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MADAGASCAR - CONNECTIVITY FOR RURAL LIVELIHOOD IMPROVEMENT PROJECT

SUMMARY OF SAFEGUARD INSTRUMENTS

October 2019

CONTENTS 2

1 PURPOSE OF THE DOCUMENT 3

2 PROJECT COMPONENTS CONCERNED BY ENVIRONMENTAL AND SOCIAL IMPACTS 3

3 ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS APPLICABLE TO THE PROJECT 4

4 SUMMARY OF THE ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS DEVELOPED FOR COMPONENT 1 OF THE PROJECT 6

4.1 SUMMARY OF THE ESIA FOR COMPONENT 1 6

4.1.1 BRIEF DESCRIPTION OF THE SITE AND THE ENVIRONMENTAL AND SOCIAL ISSUES IN EACH SUB-PROJECT INFLUENCE ZONES 6

4.1.2 INSTITUTIONAL AND LEGAL FRAMEWORK FOR THE IMPLEMENTATION OF SUB-PROJECTS 9

4.1.3 MAJOR AND MEDIUM IMPACTS 11

4.1.4 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) 12

4.1.5 CONSULTATIONS CARRIED OUT 21

4.2 SUMMARY OF THE RESETTLEMENT ACTION PLAN (RAP) OF COMPONENT 1 22

4.2.1 SUMMARY OF THE RAP FOR RNS44 REHABILITATION WORKS 22

4.2.2 SUMMARY OF RAP FOR RNS12A REHABILITATION WORKS 26

4.3 SUMMARY OF ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS DEVELOPED FOR COMPONENT 2 30

4.3.1 SUMMARY OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) FOR THE MANAGEMENT OF PROVINCIAL, COMMUNAL, AND UNCLASSIFIED ROADS 30

4.3.2 SUMMARY OF THE RESETTLEMENT POLICY FRAMEWORK (RPF) FOR TERTIARY ROADS MANAGEMENT 36

List of tables

Table 1: Summary of properties affected in the context of the RNS44 rehabilitation project, priority 1 (KM 20 to KM 133) 23
Table 2: RAP baseline data for the rehabilitation of RNS44 from KM 20 to KM 133. 26
Table:3 Table summarizing the assets affected in the project under the rehabilitation project of RN 12A, priority 1 (PK 94 to PK 202) 27
Table:4 RAP basic data matrix for the rehabilitation of RNS12A PK94 at PK 202. 30
Table:5 Synthesis the potential impacts of the Provincial, Communal, and Unclassified Roads Rehabilitation with corresponding mitigation measures. 32

1 PURPOSE OF THE DOCUMENT

1. **The purpose of this document is to present the Environmental and social safeguards documents developed in the framework of the Connectivity for Rural Livelihood Improvement Project (CRLIP),** mainly for Component 1 (Rehabilitation of secondary roads in Priority Regions) and for Component 2 (Improvement of Provincial, Communal, and Unclassified Roads in priority regions).

2 PROJECT COMPONENTS CONCERNED BY ENVIRONMENTAL AND SOCIAL IMPACTS

2. **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.** The project will rehabilitate secondary networks in the Alaotra Mangoro Region and in the Anosy/Atsimo Atsinanana Regions, respectively RNS44, from Marovoay to Vohidiala, and from Ambatondrazaka to Vohitraivo and RNS12A, from Taolagnaro to Vangaindrano. In addition to these two secondary roads, it was also decided to improve Provincial, Communal, and Unclassified Roads in certain districts of these three Regions (Alaotra Mangoro, Anosy/Atsimo Atsinanana). The impacts of project activities on the biophysical and human environment may in terms of scope and significance, and in relationship to social acceptance of the project to beneficiary communities.

3. **At the current stage of the project,** Provincial, Communal, and Unclassified Roads **that will be upgraded/rehabilitated have not yet been identified.** They will be selected during project implementation. However,

- The selected roads will be rural roads in the targeted districts of the priority regions identified by the project (Alaotra Mangoro - RNS44 and RNS12A);
- The works will consist in point improvements within the existing road footprint;
- The works will also include the reconstruction of drainage structures (scuppers, ditches) to make rural roads more climate resistant.

❖ **<u>Component 1: Rehabilitation of secondary roads in priority areas (estimated cost of USD 108.0 million).</u>**

4. **Component 1 focuses mainly on secondary road network, which is key to ensuring continuity and connection of rural roads with the main network, linking rural areas to secondary towns, and includes design studies and supervision of works.** It supports the rehabilitation of approximately 148 km of secondary roads as follows: (i) Rehabilitation of a 113 km section of RNS44 from Marovoay to Vohidiala (USD 73 million). RNS44 is the only link between the Ambatondrazaka Rice Basin and the main network in the Alaotra Mangoro region. Interventions will include, inter alias, rehabilitation or reconstruction of hydraulic structures, rehabilitation of the carriageway, periodic maintenance of the carriageway and improvement of road safety facilities; (ii) improvement of a section of approximately 35 km of RNS12A from Masianaka to Manambondro (USD 25 million). RNS12A is the only road that provides access to the poorest districts of the country located in the regions of Anosy and Atsimo-Atsinanana. Interventions will include, inter alias, rehabilitation or reconstruction of hydraulic structures, rehabilitation of roadways and improvement of road safety equipment.

5. **Construction of the Manambondro Bridge on RNS12A to replace the existing ferry (USD 10 million). Works will include, inter alias, construction of bridges, rehabilitation or reconstruction of hydraulic structures, rehabilitation of roads and their carriageways and improvement of road safety equipment.**

❖ **Component 2: Improvement of provincial, communal and unclassified roads in priority regions (estimated cost of USD 20.0 million)**

6. **This component will fund upgrades to provincial, communal and unclassified road sections to improve road accessibility in selected districts of Alaotra Mangoro, Anosy and Atsimo Atsinanana, and includes design studies and works supervision.** Roads will be selected using a multi-criteria analysis that refers to agricultural production, access to schools, access to health centers and other factors and that will take into consideration budget limitations and climate vulnerability. The total length of roads that would be supported under this component will be determined according to the standards to which they will be upgraded, the implementation methods, as well as the number of participating districts/communes that have sufficient capacity to implement projects. Plans are to improve Provincial, Communal, and Unclassified Roads in:

   - Anosy (Taolagnaro District) and Atsimo Atsinanana (Vangaindrano District) - (Estimated cost of USD 10 M): Upgrading approximately 250 km of provincial and communal roads: 25 Km from RP118 - From Fort Dauphin to the North - Contiguous Section;
   - 55 km of rural roads connecting to the RP118 - 25 km from RP 118;
   - 170 km connected to the RNS12A and the Alaotra Mangoro region - (Estimated cost of USD 10 M): 250 km of arterial roads connecting to the RNS44 (to be identified during project implementation). Types of interventions include, inter alias, reconstruction or rehabilitation of hydraulic structures, gravel and surface treatment.

3 ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS APPLICABLE TO THE PROJECT

7. **In accordance with the World Bank Operational Policies (OP), the project has developed Environmental and Social Impact Assessments (ESIA) for the sub-projects under Component 1, i.e. the two secondary roads mentioned earlier,** RNS44, and RNS12A with their respective Environmental and Social Management Plan (ESMP), two Resettlement Action Plans (RAP) for RNS44, and RNS12A; and one Environmental and Social Management Framework (ESMF) and one Resettlement Policy Framework (RPF) for Provincial, Communal, and Unclassified Roads to be identified during project implementation.

8. Environmental and Social Impact Assessment (ESIA). Environmental and Social Impact Assessments (ESIA) consist of scientific and prior analysis of foreseeable potential impacts of a given activity on the environment, and a review of the acceptability of their magnitude and mitigation measures to ensure the integrity of the environment to the extent allowed by the best available technologies at an economically acceptable cost. They provide a description of the proposed sub-project and its setting, discuss the environmental and social regulatory framework applicable to the project (including the safeguard policies that are applicable to the sub-projects), identify and assess the impacts of the sub-project on the environment and communities, and propose an Environmental and Social Management Plan (ESMP).

9. **Resettlement Action Plan (RAP).** The purpose of Resettlement Action Plans (RAP) is to mitigate the adverse effects of land acquisition and involuntary displacement and to protect the social and cultural fabric of the communities affected by the works planned. The development and implementation of a fair compensation plan for affected individuals, households and/or communities is one of the first impact mitigation instruments. To this end, the main objective of RAPs is to ensure that communities affected by the project will benefit from a compensation that will enable them to restore their living conditions to what it was prior to the project, if not better. To this end, Resettlement Action Plans (RAP) cover several objectives (OP 4.12, para 2):

   - Avoid or minimize losses and possible displacements,

- Design RAPs as a development plan, that is, compensation must be enough to allow for full replacement assets affected by the project,
- Ensure active participation of Project Affected People (PAPs) in the planning and implementation of RAPs,
- Provide support to displaced people to improve their incomes and standards of living, or at least to restore them,
- Provide support to people resettled, regardless of whether their occupancy of land is legitimate.

10. **Environmental and Social Management Framework (ESMF).** The purpose of Environmental and Social Management Frameworks (ESMF) is to identify the environmental and social selection process that will allow the entities in charge of project implementation to have a framework for identifying, assessing and mitigating environmental and social impacts resulting from the planned activities at the planning stage according to prioritization criteria adopted by projects. ESMFs are designed as a sorting mechanism and define procedures for identifying and managing environmental or social impacts of investments and activities unknown prior to project appraisal. They set out the principles and provisions for incorporating the environmental and social dimensions into the project cycle as well as for project compliance with World Bank environmental and social standards and applicable national legal frameworks.

11. **Resettlement Policy Framework (RPF).** Resettlement Policy Frameworks (RPF) aim to clarify the principles guiding involuntary resettlement (permanent or temporary), as well as the legal, institutional and organizational provisions applicable under the Project. They are documents through which the Government defines its commitment to comply with the World Bank's Land Acquisition, Land Use Restriction and Involuntary Resettlement standards (OP 4.12) in consideration of project-affected people. RPFs clearly state the procedures and institutional arrangements for compliance with national provisions and regulations and WB's OP 4.12; explicitly define the process for identifying affected persons and eligibility criteria (including for property owners, informal landlords, tenants, squatters, permanent/ semi-permanent kiosks and street vendors etc.); contain a cadastral matrix; will present a unit scale for valuation of properties that is at least equivalent to replacement costs; determine a participatory approach for local involvement; establish a grievance procedure with dispute resolution mechanisms at the local and higher levels; define the compensation payment system (including the possibility of replacing land or structures destroyed by another, compensation of tenants, improvement of land tenure security for Project Affected Persons (PAPs), and if necessary, economic rehabilitation and restoration of living conditions); detail institutional arrangements, budget, and the financial responsibilities of each agency; will present a time schedule; and define a monitoring system (with benchmarks).

