td>
</tr>
<tr>
<td>Melaky – Bongolava</td>
<td>Center-West</td>
<td>RN1BIS; Mahajanga Port</td>
</tr>
<tr>
<td>Vatovavy Fitovinany – Atsimo Atsinanana -</td>
<td>South-East</td>
<td>RN45; RN25; RN12; RN12A; FCE Rail; Canal des</td>
</tr>
<tr>
<td>Anosy</td>
<td></td>
<td>Pangalanes; Ehoala Port</td>
</tr>
<tr>
<td>Atsimo Andrefana – Androy</td>
<td>South</td>
<td>RN10; RN13; Tulear Port</td>
</tr>
<tr>
<td>Greater Antananarivo area</td>
<td>Center</td>
<td>Urban transport services</td>
</tr>
</tbody>
</table>

Source: Adapted from Madagascar Spatial Analysis of Transport Connectivity, final report the World Bank (2018)

**Figure 4: Prioritization of districts for connectivity improvements**

Source: Madagascar Spatial Analysis of Transport Connectivity final report, the World Bank (2018)

22. The PDO of the proposed project is to be realized through the following four components:

23. **Component 1: Connectivity improvements in priority regions** (Approximately US$132 million). This component would support connectivity improvements to enhance access to markets, and other economic activities.
24. **Subcomponent 1.1: Rehabilitation of Secondary Roads in priority regions (Approximately US$112 million).** Depending on available resources (including external resources by other donors), the project would rehabilitate one or two of the secondary roads described in table 2 below.

<table>
<thead>
<tr>
<th>Regional clusters</th>
<th>Proposed Road</th>
<th>Localization</th>
<th>Length (km)</th>
<th>Proposed Scope of works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaotra Mangoro – Toamasina</td>
<td>RN44 (Secondary)</td>
<td>From Amboasary to Ambatondrazaka</td>
<td>91</td>
<td>Periodic maintenance and rehabilitation of pavement surface within existing RoW. Reconstruction of drainage structures to make them climate-resilient (side drainage, culverts, and small bridges) within existing RoW.</td>
</tr>
<tr>
<td>Vatovavy Fitovinany – Atsimo Atsinanana - Anosy</td>
<td>RN12A (Secondary)</td>
<td>From Fort Dauphin to Vangaindrano</td>
<td>236</td>
<td>Co-financing with EU: Upgrading to asphalt standard; Construction of 10 bridges at existing ferry crossings; Reconstruction of drainage structures to make them climate-resilient (side drainage, culverts, and small bridges) within existing RoW.</td>
</tr>
<tr>
<td>Sofia – Analanjirofo</td>
<td>RN32 (Secondary)</td>
<td>From Antsohihy to Befandriana</td>
<td>83</td>
<td>Rehabilitation of pavement and reconstruction of drainage structures to make them climate-resilient (side drainage, culverts, and small bridges) within existing right of way (RoW).</td>
</tr>
</tbody>
</table>

25. **Subcomponent 1.2: Improvement of Tertiary (provincial/communal) roads in selected districts of same priority regions (Approximately US$20 million).** This subcomponent would finance spot improvement works within existing Right of Way on rural roads in targeted districts of priority regions identified by the spatial analysis, including design studies and supervision activities. Work will also entail the reconstruction of undersized drainage structures (culverts, and ditches) to make them more climate-resilient. Rural roads will be selected during project implementation using multi-criteria analysis based on poverty, agricultural production, access to social facilities and other factors, including investment efficiency and climate vulnerability. The total road length that would be supported under this component, will be determined based on the standards to which they would be improved, the method of implementation, as well as the number of participating districts that have sufficient capacity of implementing projects.


27. **Subcomponent 2.1: Capacity building for road management and maintenance (Approximately US$3.0 million).** This subcomponent would focus on the following activities, among others: (i) Road asset management support to MPW and ARM to develop road management systems including a functional road database; (ii) Support to road climate resilience through capacity building of MPW, ARM, RF, among others, for the development and implementation of climate risk screening tools; (iii) Support to the planning and programming of maintenance of tertiary networks; and (iv) Support to the Road Fund to restore its financial sustainability.
28. **Subcomponent 2.2: Support for the preparation and implementation of a National Road Safety Strategy (Approximately US$2.0 million).** This subcomponent will support the Directorate of Land Transport of the Ministry of Transport and Meteorology in the preparation and implementation of a multidimensional road safety strategy.

29. **Component 3: Support to Implementation, Monitoring and Evaluation** (Approximately US$3 million). This component will finance: (i) equipment and operating costs, as well as training, for the agencies and Directorates in charge of project implementation: ARM, FER, APMF, DTT; (ii) technical and financial audits; (iii) support to monitoring and evaluation, including surveys and beneficiary assessments; and (iv) information, education and communication (IEC) for the project.

30. **Component 4: Zero-budget Contingency Component.** This component will facilitate access to rapid financing by allowing reallocation of uncommitted project funds in the event of a natural disaster either by a formal declaration of a national or regional state of emergency or upon a formal request from the GOM.

**SAFEGUARDS**

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

The project will be implemented in the following three regions: Alaotra, Sofia and Anosy. The project will have adverse environmental impacts as a result of the rehabilitation of existing Secondary and Tertiary roads. The EA category for this project is Category A. The potential environmental and social impacts and risks that could be generated by the project activities will be assessed in: (i) the ESIsAs, ESMPs, and RAPs that will be prepared for each secondary road selected prior to appraisal (subcomponent 1.1), and (ii) the framework documents – ESMF and RPF for the improvement of tertiary networks (subcomponent 1.2) for which scope and designs are not fully defined at the time of appraisal. This assessment will also include a detailed review of safeguard institutional arrangements and capacity building to ensure compliance with environmental and social safeguards during implementation.