12. The table below summarizes the social and environmental safeguards used for each of the sub-projects under Component 1:

Instruments	**RNS44**	**RNS12A**	Provincial, Communal, and Unclassified Roads
ESIA-ESMP	Applicable	Applicable	Potential (After identifications of activities)
RAP	Applicable	Applicable	Potential (After identifications of activities)
ESMF	Not applicable	Not applicable	Applicable
RPF	Not applicable	Not applicable	Applicable

4 SUMMARY OF THE ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS DEVELOPED FOR COMPONENT 1 OF THE PROJECT

4.1 SUMMARY OF THE ESIA FOR COMPONENT 1

4.1.1 BRIEF DESCRIPTION OF THE SITE AND THE ENVIRONMENTAL AND SOCIAL ISSUES IN EACH SUB-PROJECT INFLUENCE ZONES

4.1.1.1 RNS44 KM 20 to KM 133

13. **The high hills of the study area have steep slopes and are cut by a dense network of lowland bottoms.** On the hills, there are red or yellow lateritic soils, which are characteristic of hot and humid regions. These soils are generally poor and fragile. Erosion and landslide are often very active in these areas AND can result in the formation of many and immense "lavaka". This erosion and landslide phenomenon lead to problematic silting in the plains, in rivers, canals, rice fields and marshes. The road crosses through innumerable small tributary streams of the Mangoro river originating from rice fields and possibly some low areas. Flood areas are located in several parts of the zone. Floods are particularly an issue between KM 66 + 000 and KM 92 + 000.

14. **Fauna and flora. Four types of ecosystems have been identified and characterized.** They are described below. For terrestrial ecosystems, these are reforestation forest formations, grassland formations, plant formations along watercourses; for aquatic ecosystems, there are wetlands. The reforestation forest formations are artificial formations, poor in floristic diversity. They are made up of mostly introduced species including *Eucalyptus robusta* and *Pinus kesiya*. Other species such as *Lantana camara*, *Aristida* sp, and *Hyparrhenia* sp are non-endemic and tend to be invasive. For the ericoid bushes, one species is classified as endemic: *Philippia floribunda*. The ecological value of these species is low compared to their economic value. In addition, they cover large areas. The grass and vegetation formations in the study area are of minor importance and of low ecological value. They present little interest to the local population. The floristic diversity is generally poor except near agricultural fallows. However, not all species listed above are endemic or included in the IUCN Red List. As a result, areas occupied by grassland formation are ideal for the installation of related sites. With regards to the plant formations along the watercourses in the study area, the environmental stakes are moderate for Tetezambahatra, due to the presence of a riparian forest. Indeed, this forest contains forest species some of which are endemic such as the *Brachylaena ramiflora* and *Ficcus cocculifolia. Trema orientalis* is included in the IUCN list but its status is low or of minor concern. Concerning aquatic environments, wetlands are ecologically very important because they play a role of moisture retention in the dry season, also because of their role as a reservoir of food for wildlife (especially birds). They also constitute a significant ecological niche for aquatic fauna and some freshwater birds. In terms of flora, even though they contain endemic species, none of those species are included in the IUCN Red List. However, the rehabilitation works on RNS44 will not affect these wetlands because they are generally outside the road's influence zone.

15. **In terms of fauna,** marshes (aquatic environment) and reforestation areas (terrestrial environment) are the most species-rich habitat types, with a total of 27 and 28 species respectively, compared to 20 for water, 18 for paddy fields and 24 for savannas. These areas are located outside the project's influence zones.

16. **Regarding the socio-economic aspect,** the people living in the study area are mainly rural, whose main livelihood is in agriculture. The section of the RNS44 road that will be rehabilitated under the project (from KM 20 in Marovoay to KM 133 in Vohidiala), goes through the districts of Moramanga and Ambatondrazaka, through six Communes: Morarano, Amboasary, Bembary, Andaingo, Andilanatoby and Manakambahiny West. The fokontanys of the six Communes directly affected by the project have a

total of more than 55,000 inhabitants. The population is mainly made up of Sihanaka, followed by Bezanozano, Merina, Betsimisaraka and Antandroy; migrants accounting on average for less than 10 percent of the local population. As is the case for all the ethnic groups in Madagascar, the Sihanaka have their own cultures. Nevertheless, since the area through which RNS44 passes, and which is the object of the project, is an area that has been and remains strongly influenced by Christian religion, traditional cultural practices tend to disappear, although some still remain. The social surveys carried out in April-May 2019 have shown that carrying out road rehabilitation works in the project area does not require a ritual. In addition, no cultural site has been identified within the right-of-way of the project's influence zone of the project area.

17. **There are cases of Gender Based Violence (GBV), and it is even part of the daily lives of some people, especially women.** It is not easy for the local population to speak openly about this subject, and sometimes people try to conceal the issue. The most common cases are women who are beaten by their spouses for various reasons (housewives who submit to their husbands, financial dependency on men, infidelity) or girls who fall victims of early pregnancy and are abandoned by their companions. Sometimes, women who are victims of violence stand up to their spouses and can attack them. Cases of GBV are generally discussed between women but can also be brought up to fokontany, communes, gendarmerie depending on the severity of the case. Fokontany and communes generally try to settle the problems of the couples while the gendarmerie receive the complaints when such case arises. According to information collected from the communes and CSBs, there are approximately 10 cases of GBV annually which involve minor injuries. Currently, most GBV are settled in such a way that couples end up getting back together.

18. The arrival of migrant workers could increase the risk of GBV since these foreign workers are generally perceived as better paid. The fact that local women and girls are attracted to these migrant workers is often a source of marital conflict or results in unintended pregnancies.

19. **The RNS44 road between Marovoay and Vohidiala is a busy road during the day time and at night time.** Indeed, the road connects RN2 to the capital of the Alaotra-Mangoro Region (Ambatondrazaka). Different types of vehicles use this road: taxi-brousses, trucks, taxi, private vehicles, tractors, "kubota", cart, motorcycle, bicycle. Taxi-brousses and trucks are usually the only vehicles that travel at night on that road.

4.1.1.2 RNS12A (KM 94 to KM 202)

20. Fauna and flora. Four main types of ecosystems have been identified in the study area:

- Grassy savanna formations: is an open formation resulting from the degradation of primary and secondary forest (Savoka) after clearing and repeated burning. For the section of the road where rehabilitation works will be conducted, this formation is grass-like savanna *Aristida similis*, and occupies a length of about 70 km between the ferry of Esama and the end of the diversion to Ankazinina. In some sites, the savannah is characterized by the presence of characteristic species of littoral forests such as *Sarcolaena eriophora, Strychnos spinosa*. Sometimes the forest becomes a shrubby savanna whose upper stratum is dominated by *Ravenala madagascariensis* and/or *Grevillea banksii*. This type of formation was found between the Bac Maroroy and Bac Befasy sections. On the stretch near the coast, the savannah turns into a thicket with *Phillippia* sp. Consisting of *Philippia* sp. and *Nepenthes madagascariensis*, a vulnerable species from southeastern Madagascar.
- Anthropogenic formation: Anthropogenic formation is a type of plant formation resulting from human intervention. These are reforestation forests (*Acacia mangium, Eucalyptus spp, Grevillea banksi*i): there are crop fields (rice, cassava), fruit trees (*Mangifera indica, Artocarpus altilis and Artocarpus heterophylla*), cash crops (cloves, coffees, rose berries). These formations are generally located around areas of human settlements such as residential and ferry crossing areas.

- Wet marsh formation: The marsh formation consists of an open stand of trees and is particularly established in lower areas, wet valleys, flood plains and intermediate bridges located along the section. It is characterized by woody species: Pandanus spp., *Ravenala madagascariensis, Typhonodorum lyndleyanum*, and herbaceous species, such as *Lepironia mucronata* and *Nepenthes madagascariensis*. Some parts of these formations have been converted to rice fields.
- Riparian wet formation along streams and crossings: This type of formation has been identified along the rivers at the crossing areas of the eight barges to be replaced with bridges. This formation works as a transition between the aquatic and terrestrial environment. The upper layer mainly consisting of trees and/or shrubs (e.g. *Barringtonia racemosa*), the intermediate layer made up of aquatic plants such as *Typhonodorum lindleyanum, Ravenala madagascariensis, Phragmites mauritianus, Pandanus* sp., and finally there is the stratum of herbaceous plants (aquatic or terrestrial) such as *Typha angustifolium, Panicum sp, Acrostichum aureum*.

21. **The survey helped identify a total of 63 species** in five taxonomic groups including Amphibians and Reptiles, Fishes, Birds and Mammals. The species richness along the route to be rehabilitated and at the level of the eight bridges to be built is almost identical with respectively 55 and 56 species.

22. **Regarding environmental pressures, the study area is currently experiencing the impacts of environmental destruction:** forest clearing caused by the extension of farming areas (slash-and-burn agriculture), exploitation of natural resources, renewal of grazing areas.

23. **Wetlands along the road section or in the river crossing areas are deemed to be sensitive ecosystems.** As such, they contain a diversity of aquatic plant species, some of which are endemic to Madagascar such as the *Pandanus platyphyllus, Pandanus sp., Voacanga thuarsii, Ravenala madagascariensis, Nepenthes madagascariensis.* In addition, some of these species are also included in the IUCN Red List, including *Nepenthes madagascariensis* (Vulnerable) and *Pandanus platyphyllus* (Endangered).

24. **The section of the RNS12A to be rehabilitated as well as the eight bridges to be built run through nine communes, distributed in the districts of Taolagnaro and Vangaindrano:** they are Iaboakoho, Manantenina, Soavary, Sandravinany, Fenoambany, Manambondro, Mahabe, Marokibo and Masianaka. Traditionally, the area is divided between the territories of the "Antesaka" (in the North, Vangaindrano district) and "Antanosy" (in the South, Taolagnaro district). Economic activities and opportunities have turned the area into a migration destination for many peoples from diverse backgrounds. As such, one can find in this area some Antandroy, Bara, Betsileo, Merina, Antesaka, Antambahoaka and Betsimisaraka people. Particularly, during the clove harvest season, between September and December, there is a large arrival of collectors who mainly come from Vangaindrano, Farafangana, Manakara, and Fianarantsoa.

25. **The population of the study area is predominantly rural.** In general, these people possess poor qualification, and the level of schooling is usually primary or secondary education. However, the many road infrastructure maintenance works along RNS12A have given the local population job opportunities. That being said, the works that they get for handler, bricklayer, metal workers, formwork, flagman, warehouseman, foreman, driver of vehicles ...

26. **In terms of basic social infrastructure, the main towns of the communes are the most well equipped with water supply infrastructures and have standpipes.** Rivers and spring waters and some wells are the primary supply points for water for household usage. The study area is not covered by the JIRAMA electricity distribution network. Paraffin oil is still the most used means for lighting houses, especially in rural villages. Nevertheless, households are beginning to use individual solar panels to provide the energy needed for their lighting. Sometimes, economic operators and wealthier families use gasoline-powered generators to produce electricity.

27. **All fokontany in the study area have a public primary school (or EPP).** The secondary schools are generally located on the outskirts of the capital of the commune. Meanwhile, high schools are located in district towns. Access to health services is also one of the major issues that the population is faced

with. Health centers are usually located in the capital of the communes and districts. Consequently, patients have to travel several kilometers in order to receive medical care.

28. **Gender Based Violence (GBV) does occur in the study area.** In most cases, this type of violence takes place within the family. A form of reluctance to denounce is often raised as is the case in most areas of Madagascar. There are counselling and/or support structures such as the Counselling and Legal Advice Units (CECJ) and the child protection networks under the coordination of the Regional directorate for social protection and women's empowerment. However, the fact that these structures are in major towns limits their accessibility. The situation is such that official statistics do not necessarily reflect realities. At the same time, local customs, such as "fafy ratra" and blessings in traditional marriage, can also contribute to the fight against GBV.

29. **The study area is in Antanosy and Antesaka territories.** As is the case in most Malagasy societies, the social organization is based on the "Lonaka" or the elderly of each lineage. The "lonaka" also lead the rituals practiced before the beginning of the constructions and/or a major work in a household. Moreover, during public consultation meetings, many have requested that ritual ceremonies are conducted before the start of rehabilitation works on RNS12A road. The system of "fafy ratra" is also well-established in society. It pertains to the repair of damages in the event of injury inflicted on another person.

30. **The "kibory" (tombs and commemorative steles of the dead) are easily recognizable by their pyramidal shapes and are usually grouped in one place.** The taboos to be observed relate to that desecrate specific places (urinating and defecating). As a precaution, it is not advisable to go to these places without some locals coming along, especially now that there is widespread phenomenon of the stealing of the bones of the dead in Madagascar. Finally, the study area is located on the eastern part of Madagascar. It boasts a high number of watercourses. The local population gives some importance to the latter, especially large rivers. They are associated with some forms of prohibitions that must be respected. In general, the large rivers (Vatomirindry, Riandava, Manambato, Esama, Manampanihy, Maroiroy, Befasy-Manara, Manambondro and Masianaka) have specificities. In any case, it is always advisable to consult local officials before any works is conducted at those watercourses. For the Antesaka, large rivers are also important because they are "fanariam-poitra". The rivers are therefore vested with cultural significance by the local population. The population and the local administrative authorities recommend performing ritual ceremonies before beginning construction work for each bridge. The ceremonies usually consist of a zebu sacrifice conducted by the Mpanjaka or Lonaka of the village (depending on the case), and in the presence of the local administrative authorities and the contractor in charge of the works.

31. **Regarding transport activities, they face the issue of the difficulty of access to the area.** On the one hand, the road is in poor condition, and on the other, there are almost no proper infrastructure for crossing the rivers (bridge crossing major rivers) and this situation limits the types and number of vehicles servicing the area. These two main constraints considerably increase travel time. In addition, related activities have developed over time to cope with this difficulty of access (transport by canoe or barges, various types of catering at crossing areas ...).

4.1.2 INSTITUTIONAL AND LEGAL FRAMEWORK FOR THE IMPLEMENTATION OF SUB-PROJECTS

32. **The contracting authority is the Ministry of Land Planning, Housing and Public Works (MAHTP), and delegated to the Road Authority of Madagascar (ARM).** ARM supervises, among other things, the application of environmental measures by the contractor and the effectiveness of the control associated with the Supervision mission. The World Bank is the donor.

33. **The implementation of the project and its ESMP are carried out in accordance with the relevant regulatory requirements, such as:**

- The decree MECIE (Establishing Compatibility of Investments with the Environment) which specifies inter alia in its Annex 1 that any road construction and layout project, paved or not, is subject to an environmental and social impact assessment (ESIA);
- The Road Charter in Madagascar;
- Regulatory sectoral texts governing land, sensitive areas, water resources, work ...
- World Bank Safeguard Policies Initiated for RNS44, RNS12A Rehabilitation Projects: OP 4.01 "Environmental Assessment" and OP 4.12 "Involuntary Resettlement";
- IFC's EHS Guidelines (General EHS Guidelines, EHS Guidelines for Toll Roads, EHS Guidelines for Construction Material Extraction, Guidelines for Managing Risks of Harmful Impacts on Communities by a temporary project causing an influx of labor)
- https://www.ifc.org/wps/wcm/connect/d4260b19-30f2-466d-9c7e-86ac0ece7e89/010_General%2BGuidelines.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d4260b19-30f2-466d-9c7e-86ac0ece7e89-jkD2Am7;
- https://www.ifc.org/wps/wcm/connect/435bb11f-6488-492a-a1c1-cbb84f0c2b86/048_Toll%2Broads.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-435bb11f-6488-492a-a1c1-cbb84f0c2b86-jqeDarF;
- https://www.ifc.org/wps/wcm/connect/e1c73d0a-6af5-47c8-b4a6-762e2585b9e9/001_Construction%2BMaterials%2BExtraction.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-e1c73d0a-6af5-47c8-b4a6-762e2585b9e9- jqevBTQ

34. Scope of the EHS Guidelines in relation to the different components of the project

EHS Guidelines	Road development works	Running of the site facilities & site installation	Running of dormitories and quarries	Mobilization of human resources for works	Usage of the rehabilitated road
General EHS Guidelines	relevant	relevant	relevant	relevant	relevant
EHS guidelines for toll roads	relevant				relevant
EHS guidelines for the extraction of building materials			relevant		
Guidelines for Managing the Risks of Harmful Impacts on Communities by a temporary project causing an influx of labor				relevant	

4.1.3 MAJOR AND MEDIUM IMPACTS

35. The main potential impacts of each sub-projects, assessed as medium or major, are as follows:

Type of Impact	RNS44	RNS12A
For the release of road rights-of-way: households will be potentially affected, the types of affected property being land, buildings, agricultural and economic infrastructure, various networks, trees and agricultural activities	477 households	628 households
The risk of accidents for the populations of the towns and villages through which materials will be transported	Yes	Yes
Social impacts related to the rights of way of the related sites (temporary losses of crops, losses of source of income, ...)	Yes	Yes
The silting/degradation of streams or crop plots downstream of developed areas for associated site facilities	Yes	Yes
Fragmentation of natural habitat and the risk of increasing pressure on resources when setting up deviations	Yes	Yes
The risk of increased violence against women (GBV), sexual exploitation of children, and child labor, as well as the risk of transmission of STI/HIV AIDS, through the influx of outside labor to the area	Between 400 and 600 people from outside the area may be needed for the works	Between 400 and 700 people from outside the area may be needed for the work for the initial project
During operation of material extraction sites: leaching of exposed surfaces, and soil erosion; silting/degradation of downstream watercourse or crop land	Yes	Yes
The risk of accident for the operating staff of material extraction sites and for local residents; the risk of accident for the populations of the towns and villages through which extracted materials will be transported	Yes	Yes
For the operation of the site facilities/ installation of the construction site: Risk of depletion of local water resources; Risk of alteration of the quality of local water resources, risk of pollution to groundwater; Risk of pollution and contamination of the environment in the event of a leak in the storage of hazardous products (e.g. fuel, chemicals); Water pollution by leaching of stored materials by rain runoff	Yes	Yes

Type of Impact	RNS44	RNS12A
Health risk and accident risk for operating personnel at asphalt plants and crushing sites; Risk of pollution and environmental contamination in the event of a spill of dangerous products (e.g. bitumen, oil, etc.); Damage to the health of populations exposed to the emanations emitted by the asphalt plant	Yes	Yes
During pavement development work: risk of construction accident; Damage to the health of populations exposed to emanations emitted by the application of asphalt layers; impacts on nearby areas (rice fields, wetlands); Accidental network deterioration, and discomfort associated with the disruption of the service in question;	Additional risk: Disturbance of the local way of life and local activities relying on the road (e.g. paddy drying, route used by schoolchildren and cattle herders...)	Additional risk: Disturbance of local lifestyle and local activities relying on the road (e.g. paddy drying, route used by schoolchildren and cattle herders ...)
For the construction of river crossing infrastructures: risk of erosion; risk of depletion of groundwater; Disturbance of local activities using the watercourse (e.g. fishing, laundry, livestock watering, transportation)	Yes	Additional risk: Risk of pollution and environmental contamination in case of dispersion or spill of hazardous waste.
Notable impacts during the operation of the rehabilitated road: Risk of flooding in low areas; Risk of silting/environmental degradation in the outlet areas of runoff water; Risk of traffic accident for road users and the populations in towns and villages along the road; Degradation of air quality caused by increasing carbon emissions; Degradation of rehabilitated infrastructure; Resurgence of abusive or illegal exploitation of natural resources	Yes	Additional risk: Loss of economic activities and income as a result of the completion and operation of the new bridges at crossings (canoes, crew of barges, catering and restaurants near crossing areas ...).

4.1.4 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

36. **The main objective of the Project's Environmental and Social Management Plan (ESMP) is to ensure that the mitigation measures for negative impacts provided for in the project correspond to the predicted avoidance or minimization of the predicted impacts.** In addition, the contractor in charge of the works must draw up an environmental and social management plan for the works (ESMP for the construction works) which will be based on the ESMP. The

ESMP for the construction works will ensure the effective implementation of environmental and social measures related to the implementation of road rehabilitation works.

4.1.4.1 Medium and major impacts mitigation program

37. The mitigation program summarizes the proposed mitigation measures for the impacts assessed as medium and major.

Types of measures	Proposed measures	RNS44	RNS12A
Measures associated with road rights-of-way	- Maintain the existing right-of-way to avoid relocation. *Where appropriate,* o Prior information of the affected households. o Implementation of the Resettlement Action Plan (RAP) of the project. o Fair compensation of the affected households. o Conduct the process in a transparent and documented manner. o Accompanying households for their resettlement.	Measures to consider and implement	Measures to consider and implement
Measures associated with the transport of materials	- Implementation of the traffic plan. - Using trucks in good condition. - Driver training and awareness. - Installing road signs. - Abiding by recommended travel speeds. - Control at risky points such as schools and markets, ... - Prohibiting night driving. - Sanctioning drivers in case of non-compliance with the provisions of the traffic plan. - Fair compensation in case of accidental damage caused.	Additional measure: Speed limits (maximum speed limited to 20 km/h when driving through villages).	Additional measure: Speed limits (maximum speed limited to 40 km/h when driving through villages).
Measures associated with the preparation of related sites	- Choice of related sites, avoiding encroachment on inhabited areas or areas used by the local people. *Where appropriate,* o Implementation of project RAP provisions. o Prior information of the affected households. - Choice of related sites by avoiding sites at risk to erosion. - Limitating the right-of-way to the strictest minimum necessary.	Measures to consider and implement	Measures to consider and implement

Types of measures	Proposed measures	RNS44	RNS12A
	- Rehabilitation of the site (revegetation) at the end of its use. - Stabilization of embankments in excavated areas. - Choice of deviation routes, avoiding to go through ecologically sensitive habitats. - Ecological monitoring of the affected areas. - Sensitizing staff and populations against the illegal exploitation of local resources. - Strict punishment of staff caught in the act of unlawfully exploiting local resources. - Choosing the shortest possible deviations.		
Measures associated with the mobilization of human resources for the work	- Mobilization of an implementation structure for the management of VBG/SEC issues during the project. - Sensitization of staff to avoid any case of GBV/SEC resulting from the presence of the project. - Prohibiting the contractor to employ children. - Awareness campaign for the staff of the contractor and local populations on the risks of STI/HIV AIDS - Raising awareness of the Company's staff regarding good behavior to adopt at local community level	Measures to consider and implement	Measures to consider and implement
Measures associated with the operation of material extraction sites and the transport of extracted materials	- Choice of related sites by avoiding sites at risk to erosion - Limiting the right-of-way to the strict minimum - Rehabilitation of the site (revegetation) at the end of its use - Stabilization of embankments in excavated areas - Mandatory PPE for anyone on the site. - Tagging all work areas - Prohibition of access to the site for anyone outside the project - Prohibition of night activities - Implementation of the traffic plan - Using trucks in good condition	Speed limits (maximum speed limited to 20 km/h when driving through villages).	Speed limits (maximum speed limited to 40 km/h when driving through villages).