B. **Borrower’s Institutional Capacity for Safeguard Policies**

The preparation of the necessary safeguard instruments, and the management and mitigation of the environmental and social impacts of the project will be the responsibility of the National Road Agency ARM, with oversight from the MPW.

The client has a good experience in the preparation and implementation of world bank safeguard policies with the previous and ongoing Bank’s financing in the sector. ARM is familiar with the Bank safeguard policies given its prior experience developed during the preparation and implementation of other Bank-financed projects. During the preparation of the project, the Bank team will review the environmental and social capacity of ARM, and identify additional capacity needs, or additional training, necessary prior to project implementation.

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

Paul-Jean Feno, Environmental Specialist
Andrianjaka Rado Razafimandimby, Social Specialist

D. **Policies that might apply**
Safeguard Policies | Triggered? | Explanation (Optional)
--- | --- | ---
Environmental Assessment OP/BP 4.01 | Yes | This policy is triggered since the rehabilitation and improvement of secondary and tertiary roads may result in both transient and non-transient environmental and social impacts.

The EA category for this project is A. The project could entail economic and physical displacements of PAPs along the ROWs, potential 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, the Vatovavy Fitovinany – Atsimo Atsinanana – Anosy would involve upgrading of a 236 km road to asphalt standard, construction of 10 bridges at existing ferry crossings, 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, more PAPs to be affected and more health & safety issues.

Site specific ESIA and ESMP will be prepared for Secondary roads to be rehabilitated (subcomponent 1.1), consulted upon, approved and disclosed ahead of appraisal. 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 subcomponent 1.2, where the location may not be know at the time of Board Approval an ESMF and RPF will be 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 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 ESIAs, and will cover both construction and operational phases of the project. These risk assessments will be the basis to recommend mitigation measures to be included in the ESMPs/ESMMPs but should also recommend measures to feed into the design of the project, and institutional arrangements for implementing agencies or other parties. The ESMP should identify 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).

<table>
<thead>
<tr>
<th>Performance Standards for Private Sector Activities OP/BP 4.03</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
</tr>
<tr>
<td>This policy is triggered given the scope of rehabilitation and improvement works on national 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.</td>
<td></td>
</tr>
<tr>
<td>Forests OP/BP 4.36</td>
<td>TBD</td>
</tr>
<tr>
<td>Tertiary roads that may be identified during the implementation phase may cross forest reserves in which case the ESMF must include screening for impacts and measures to mitigate them.</td>
<td></td>
</tr>
<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
</tr>
<tr>
<td>The activities are not expected to involve pest management, so this policy is not triggered.</td>
<td></td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>Yes</td>
</tr>
<tr>
<td>This policy is triggered because road works may result in the possibility of “chance finds” of cultural properties. The ESIA for each road will assess impacts on Physical Cultural Resources and “Chance Finds” Procedures and mitigation measures will be included in the ESIA/ESMPs.</td>
<td></td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
</tr>
<tr>
<td>There are no ethnic minorities in Madagascar that meet the criteria defined under the policy. The policy is thus not triggered.</td>
<td></td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>Yes</td>
</tr>
<tr>
<td>This policy is triggered as road rehabilitation and upgrading work will require the removal of any encroachment to the existing RoW, such as crops,</td>
<td></td>
</tr>
</tbody>
</table>
residences, and road side businesses. A RAP will be prepared for subcomponent 1.1 and a RPF to guide the development of future RAPs for the tertiary roads (subcomponent 1.2), if required.

<table>
<thead>
<tr>
<th>Safety of Dams OP/BP 4.37</th>
<th>No</th>
<th>The Project is not financing any activities related to dams. This policy is not triggered.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>No</td>
<td>This policy is not triggered as Madagascar is an Island country that does not share international waters with neighboring countries</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td>No</td>
<td>This policy does not apply.</td>
</tr>
</tbody>
</table>

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Oct 31, 2018

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

Site Specific ESIA's, EMPs and RAPs, as required, will be prepared, consulted and disclosed for the rehabilitation of Secondary roads (subcomponent 1.1). ESMF and RPF will also be prepared, consulted and disclosed for Tertiary roads (subcomponent 1.2). These instruments are scheduled to be available by the end of October 2018.

CONTACT POINT

World Bank

Papa Mamadou Fall, Atsushi Iimi
Senior Transport Specialist

Borrower/Client/Recipient

REPUBLIC OF MADAGASCAR

Implementing Agencies
Autorité Routière de Madagascar
Jean-Pascal RAMANAMISATA
Director General
pascal.r-misata@arm.mg

Ministère des Transports et de la Météorologie
Vola RAJAOFERA
Directeur Général des Transports Terrestres
vola.rajaofera@gmail.com

Mihaja RANAIVO
Directeur des Etudes et de la Planification
mihaja.ranaivo@gmail.com

Ministère des Travaux Publics
Jean Ernest RABE
Directeur des Ponts et Chaussées
sg-mtp@mtpm.gov.mg

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, Atsushi Iimi

Approved By
Safeguards Advisor: Josefo Tuyor 01-May-2018
Practice Manager/Manager: Benedict L.J. Eijbergen 01-May-2018
Country Director: Raymond Bourdeaux 27-Nov-2018