Types of measures	Proposed measures	RNS44	RNS12A
	- Driver training and awareness - Installing road signs - Compliance with travel speed - Control at risk points such as schools, markets, ... - Prohibition of night traffic - Sanctioning drivers in case of non-compliance with the provisions of the traffic plan. - Fair compensation in case of accidental damage caused.		
Measures associated with the operation of the site facilities/site installation	- Independent water supply from the points used by the local population - Monitoring of water consumption - Staff education on rational use of water - Dedicating a special area for the maintenance and washing of machinery and equipment. - Setting up a system for collecting and pre-treating polluted water. - Installation of a waterproof device with retention capability for the storage of any dangerous products - Monitor the status of stored products - Development and implementation by the contractor of a specific plan for the management of accidental spills.	Measures to consider and implement	Measures to consider and implement
Measures associated with the operation of asphalt plants	- Choice of asphalt plant sites by avoiding sites near inhabited areas. - Making a complaint register available to the locals. - Installation of a waterproof device with retention capability for the storage of dangerous products. - Monitor the status of stored products. - Development and implementation by the contractor of a specific plan for the management of accidental spills. - Mandatory PPE for anyone on the site. - Prohibiting access to the site to anyone outside the project. - Prohibiting activities at night.	Measures to consider and implement	Measures to consider and implement

Types of measures	Proposed measures	RNS44	RNS12A
Measures associated with the operation of crushing sites	- Mandatory PPE for anyone on the site. - Prohibiting access to the site to anyone outside the project. - Prohibiting activities at night.	Measures to consider and implement	Measures to consider and implement
Measures associated with the use of material storage sites and debris disposal areas	- Carrying out the works during the dry season. - Installation of a waterproof device with retention capability for any storage of dangerous products. - Closing off the site at the end of its operation (including revegetation).	Measures to consider and implement	Measures to consider and implement
Measures associated with the temporary traffic of private vehicles using deviation routes	- Setting up proper signposts, visible and in sufficient number.	Measures to consider and implement	Measures to consider and implement
Measures associated with pavement works	- Regular HSE staff training. - Mandatory PPE for anyone on the site. - Tagging of all work areas. - Prohibition of access to the site for anyone outside the project. - Prohibition of activities at night. - Compliance with the technical specifications of the project to optimize the application of asphalt. - Prior information campaign for the local populations regarding the project and the emanations associated with the application of asphalt layers. - Making a complaint registry available to the local people. - Prior identification of all existing networks in the area of intervention, and avoid their displacement as far as possible.	Measures to consider and implement	Measures to consider and implement

Types of measures	Proposed measures	RNS44	RNS12A
	- Prior information of populations in case of network displacement. - Planning network relocation work to limit it to the shortest possible time. - Campaign to inform the local population about the project and any associated restrictions. - Management of the work schedule so as to limit the duration of the disturbance.		
Measures associated with the construction of crossing structures	- Carrying out the works during the dry season. - Limiting the cleared right-of-way to the strictest minimum necessary. - Stabilization of slopes using vegetation. - Use sheet piles to dry the work area (so as not to divert the watercourse and ensure its flow). - Prior strengthening of fragile or vulnerable banks. - Campaign to inform the local population about the project and any associated restrictions. - Management of the work schedule so as to limit the duration of the disturbance.	Measures to consider and implement	Additional measures: Installation of a waterproof device with retention capability for the storage of dangerous products. -Monitor the status of the stored products. -Development and implementation by the contractor of a specific plan for the management of accidental spills.
Measures Associated with Runoff Drainage (Operation Phase):	- Having multiple outlets so as not to drain in one area a large volume of used water. - Choosing outlets by avoiding inhabited and sensitive areas. - Sensitization of local authorities and technical services on the protection of watersheds.	Measures to consider and implement	Measures to consider and implement

Types of measures	Proposed measures	RNS44	RNS12A
Measures associated with road traffic (operation phase):	- installing sufficient road signs (speed, danger, crossing of village, ...). - Conducting a sensitization campaign on road safety for road users and local residents. - Random control of exhausts emissions from used vehicles, by the Service in charge of Road Safety.	Additional measure: Provision of rest areas along the road.	Additional measure: Provision of rest areas along the road. -Implementation of the provisions of the Resettlement Action Plan (RAP) of the project for the loss of economic activities and income resulting from the completion and operation of the 8 bridges; Assigning crews of the barge to other available positions.
Related measures to the activities induced by the presence of the section of road that has been rehabilitated (exploitation phase):	- Regular monitoring of the physical condition and maintenance of the works by the relevant technical services. - Control of the authorized weight on the road. - Control of the loadings of heavy vehicles using the road. - Sensitization of the population against the illegal exploitation of natural resources, to be carried out by the relevant environment services	Measures to consider and implement	Measures to consider and implement

4.1.4.2 Project grievance redress mechanism

38. **In accordance with the local context and in line with all legal arrangements associated with World Bank guidelines, conflict resolution systems and structures will be put in place as part of the project.**

39. **Complaints can be received through different means (written complaints or oral complaints).** Oral or written complaints can be received at the level of the various dedicated local entities, through direct contact, through letters, complaint notebooks, a toll-free number, or by email. All complaints and their treatment will be recorded in registers with the name of the village or town, the date, the identification of the complainant, and the name of the person who received the complaints.

40. **Complaints can be handled on many levels.** These levels of complaint handling are summarized in the figure below. The first level is amicable settlement, with recourse to local and traditional authorities. Then, the treatment of complaint can be done within a of Dispute Settlement Committee (CRL) at the commune level, then if necessary, at the regional level. After exhausting all previous attempts to settle the complaint, the plaintiffs can also bring the matter to court. It should be noted that special provisions will be made for the treatment of special cases such as GBV, acts of corruption. The Project will be responsible for the general capitalization, the management of a central database and overall complaint handling.

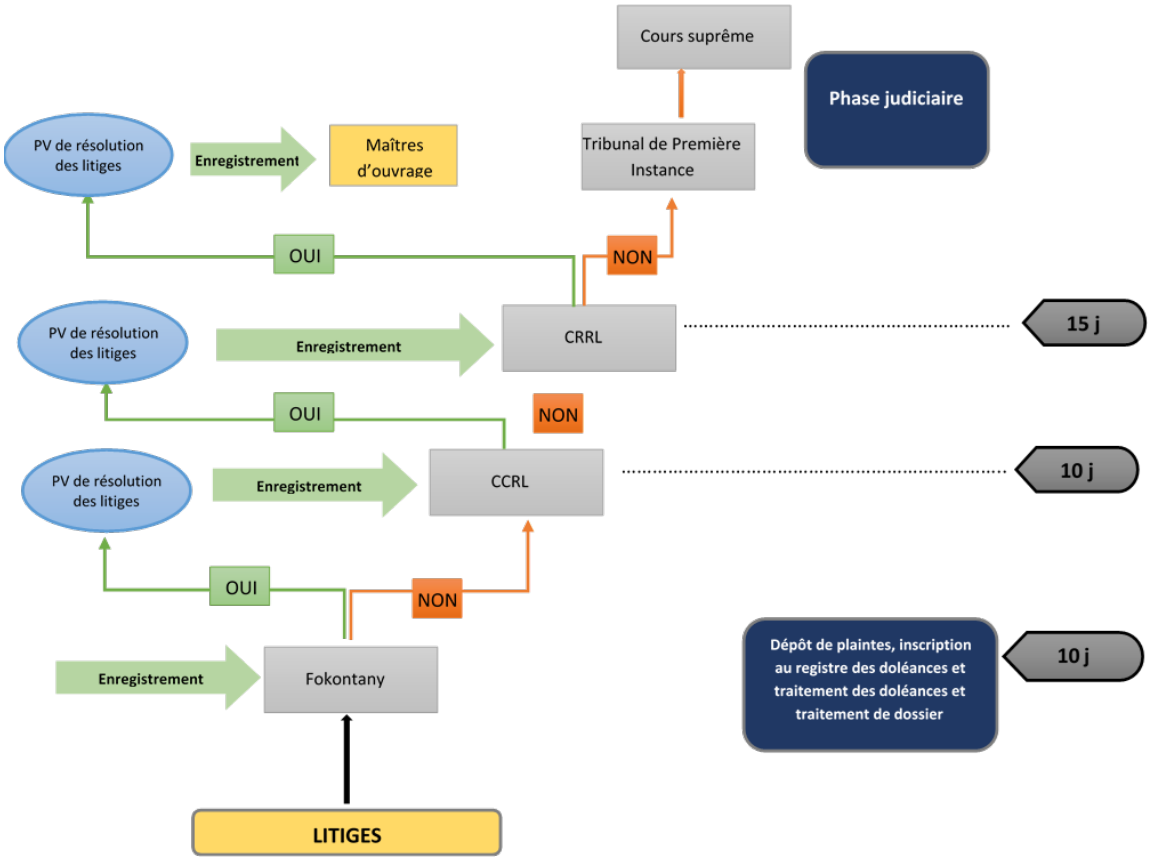

Figure: Grief redress mechanism (GRM) for the project at the administrative authority level

4.1.4.3 Environmental Monitoring Program

41. **The environmental monitoring program details the mitigation measures proposed for medium and major impacts, the distribution of the responsibilities among the various players involved in their implementation, as well as the indicators of the actual implementation of the measures.**

42. **The implementation of the program is, for the most part, the responsibility of the contractor in charge of the works;** except for some actions that fall within the purview of the ISPM and the RAP executing

entity (for procedures related to the securing of right-of-way), or deconcentrated technical services (e.g. for monitoring the status of works, awareness on road safety, vehicle control, control of authorized loads, awareness raising against the illegal exploitation of natural resources).

43. **The control of its implementation is the responsibility of the Supervision mission (Technical Project Manager),** which represents the Administration in the field at the operational level. The delegated contracting authority (ARM) will carry out regular monitoring missions for the implementation of the program, based on the environmental reports prepared by the Supervision mission.

44. **In addition, the implementation of rehabilitation projects for RNS44 (KM 20 to KM 133) and RNS12A (KM 94 to KM 202) will have to comply with the risk management guidelines related to gender-based violence (GBV) and the Resettlement Action Plan developed for the project.** A strategic note on GBV risks has been developed to accompany road projects, in order to support prevention and response to gender-based violence on target groups with a influence on the management of issues around GBV as well as vulnerable populations.

45. **In addition, the implementation of the RAP will ensure the provision of compensation to affected households by the projects and their support during the process.** The budget for the compensation of the households affected by the projects is presented in the chapter dealing with the summary of the RAP for the rehabilitation of RNS44 and RNS12A.

4.1.4.4 ESMP Works for RNS44 and RNS12A

46. **An Environmental and Social Management Plan for the road rehabilitation works (ESMP for the rehabilitation works) has been developed and will be incorporated into the Bidding documents of the works for the selection of the Companies to be entrusted with the rehabilitation works of RNS44 and RNS12A.** The provisions of this ESMP for the rehabilitation Works include:

- EHS criteria for selecting companies
- Environmental and social clauses for the works
- The Code of Conduct for contractors' staff
- Management of internal complaints of contractors' workers
- The ESMP-construction sites, including:
    - Environmental, Social, Health and Safety Policy of the company;
    - Precise description of the project component in question;
    - Objectives of the ESMP-construction sites;
    - E & S Resources;
    - E & S regulation;
    - Operational control means for E & S;
    - Description of the activity zones;
    - Safety & Health Plan
    - Training plan;
    - Working conditions;
    - Local recruitment;
    - Traffic of Vehicles and Machinery for the Project;
    - Hazardous products
    - Effluents, noise and vibrations, waste;
    - Deforestation and revegetation, erosion control;
    - Documenting the situation of the zones of the activities
    - Rehabilitation of the zones of the activities;
    - Site Environmental Protection Plans (SEPP), Emergency Plan
- Guidelines for Establishing the Environmental Plans of the Company
- Provisions in the event of non-compliances or failures of the contractor to comply with the environmental and social requirements
- The budget for implementing the ESMP-Works

47. **It should be noted that the contractor must correct any failure to comply with the requirements duly notified to it.** Indeed, failure to comply with environmental and social clauses, noted, may be grounds for termination of the company's contract. **The staff of the contractor will consist of a full-time environmental and social specialist responsible for the environmental and social management of the works.**

4.1.4.5 Estimated overall budget

48. **A large part of the implementation of the ESMP is included in the Works' budget** (the Mitigation, Monitoring and Implementation Programs of the ESMP-construction site, the Environmental and Social Clauses of the Contractor and various plans), in the budget of the Supervision mission (Environmental Monitoring Program) and in the budget of the Delegated Contracting Authority (Implementation of the Project grief redress mechanism). The estimated remaining ESMP implementation budget is estimated in the following table (Capacity Building Program, GBV Risk Management, CSE/ONE Monitoring, Accompanying Measures), off-budget implementation of RAP (see next chapter).

Sub- Project	**RNS44**	**RNS12A**
Budget for the implementation of the remaining ESMP	USD 423,000	USD 530,000

4.1.5 CONSULTATIONS CARRIED OUT

49. **Consultations carried out in reference to RNS44.** Stakeholder consultation as part of preparation of this ESIA took several forms:

- Information/consultation meetings at the beginning of the study, with local authorities and the public, from May 7 to 10, 2019. The road rehabilitation project and its potential impacts were presented at these briefing meetings. The meetings also offered an opportunity to learn about any concern of the public about the project in general.

- Interviews with various local actors (administrative authorities, government services, local communities), in April-May 2019. These were carried out during the socio-environmental field investigations. The main objective was to collect information on local actors and the baseline of the study area in relation to the different socio-environmental aspects reviewed.

- Public consultation meetings, at the end of the study, conducted from June 20 to 24, 2019. The purpose of the public consultation meetings was mainly to present to local stakeholders' study findings, especially project impacts, associated measures and the environmental and social management plan proposed for the project.

50. **The main concerns and comments raised by the public during the consultations were considered in the preparation of the project and the development of the ESIA/ESMP.** These concerns are of a social nature (implementation of compensation, recruitment, communication), and pertain to social integration of works contractors, the characteristics of the project, especially sanitation structures, and the effective implementation of the ESMP.

51. **Consultations conducted in reference to RNS12A.** Stakeholder consultation as part of preparation of this ESIA took several forms:

- Information/consultation meetings at the beginning of the study, with local authorities and the public, from April 30 to May 8, 2019. The road rehabilitation project and its potential impacts were presented at these briefing meetings. The meetings also offered an opportunity to learn about any concern of the public about the project in general.

- Interviews with various local actors (administrative authorities, government services, local communities), in April-May 2019. These were carried out during the socio-environmental field investigations. The main objective was to collect information on local actors and the baseline of the study area in relation to the different socio-environmental aspects reviewed.

- Public consultation meetings, at the end of the study, from June 21 to 25, 2019. The purpose of the public consultation meetings was mainly to present to local stakeholders study findings, especially project the impacts, associated measures and the environmental and social management plan proposed for the project.

52. **The main concerns and comments raised by the public during the consultations were considered in the preparation of the project and the development of the ESIA/ESMP.** These concerns are of a social nature (implementation of compensation, recruitment, communication, consideration of local customs), and pertain to social integration of works contractors, the characteristics of the project, especially sanitation structures, the asphalting, and diversions. The ESIA documents and the related ESMP for RN 44 and RN 12A have been published in the country since 29 July 2019.

4.2 SUMMARY OF THE RESETTLEMENT ACTION PLAN (RAP) OF COMPONENT 1

4.2.1 SUMMARY OF THE RAP FOR RNS44 REHABILITATION WORKS

4.2.1.1 Types of impacts

53. **The RAP concerns the section from KM 20 in Marovoay to KM 133 in Vohidiala on RNS44 and different categories of property affected, and types of losses associated with the project.** As part of this project, it has been decided that current the right-of-way of the existing road will be maintained, if technically possible. Infrastructures that require physical displacement or economic displacement must also be avoided. The project should not, in principle, have many major negative social impacts. However, since almost no right-of-way is released in the project area, any extension work may have negative impacts. The impacts considered under this RAP are those covered by OP 4.12, i.e. economic or social impacts directly related to the project. Thus, the followings are considered:

- involuntary withdrawal of lands causing
    - relocation or habitat loss;
    - loss of property or access to such property;
    - loss of sources of income or livelihood, whether or not those affected have to move to another site;

- unintentional restriction of access to legally defined parks and protected areas with negative consequences for the livelihoods of displaced persons.

4.2.1.2 Legal framework of the RAP.

54. **The Resettlement Action Plan is governed jointly by the World Bank's social safeguard policy on involuntary resettlement, including OP 4.12, and national laws and regulations that apply to the development and implementation of Resettlement Action Plans. National laws and regulations include:**

    - Ordinance No. 62-023 dated September 19, 1962 on expropriation for public utility purposes, amicable acquisition of real estate by the State or secondary public authorities and land appreciation and the implementing Decree No. 63-030 dated January 16, 1963 which is triggered in complement to the implementation of OP 4.12;

    - Act No. 2005-019 dated October 17, 2005 laying down the principles governing the statutes, Act No. 2008-013 dated July 23, 2008 on the land public domain and its implementing decree, Act

No. 2008-014 dated July 23, 2008 on the Private Domain of the State, Decentralized Communities and legal persons of Public Law and its implementing decree; Act No 2006-031 dated November 24, 2006 laying down the legal regime of the private property not governed by Order No. 60-146 dated October 3, 1960, relating to the land registration system as amended by Act No. 2003-029 dated August 27, 2003, and its implementing decree, which were issued to establish legal regimes of land tenure in Madagascar;

- Act No. 2015-051 dated February 3, 2016 relating to the Orientation of the Spatial Planning and Act No. 2015-052 dated December 16, 2015 relating to town planning and habitat, which set the rules for land and urban development;

- Act No. 98-026 dated January 20, 1999 amending the Road Charter, Ordinance No. 60-166 dated October 3, 1960 constituting along National Roads and Provincial Roads right-of-way reserve and Decree No. 99-776 dated September 27, 1999 on the overhaul of the classification of the National Roads, which set the delimitation of right-of-way of the road networks in Madagascar, identify the bodies in charge of managing roads and doing the legal classification of roads to rehabilitate.

4.2.1.3 Census of project-affected households (PAH)

55. **The loss of parcels of land, housing, cropland, commercial activities are the main negative impacts associated with the project.** Thus, the Malagasy Government adopted the "principle of avoidance" for the implementation of rehabilitation works on RNS44. For this purpose, the demolition of buildings or infrastructures will be avoided either by diverting the road alignment or, if necessary, reducing the road right-of-way.

56. **A right-of-way of 0 to 5 meters from the central line on either side was thus retained.** As a result, residential houses, churches, commercial buildings and workshops that generate income for households and administrative offices are no longer taken into consideration in the RAP.

57. **As a result, 477 households will potentially be affected.** The following table summarizes the types of assets affected by the RNS44 rehabilitation project, priority 1, including land, related infrastructure, agricultural and economic infrastructure, utilities networks, fruit and non-fruit trees and agricultural activities.

Table 1: Summary of properties affected in the context of the RNS44 rehabilitation project, priority 1 (KM 20 to KM 133)

AFFECTED PROPERTY	TOTAL	
	UNIT	AMOUNT
Land (original alignment)	m2	4 896
Land (changes in alignment)	m2	9 418
Buildings and housing		
Porch	m2	25
Staircase	lm	2
Well	number	11
Footbridge	m2	13
Basin	number	2
Gravel driveways	lm	9
Huts	m2	15
Awning	m2	2
Wooden fence	lm	3 103
Brick fence	lm	573
Wire fence	lm	7
Live fence	lm	550
Kitchen built with bricks	m2	66
Kitchen built with adobe	m2	44
Kitchen built with leaves	m2	15

AFFECTED PROPERTY	TOTAL	
	UNIT	AMOUNT
Kitchen built with wood	m2	21
Toilet blocks built with bricks	m2	56
Toilet blocks built with adobe	m2	13
Toilet blocks built with plastic sheets	m2	4
Toilet blocks built with leaves	m2	17
Agricultural infrastructure (water supply)		
Animal shelters built with wood	m2	206
Animal shelters built with bricks	m2	21
Workshop built with bricks	m2	108
Workshop built with wood	m2	78
Enclosure built with wood	lm	180
Warehouse built with wood	m2	21
Warehouse built with adobe	m2	28
Garage built with wood	m2	244
Economic Infrastructure		
Commercial booth	number	54
Sensitive infrastructure		
FJKM church road sign built with bricks	number	1
Trees affected		
Fruit trees	Number	902
Non fruit trees	Number	8 852
Agricultural activities		
Non perennial crops	m2	18 801
Utilities network		
Water pipe	number	1
Electricity meter	number	1
Electricity cable	number	1
Income Generating Activities		
Bar	number	2
Butcher's shop	number	4
Veterinary practice	number	2
Cash point	number	3
Fruit/vegetable stalls	number	14
Grocery shop	number	49
Small restaurants	number	45
Small business	number	15
Service provision	number	15
Other trade	number	19

4.2.1.4 Eligibility criteria

58. **Displaced persons eligible for compensation under the project may fall into one of the following three categories:**

- holders of a formal land right (including customary and traditional rights recognized by the country's legislation);
- those who have no formal land titles at the time the census begins, but who have land or other titles - provided that such titles are recognized by the country's laws or can be recognized in the context of a process defined in the resettlement plan; and
- those who have neither formal rights nor titles likely to be recognized on the lands they occupy.

59. **The people affected by the project belong to Category (iii),** i.e. they have no formal rights or titles that can be recognized on the lands they occupy. Indeed, the right-of-way of the road to be rehabilitated falls in the public domain and therefore cannot be subject to prescriptive acquisition or private appropriation.

4.2.1.5 Cutoff date for eligibility

60. **The setting of a cutoff date for eligibility to compensation is a mechanism established to identify the people entitled to compensation under the project.** The cutoff date has the effect of forfeiting the right to compensation and any form of resettlement assistance for people occupying the right-of-way areas once the census has begun. For the Alaotra Mangoro Region, the cutoff date was April 29, 2019, i.e. the day on which the census of people affected by the project and the inventory of property affected by the project started.

4.2.1.6 Implementation of the RAP

61. **Public consultations.** In order to ensure the implementation of the RAP, public consultations must be carried out. They aim to inform the project's various institutional arrangements and the road's final right-of-way. Thus, a regional Decree must also be issued to inform the population about the availability of the provisional list of project-affected households (PAH) in each commune.

62. **Relocation site.** The rehabilitation of roads under Component 1 does not plan for an expansion of the existing right-of-way. In addition, following the adoption of the "avoidance principle", all infrastructures requiring population resettlement, including dwellings, commercial buildings, built in bricks or other materials, would not be affected by this project. Thus, no loss of housing or physical displacement of populations is expected, as the land taken by the project represents only a small fraction of the assets affected and the remaining assets are economically viable. As a result, the identification of resettlement site does not apply to the RAP.

63. **Compensation payment and granting process.** As the Contracting Authority for the national roads rehabilitation project, the Government of Madagascar, represented by the Ministry of Spatial Planning, Housing and Public Works (MAHTP), will fully bear the financial expenses related to the compensation of project-affected people (PAPs). For this purpose, the costs of compensation and resettlement will be included in the MAHTP budget. Thus, the Ministry must include the funds for the compensation commitments in the Government budget, which is prepared and approved twice a year, at the time the Budget Law (November-December) and the Budget Law Amendment (June-July) are voted.

64. **Grief Redress Mechanism (GRM).** In anticipation of possible conflicts that may arise in the implementation of the resettlement activities and of the subproject, the RAPs plan for establishment of a grief redress mechanism that has several tiers and is accessible and responsive to the project areas' social contexts. Indeed, in case of conflict, PAHs are called initially to resolve their disputes amicably, under the arbitration of local authorities (traditional and administrative). In the absence of agreement at this first tier, they may refer the matter to the Commune Dispute Settlement Committee (CCRL). When no agreement is achieved further to CCRL mediation, PAHs may bring the disputes before the Regional Dispute Settlement Committee (CRRL). In parallel and beyond the mechanisms mentioned above, PAHs may refer to the jurisdictional bodies in any case to avail themselves of their rights.

4.2.1.7 Cost and budget

65. **The budget required for the implementation of the RAP amounts to MGA 1,814,101,323 or USD 503,917.** These costs cover all compensation in cash. Cases of direct land purchase will be the responsibility of the Government of Madagascar. All expenses related to the removal/ re-installation/ reconstructions will be included in the costs of contractors in charge of road rehabilitation. All implementation monitoring, evaluation and support costs will be charged to the project.

4.2.1.8 Implementation schedule

66. **The implementation of the RAP for the RNS44 rehabilitation works is expected to take approximately 3 years (36 months) from the recruitment of the Institutional and Social Project Manager (ISPM) until the RAP monitoring and evaluation phase.** However, works may begin in the affected areas only after compensation has been paid to the affected persons.

4.2.1.9 Monitoring and evaluation

67. **The implementation of the RAP requires a certain level of logistical monitoring and evaluation, which will be ensured by an independent private body that will be appointed by the Contracting Authority at a later stage.** This monitoring and evaluation body will oversee three main tasks: (i) Monitoring the resettlement implementation and progress, (ii) evaluating the impacts of the compensation provided, (iii) mobilizing stakeholders and institutional arrangements.

4.2.1.10 Stakeholder mobilization and institutional arrangements

68. **The implementation of RAPs will be supported by the following institutions:**

- The Contracting Authority
- The delegated contracting authority
- Institutional and Social Project Manager (ISPM)
- The Ad hoc Evaluation Committee
- Local authorities
- The Communal Dispute Settlement Committee (CCRL)
- The Regional Dispute Settlement Committee (CRRL)
- The Payments Execution Agency
- And the Monitoring and Evaluation Agency

4.2.1.11 Conclusion

Table 2: RAP baseline data for the rehabilitation of RNS44 from KM 20 to KM 133.

#	Designation	Basic data
1	Project location	RN 44 KM 20 to KM 133 Region: Alaotra Mangoro District: Moramanga and Ambatondrazaka
2	Communes concerned	Amboasary; Andaingo; Andilanatoby; Bembary; West Manakambahiny and Morarano Gara
3	Type of work	Civil engineering: Rehabilitation of national roads
4	Works budget	USD 80 million
5	RAP Budget	MGA 1,814,101,323 Ariary, or USD 503,917 USD 1 = MGA 3,601.61 (12/07/2019)
6	Cutoff date for eligibility	April 29, 2019
7	Number of project-affected households	477

4.2.2 SUMMARY OF RAP FOR RNS12A REHABILITATION WORKS

4.2.2.1 Types of impacts

69. **Different categories of property affected and the types of losses associated with the project.** The road rehabilitation works of the RNS12A do not provide for a right-of-way extension. In addition, the Malagasy Government has considered the "avoidance principle" in this project by avoiding the demolition of buildings or infrastructure. Thus, a priori, the project should not have many major negative

social impacts. However, since most of the existing RoW boundary zones in the RNS12A are all occupied, any rehabilitation works on the road may have negative impacts. In addition, the construction of bridges may also require land acquisitions and consequently lead to property losses.

70. **The impacts considered under this RAP are those covered by OP 4.12, ie the economic or social impacts directly related to the project. In this way, the involuntary withdrawal of land resulting in:**

- relocation or habitat loss;
- loss of property or access to such property;
- loss of sources of income or livelihood, whether or not the affected persons move to another site.

4.2.2.2 RAP legal framework

71. **The Resettlement Action Plan is framed jointly by the World Bank's social safeguard policy on involuntary resettlement, including OP 4.12, and relevant national laws and regulations in the development and implementation of the Resettlement Action Plan. resettlement. (see same section as RAP of RN 44)**

4.2.2.3 Census of households affected by the project (MAPs)

72. Following the adoption of the avoidance principle, the loss of private land parcels, associated living infrastructure, cropland, agricultural products, trade infrastructure and revenues are the main negative impacts associated with the project and trigger the development of the RAP.

73. **As a result, 628 households made up of 3,023 people will potentially be affected.** The following table summarizes the types of assets affected by the NR 12A priority 1 rehabilitation project, including land, buildings, agricultural and economic infrastructure, miscellaneous networks, trees and generating activities. income, etc.

Table:3 Table summarizing the assets affected in the project under the rehabilitation project of RN 12A, priority 1 (PK 94 to PK 202)

PROPERTY AFFECTED	TOTAL	
	UNIT	QTTE
Titled land bounded	m2	534
BATIS AND HOUSING		
Wooden chalet	m2	27
Wooden fence	ml	2 058
Wire fence	ml	50
Fence in plants	ml	212
Can fence	ml	160
Wooden kitchen	m2	225
Sheet metal kitchen	m2	7
Wooden latrine shower	m2	24
AGRICULTURAL INFRASTRUCTURE (AEP)		
Wooden animal shelters	m2	24
Animal shelter in leaves of plants	m2	8
Animal shelter in sheet metal	m2	3
Wooden workshop	m2	7
Wooden enclosure	ml	61
Wooden warehouse	m2	2
ECONOMIC INFRASTRUCTURE		
Commercial wooden booth	number	243
SENSITIVE INFRASTRUCTURE		
Alam-bato	number	1
Fatrange	number	3
Toeram-bato razana	number	1

PROPERTY AFFECTED	TOTAL	
	UNIT	QTTE
Tokotany be	number	1
Tranobe	number	3
Funeral homes (specially for women)	number	1
AFFECTED TREES		
fruiterer	feet	5 108
No fruit	feet	6 990
No fruitier clove	feet	7 171
Non fruitful vanilla	feet	1 354
AGRICULTURAL ACTIVITIES		
Culture not sustainable	m2	16 342
MISCELLANEOUS NETWORKS		
Poles water towers	number	4
INCOME GENERATING ACTIVITIES		
Grocery	number	5
Gargote	number	16
Hotel	number	1
Store	number	1
Small business	number	8

4.2.2.4 Eligibility criteria

74. The categories of displaced persons eligible for compensation under the project may fall into one of three categories:

(i) holders of a formal land right (including customary and traditional rights recognized by the country's legislation);

(ii) those who have no formal land entitlement at the time the census begins, but who have land or other titles - provided that such titles are recognized by the laws of the land or can be recognized in the context of a process identified in the resettlement plan; and

(iii) those who have neither formal rights nor titles likely to be recognized on the lands they occupy.

75. **The persons impacted by the project belong to category (iii), that is to say those who have no formal rights or titles that can be recognized on the lands they occupy as the area The right of roads to be rehabilitated is a public domain and therefore cannot be acquired by prolonged possession and cannot be subject to private appropriation.**

4.2.2.5 Deadline for eligibility (cutoff date)

76. **The fixing of a deadline for eligibility for compensation is a mechanism set up to define the persons entitled to compensation under the project.** The deadline for eligibility has the effect of forfeiting the right to compensation and any form of resettlement assistance for people occupying the right-of-way areas once the census has begun.

77. For the Atsimo Atsinanana Region, also valid for the updated project, the deadline for eligibility is 29 April 2019 by the Regional Order N ° 003-REG/SE/CR/TP for the identification and eligibility of households likely to be affected by the project in the Atsimo Atsinanana region - Rehabilitation of the RN 12A (Vangaindrano - Taolagnaro) and other sites related to this national road.

78. For the Anosy Region, the deadline for eligibility is set on 1st May 2019 by the Regional Order N ° 006-REG/ANOSY concerning the census and eligibility of households likely to be affected by the project in the Anosy region. Rehabilitation of the RN 12A (Vangaindrano - Taolagnaro) and other sites on this national road.

4.2.2.6 Implementation of RAP

79. **Public consultation.** In order to ensure the implementation of the RAP, a public consultation must be carried out. It aims to inform the various institutional arrangements, the final influence of the project. Thus, a regional decree must also be published to inform the population about the availability of the provisional list of households affected by the project (MAPs) at the level of each municipality.

80. **Relocation site.** The rehabilitation of roads under Component 1 does not provide for an extension of the existing right-of-way. In addition, following the adoption of the "avoidance principle", all infrastructures requiring the resettlement of the population, including dwellings, commercial buildings, solid or otherwise, would not be affected by this project. Thus, no loss of housing or physical displacement of populations is expected, as the land taken by the project represents only a small fraction of the assets affected and the remains of the assets are economically viable. As a result, resettlement site identification does not apply to RAPs.

81. **Process of payment and granting of compensation.** As the owner of the rehabilitation project for national roads, the Malagasy Government, represented by the Ministry of Spatial Planning, Housing and Public Works (MAHTP), will fully assume the financial expenses related to the compensation of the people affected by the project (PAPs). For this purpose, the costs of compensation and resettlement will be included in the MAHTP budget. Thus, the latter must seize the opportunity to insert funds related to these compensation commitments at the level of the state budget, which is stopped twice a year, during the vote of the finance law (November-December) and during its revision (June-July).

82. **Grievance Redress Mechanism (GRM).** In anticipation of possible conflicts that may arise in the implementation of resettlement and subproject implementation, the RAPs provide for the establishment of a hierarchical, accessible and responsive social context of the project area. Indeed, in case of conflict, the MAPs are invited, initially, to resolve their disputes amicably, under the arbitration of the local authorities (traditional and administrative). Secondly, in the absence of agreement in the first instance, the MAPs are invited to refer the matter to the Municipal Dispute Resolution Committee (CCRL). And in the absence of agreement in the CCRL mediation, the MAPs are invited to bring the disputes before the Regional Committee for the settlement of disputes (CRRL). In parallel and beyond the mechanisms mentioned above, the MAPS could always seize the jurisdictional bodies to avail themselves of their rights.

4.2.2.7 Cost and budget

83. **The budget required for the implementation of the RAP of the initial project is Ariary 4,113,062,665, or $ 1,142,506 (USD).** These costs cover all cash compensation, or cases of direct purchase of land will be the responsibility of the Government of Madagascar; all expenses related to the removal/rests/reconstructions will be included in the cost of the company in charge of the rehabilitation of the road; all the expenses of monitoring, evaluation and support of the implementation will be charged to the project.

4.2.2.8 Implementation schedule

84. **The implementation of the RAP for RNS44 rehabilitation works is expected to take approximately 2 years (21 months) from month-to-month recruitment to the RAP monitoring, monitoring and evaluation phase. However, work can only begin in the affected areas after payment of compensation from the affected persons.**

4.2.2.9 Monitoring and evaluation

85. **The implementation of the RAP requires a level of logistical and evaluation follow-up by an independent private body, later designated by the project owner. This monitoring and evaluation body will be (i) monitoring of implementation and progress of resettlement, (ii) Evaluation of the**

impacts of the compensation made, and (iii) mobilization of stakeholders and institutional arrangements.

4.2.2.10 Stakeholder mobilization and institutional arrangements

86. The implementation of RAPs will be supported by the following institutions:

- The Client
- The delegated contracting authority
- Institutional and Social Mastery (MOIS)
- The Ad'hoc Evaluation Committee
- Decentralized Territorial Communities
- The Communal Committee for Dispute Resolution (CCRL)
- Regional Dispute Resolution Committee (LRRC)
- The Payments Execution Agency
- And the Monitoring and Evaluation Agency

4.2.2.11 Conclusion

Table:4 RAP basic data matrix for the rehabilitation of RNS12A PK94 at PK 202.

#	Topics	Basic data
1	Project location	RN 12 A PK 94 to PK 202 Region : Anosy and Atsimo Atsinanana District: Fort Dauphin and Vangaindrano
2	Communes concerned	Manantenina; Soavary; Sandravinany; Fenoambany; Manambondro, Mahabe, Marokibo and Masianaka
3	Type of work	Civil engineering : Rehabilitation of national roads
4	Work budget	USD 80 million
5	PA R Budget	4,113,052,665 Ariary, or $ 1,142,506 1 USD = 3,600 Ariary
6	Deadline for eligibility	Atsimo Atsinanana Region - April 29, 2019 Region Anosy 1st May 2019
7	Number of households affected by the project	628 households made up of 3,023 people

4.3 SUMMARY OF ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS DEVELOPED FOR COMPONENT 2

87. **Subprojects of Component 2 are not yet known precisely at this stage (in this case the** Provincial, Communal, and Unclassified Roads **that would be the subject of rehabilitation works), an Environmental and Social Management Framework (ESMF) as well as a Resettlement Policy Framework (RPC) were prepared.**

4.3.1 SUMMARY OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) FOR THE MANAGEMENT OF PROVINCIAL, COMMUNAL, AND UNCLASSIFIED ROADS

88. **The Environmental and Social Management Framework (ESMF) of the** Provincial, Communal, and Unclassified Roads **in the target districts of the project aims to provide a general vision of the socio-environmental conditions in which the project is implemented.** It is designed before the development of the project itself, to optimize the effectiveness of the project. The ESMP aims to manage the project

in environmental and social terms while optimizing the environmental and social costs generated, and by preserving the living conditions of the local communities benefiting from the project.

4.3.1.1 General framework of the rehabilitation of Provincial, Communal, and Unclassified Roads

89. **Project management is provided by the Ministry of Land Management, Housing and Public Works (MAHTP), and delegated to the Road Authority of Madagascar (ARM). The backer is the World Bank.**

90. **The project in general is classified in category A according to the safeguarding policies of the World Bank.** It could lead to, among other things: economic or physical displacements of the people affected within the rights-of-way of work activities, the arrival of a large workforce outside the zone, health and safety risks associated with the rehabilitation works and the presence of significant labor outside the area, the opening of new material extraction sites with the environmental and social effects that all this would generate.

4.3.1.2 Environmental and social profiles of the project areas

4.3.1.2.1 Region Alaotra Mangoro:

91. **Four districts of the Alaotra Mangoro Region (Moramanga, Ambatondrazaka, Amparafaravola, Andilamena) grouping together 18 Communes are involved in the project.**

92. **The region is located on the highlands of Madagascar whose relief is characterized by formations of "lavaka".** The climate becomes wetter in the southern part of the Region (towards Moramanga). In addition, the passage of cyclones is frequent and causes damage in the region.

93. **The original vegetation is wet forest, but human activities have shaped local ecosystems (crop areas, reforestation formations, grasslands, rice fields and wetlands).**

94. **The Region of Alaotra Mangoro is one of the main rice granaries of Madagascar.** Rice production, goose farming and Besisika fishing also make the region famous. Mining operations on an industrial scale are present in the region such as Nickel, Cobalt, Chromite and lime. On the other hand, small mines are also important including gold mining, precious stones (corundum, sapphire, emerald and rubies) and semi-precious stones (crystal, amethyst, garnet, quartz, ...).

95. **The Sihanaka are the native peoples of the region.** However, the economic activities of the region attract many migrants who settle there temporarily (crop season, small mines) or permanently.

96. **RNS44 roads are the main arteries connecting the region to other cities in Madagascar.** The current deterioration of road infrastructure thus constitutes an obstacle to the circulation and the evacuation of the products of the region, mainly during rainy periods. Despite the state of the road, the area is currently served daily by public transport. Similarly, other types of vehicles frequent the region including trucks, taxis, private vehicles, tractors, "kubota", cart, motorcycle, bicycle, ...

4.3.1.2.2 Regions Anosy/Atsimo Atsinanana:

97. **The Taolagnaro District (Anosy Region) and the Vangaindrano District (Atsimo Atsinanana Region) are particularly concerned by the project.** They regroup 15 Communes.

98. **Located on the coast of south-eastern Madagascar, the area has a high rainfall. Moreover, water is the main factor in the deterioration of local road infrastructures and is even a constraint for movements within the zone, particularly at the level of water crossings.**

99. **The dense original forest formations are more and more degraded and become savoka or even savannah.** The landscape is also characterized by the presence of anthropogenic formations such as plantations and reforestation as well as cultivation areas.

100. **Local communities are still very attached to the traditional societal organization, although adopting the administrative authority.** Migrants are welcome provided they respect local traditions. The "Lonaka" can also play the role of arbitrator in cases of social disputes (separation, theft, assault, accident, ...). Large rivers are also of great cultural importance, especially in the Antesaka area.

101. The area has a strong economic potential. Cash crops (eg cloves, pink berries) and lobster and other seafood fisheries are the most important lungs in the current economy. Mineral resources are also promising especially for bauxite and ilmenite in the South.

102. The isolation of this part of Madagascar constitutes a major obstacle to its development. Access to basic services is very limited, especially for places far from the national road. The regular lines of road transport do not even reach a weekly service between Taolagnaro and Vangaindrano. RNT12A as well as previous rehabilitation works have also marked the landscape through the presence of old borrowing houses, survey sites, granite quarries, multiple diversions and abandoned infrastructure.

4.3.1.3 Legal and regulatory framework

103. **All the regulatory texts applicable to the** Provincial, Communal, and Unclassified Roads **rehabilitation in the project intervention zones were analyzed in the context of the ESMF. They are categorized as follows:**

- National legal framework (general texts governing environmental management, and sectoral texts applicable to the project);
- World Bank Safeguard Policies and IFC Environmental, Health, and Safety Guidelines.

4.3.1.4 Potential environmental and social impacts

104. **The rehabilitation of** Provincial, Communal, and Unclassified Roads **in the project areas will be a real opportunity for development of these areas.** Indeed :

- The rehabilitation of these rural roads will facilitate the circulation and make the trips more economical, but particularly also, it will facilitate the access of the populations to the administrative centers, economic, medical, school, and also develop the exchanges;
- It will make it possible to make better use of local assets and potentialities (eg agriculture which can favor the development of the region, geographical positioning in relation to National Roads ensuring the transition between production areas and markets/outlets);

105. **In addition, the rehabilitation of** Provincial, Communal, and Unclassified Roads **in the project areas will have the following positive effects:**

- The rehabilitation of Provincial, Communal, and Unclassified Roads will improve the security of property and people in the area;
- The rehabilitation of these tracks will make it possible to limit or even avoid the opening of anarchic diversion routes that may be detrimental to homes, growing areas, riparian vegetation;
- The rehabilitation of these sections of road will significantly reduce most of the inconveniences caused by the impracticability of rural roads, including the formation of sloughs during the rainy season;
- The rehabilitation of these roads will help to open up the villages and localities they serve;
- The rehabilitation of these roads should revive the road transport system in the area, or even throughout the Region;
- The rehabilitation works will have repercussions on the local and regional economy, particularly in terms of job creation, use of local businesses, development of localities along the road. The project will also develop certain related activities (eg restoration, crafts, trade) in the areas concerned, which will help increase the income of the population and thereby reduce poverty.

106. **Nevertheless, like any road project, negative impacts are expected in relation to the implementation of the project.** The table below summarizes the potential impacts of the Provincial, Communal, and Unclassified Roads , with corresponding mitigation measures.

Table:5 Synthesis the potential impacts of the Provincial, Communal, and Unclassified Roads Rehabilitation with corresponding mitigation measures.

impacts	Reduction measures
Exploitation of quarries and borrow areas	
Loss of vegetation	Prior delimitation of the exploitation area to limit the cleared right-of-way to what is strictly necessary. Reclamation plan for extraction sites after use: pay attention that topsoil is carefully removed to a thickness of 30 cm and stored in reserve for subsequent reclamation of the extraction site after operation.
Emissions of dust	Equip operating personnel with adequate protective equipment for career/loan operations (masks, uniforms, etc.). Choice of extraction sites far from areas of concentration of people, inhabited areas, areas of ecological interest, tourist areas, panoramic site.
Bushfires Degradation of the morphology of the site	Set up firebreaks around sites located near wooded areas. Reprofile/regain extraction sites after exploitation.
Disturbance of wildlife by noise	Prohibit mining activities between sunset and sunrise. Limit the speed of movement of trucks and machines to 30 km/h. Sensitize operating staff.
Poaching	Strict punishment of all cases of poaching. Awareness of operating staff. Sensitization of local communities.
Runway rehabilitation works - Biophysical environment	
Soil compaction Modification of soil quality Increased risk of erosion	Conservation of organic soils. General cleaning of the premises. Execution of drainage works. Vegetation of the edges of the track. Rehabilitation of the banks of loan. Slope protection.
Loss of vegetation cover	Rehabilitation and revegetation of used sites and runway edges. Stabilization of embankments of sections of road crossing steep sectors. Valorization of wood from the felling of trees/shrubs in the right-of-way of works (direct valorization or transformation).
Genoa for the local fauna Risk of poaching	Conservation as much as possible of riparian vegetation. Stabilization and revegetation of the slopes. Prohibition of poaching by site staff and all parties involved in the project. Vertical signs indicating possible animal crossing areas.
Depletion of local water resources Obstruction of the normal flow of watercourses Local modification of runoff and infiltration	Realization of works in dry season. Carrying out adequate drainage works to allow the normal flow of water. Conservation of riparian vegetation. Revegetation of slopes and ditches along the road. Rehabilitation of waterways if the work requires interventions in their bed. Contingency plan for accidental release of pollutants. Installation of clean and compliant sanitary on the site installation, and pretreatment of the effluents. Protection of maintenance areas to avoid any contamination (sealing, installation of oil separators). Have water pumps at reasonable distances from water points for the abstraction of surface water (at least 30 m). Prohibition of washing vehicles and machines at water points.
Runway rehabilitation works - Social environment	
Noise pollution	Favor the realization of the work during the day. Use of construction equipment and materials in good condition and in compliance with noise emission standards.

impacts	Reduction measures
	Provision of hearing protection equipment for personnel exposed to high noise levels. Information campaign of the riverside communities on the work program and the duration of nuisances. Provision of complaints register, and handling of these complaints.
Impacts on air quality	Speed limitation of vehicles and project gear, especially in village crossings. Sensitization of residents for the protection of their goods and food against dust. Limitation of clearing and earthworks to the needs of the section being worked on. Use of construction equipment and materials in good condition and in compliance with air emission standards. Do not work at night and promote the work during the day. Watering with water to limit the suspension of dust. Prohibit any burning of residual materials on the work sites. Information campaign of the riverside communities on the work program and the duration of nuisances. Provision of complaints register, and handling of these complaints.
Effects on community health	Protection of water points located near work sites. Contingency plan for accidental release of contaminants. Implementation of IEC IST - SIDA campaign for the benefit of the works staff and the populations of the villages crossed. Obligation for Works Companies to submit to a code of conduct to ensure respect for the customs and customs of local communities. Medical check of the staff before their arrival on site and at the end of their hiring. Awareness campaign for at-risk populations of the riparian villages with the medical authorities and the community organizations concerned. Provision of complaints register, and handling of these complaints.
Influx of labor	Implementation by the Company of the recommendations of the World Bank Technical Note on the Management of the Temporary Labor Flows ("Managing the Risks of Adverse Impacts on Induced Communities of Induced Labor Influx" (2016))). Put in place sufficient measures to address the risks of violence against women and children (GBV), including: - Mandatory and repeated training and awareness-raising for staff to refrain from unacceptable behavior towards members of the local community, especially women and children; - Informing staff of existing laws that make sexual and gender-based violence a punishable offense; - Introduction of a Code of Conduct for Workers in the employment contract, including penalty in case of non-compliance (eg dismissal); - Adoption of a policy of cooperation with the police to investigate the complaints received. ; - Involvement of a local NGO specialized in the prevention and treatment of sexual violence against women and children.

4.3.1.5 Environmental and Social Management Plan (ESMP)

107. **The environmental and social management system of the Provincial, Communal, and Unclassified Roads rehabilitation in the project areas is based on five main axes:** (i) the sorting of sub-projects; (ii) environmental and social management tools; (iii) the complaints management mechanism; (iv) risk

management related to gender-based violence (GBV); and (v) capacity building of stakeholders. The sorting of the sub-projects will make it possible to decide upstream of each sub-project whether it requires a complete and detailed ESIA/ESMP, or whether a simplified ESMP is enough;

108. **The environmental and social management tools are constituted by the different instruments that the project will implement for a good environmental and social management of the different sub-projects:**

- Environmental and social safeguard documents: Simplified Environmental and Social Management Plan for sub-projects whose environmental and social impact will be considered low and for which the preparation of a complete ESIA is not considered necessary; Detailed Environmental and Social Impact Assessment (ESIA), including a detailed Environmental and Social Management Plan (ESMP) for sub-projects with moderate environmental and social impacts; Environmental and social clauses of the works;

- The integration of environmental and social measures into the bidding documents (DAO) of the works;

- The environmental and social management plan of the site ("PGES-Chantier"): Whatever the type of sub-project (low environmental and social impacts or with moderate environmental and social impacts), the contractor awarded works must prepare an environmental and social management plan for its project (all the activities planned in the frame of the site, main or related);

- Environmental and social monitoring and monitoring;

4.3.1.6 Complaint management:

109. The ESMF presents the grievance management mechanism in relation to the project. The latter specifies the procedures and the dispute resolution bodies that must be put in place to receive and decide on any disputes during the implementation of the project;

110. Strategy on the risks of gender-based violence (GBV). The strategy for gender-based violence (GBV) is to avoid all forms of GBV in the project, and to ensure that possible cases of GBV can be treated and traced. The project will not interfere in the lives of the households involved but will ensure that the direct implications of the project do not favor the development of GBV cases in its areas of activity. In this sense, it is proposed to focus on raising the awareness and accountability of the various employees and project providers, while offering mechanisms to support potential victims that are related to its activities;

4.3.1.7 Institutional capacity

111. **Capacity building of the various project stakeholders is proposed for effective implementation of the ESMF,** including (i) full-time recruitment of an Environmental Project Specialist; (ii) training of actors involved in the implementation of the Provincial, Communal, and Unclassified Roads (environmental and social assessment process, health and safety, complaints management mechanism, GBV risk management); and sensitization and mobilization at the local level (Regions, Communes), for a good appropriation and sustainability of the achievements of the project of rehabilitation of Provincial, Communal, and Unclassified Roads by the local communities of the target areas, as well as for a change of behavior.

4.3.1.8 Monitoring and evaluation system

112. **The objective of project monitoring and evaluation is to ensure that the provisions of the ESMP of the** Provincial, Communal, and Unclassified Roads **are implemented effectively, produce the expected results, and are adjusted or replaced if they are not implemented. effective.**

4.3.1.9 Estimated Costs of Implementing the ESMF

113. The implementation of the ESMP for the Provincial, Communal, and Unclassified Roads rehabilitation in the project areas would require a total budget of around 170,000 USD.

4.3.1.10 Public consultation

114. **Several meetings were organized, in June 2019, in the Communes of the project intervention zones, as part of the public consultation for the environmental and social impact studies of the planned projects (mainly the rehabilitation of the RNS44 and the RNS12A).** These meetings were also an opportunity to discuss with local stakeholders the Provincial, Communal, and Unclassified Roads rehabilitation in the project areas. The participants in these public consultation meetings made their proposals/wishes for the sections of rural roads to be rehabilitated. The ESMP has been published in the country since July 29, 2019.

4.3.2 SUMMARY OF THE RESETTLEMENT POLICY FRAMEWORK (RPF) FOR TERTIARY ROADS MANAGEMENT

115. **The development of a Resettlement Policy Framework (RPF) in line with the World Bank resettlement policy is required in the case where it is not yet possible to accurately determine the impact areas of the multiple sub-areas projects or components that may involve involuntary resettlement.** The CPR establishes the guidelines and organizational arrangements for involuntary resettlement that may be carried out in the context of the implementation of such sub-projects. The impacts of project activities on the biophysical and human environment may vary according to their size, importance, and also to the social acceptability of the project by the beneficiary communities. It was therefore necessary to prepare this Resettlement Policy Framework (RPF) to define the guidelines for consideration of the social impacts that may occur as part of the activities of the rehabilitation of Provincial, Communal, and Unclassified Roads.

4.3.2.1 Categories of people who can be affected

116. Spot improvement work within the existing right-of-way on Provincial, Communal, and Unclassified Roads could negatively affect different categories of individuals: individual, household, and vulnerable person.

4.3.2.2 Legal framework for resettlement

117. **The supervision of resettlement likely to occur in the context of the Provincial, Communal, and Unclassified Roads refers to the provisions of the multiple legislative and regulatory texts in force in Madagascar as well as the operational policy of the World Bank on involuntary resettlement.** The resettlement of this project is therefore to govern:

- Legislative and regulatory texts relating to the various existing land statuses in Madagascar;
- Legislative and regulatory texts relating to regional planning and urban planning;
- Legislative and regulatory texts relating to the legal status of roads;
- Legislative and regulatory texts relating to the procedure of expropriation for reasons of public utility;
- OP 4.12 Involuntary Resettlement and Annex A of OP 4.12 Involuntary Resettlement Instruments.

118. **An analysis of the divergences and the complementarity of the national instruments with the World Bank's social safeguard policies was established within the framework of this CPR in order to make up for the inconsistencies and the shortcomings of the instruments of supervision of the reinstallation of the rehabilitation project.**

4.3.2.3 Rationale, Objectives, Principles and Process for Resettlement

119. **Justification.** The development of a resettlement plan is required when the rehabilitation of Provincial, Communal, and Unclassified Roads results in the involuntary removal of land causing: (i) relocation or loss of housing; (ii) a loss of property or access to such property; or (iii) a loss of sources of income or livelihood, whether or not the affected persons have to move to another site.

120. **Objectives and principles.** The implementation of tertiary road projects could have a negative economic, social or cultural impact on neighboring populations if appropriate measures are not carefully planned and implemented to manage the harmful consequences of involuntary resettlement. To this end, the Involuntary Operational Policy for Resettlement (OP 4.12) aims to set the following main objectives:

- Objective 01: Avoidance or Minimization of Involuntary Resettlement
- Objective 02: Establishment of a resettlement plan with a characteristic feature of a development program
- Objective 03: Assistance to IDPs in their livelihood improvement efforts

121. Also, the following principles must be respected in the planning and implementation of resettlement are:

- Principle n ° 01: Consultation and participation of affected populations
- Principle 02: Consideration of vulnerable people and the gender dimension

4.3.2.4 Eligibility for compensation

122. **Are eligible for compensation, all natural or legal persons who are installed on the project sites and are the subject of a displacement and/or whose property will be partially or totally affected by the works and which were identified during the socio-economic survey.** The following three categories of people are eligible under this Resettlement Policy Framework:

a) Those with formal and legal rights to the land (including customary and traditional rights recognized by applicable national laws);
b) Those who do not have formal and legal rights to land at the time the census begins, but who have claims to such land or property (in cases where such claims are recognized by applicable national laws or by process identified in the Resettlement Plan);
c) Those who have no right or recognized legal claim on the lands they occupy. Squatters or others illegally occupying the land are also entitled to assistance if they occupied the land before the entitlement date.

4.3.2.5 Compensation category and valuation methods for offsets for asset losses

123. The compensation may be in cash, in kind or by assistance, depending on the categories of losses. The assessment of the losses or damages resulting from the project of rehabilitation of the Provincial, Communal, and Unclassified Roads are fixed based on the costs of replacement of the affected assets.

4.3.2.6 Grievance Redress Mechanism

124. **Establishing a cost-effective and affordable dispute resolution process is required when relocation is triggered.** This mechanism must consider appeals to national courts and appeals to community dispute resolution structures.

4.3.2.7 Institutional arrangements and organizational responsibilities for the implementation of the CPR

125. At the institutional level, resettlement will be supported by multiple entities, including:

- Ministry of Spatial Planning, Housing and Public Works;
- The Road Maintenance Fund;

- The Road Authority of Madagascar;
- MONTH;
- The ad hoc evaluation committee;
- Dispute Resolution Committees;
- State deconcentrated services;
- Decentralized territorial communities;
- And NGOs.

126. **In addition, it is necessary that all institutional actors involved in the implementation of resettlement be strengthened in capacity through training sessions on OP/PB.4.12 and the tools, procedures and content of the resettlement (RPF, RAP, etc.).** This will involve organizing a training workshop bringing together the various technical structures involved in the implementation of the CPR and RAP at national and local level.

4.3.2.8 Monitoring and evaluation of the resettlement process

127. In cases where resettlement has occurred as part of the improvement of Provincial, Communal, and Unclassified Roads, a monitoring and evaluation process could be put in place to ensure compliance of the resettlement process with the policies transcribed as part of this document and also to evaluate the economic rehabilitation of the affected people.

128. The implementation of the monitoring and evaluation mechanism will be carried out by a body constituted by the Subproject Implementation Unit and an independent private body, subsequently designated by the Employer.

4.3.2.9 Costs and funding of resettlement

129. At this stage, the precise estimate of the amount required for resettlement, when it will take place, cannot yet be established since the rural roads to be rehabilitated are not yet selected and this also makes the total length of the roads that would be supported under this subcomponent of the project is not determined either. However, as one-time improvements within the existing right-of-way of the selected roads, which does not provide for the creation of new routes, and with the application of the Resettlement Avoidance Principle or at least the minimizing resettlement, the improvement of Provincial, Communal, and Unclassified Roads should not lead to significant negative impacts that could lead to massive resettlement. The project coordination unit monitors and validates the resettlement budgets.

130. The Government of Madagascar bears all the costs of resettlement. The costs will be entered in the general budget of the State on the proposal of the Ministry of Spatial Planning, Housing and Public Works, after favorable opinion of the Ministry of Economy and Finance.