BRANCH ROADS SECTION OF GLENO-MAUBISSE CORRIDOR
HATUBUILICO - LETEFOHO - GLENO

Executive Summary
Environmental and Social Impact Assessment (ESIA)/
Environmental and Social Management Plan (ESMP)
April 2019
Executive Summary

A INTRODUCTION

1. As part of the Timor-Leste Road Climate Resilience Project (TLRCRP), financed by the World Bank, the Government of Timor Leste (GoTL) is preparing the feasibility study, detailed engineering design, and impact assessment of the improvement of branch roads in the Gleno-Maubisse corridor for Timor Leste Branch Roads (TLBR) project.

2. The TLBR project aims to improve road access, safety, and climate resilience on the Gleno–Maubisse corridor. Based on the assessment, the project is not expected to generate significant adverse and/or irreversible long-term direct, induced or cumulative environmental and social impacts that are sensitive, diverse or unprecedented.

3. **Project Description**: in order to move towards this goal, the two project components of TLBR project are described in detail below.

4. **Component 1: Gleno–Maubisse Corridor Upgrading and Road Safety Improvements**. This component consists of the civil works activities to be undertaken on the Gleno–Maubisse corridor and the road safety activities on the rest of the network. The activities include:

5. **Sub-component 1.1: Gleno–Letefoho and Letefoho–Hatubuilico Junction roads sections upgrading (US$70.8 million)**. This component would upgrade the Gleno–Letefoho (25.8 km) and Letefoho–Hatubuilico Junction (18.5 km) road sections of the Gleno–Maubisse corridor (66.1 km) to National roads standards. Figure 1 shows the project location. The designs will incorporate climate resilience considerations, considering: (i) pavement upgrading with selective widening to bring the project roads to national standards; (ii) improvement of drainage structures to meet forecasted rainfall volumes and intensities; and, (iii) construction or reinforcement of slope stabilization structures. Where roads serve pass through urban areas, attention will be given to safety improvements, orientation signage, bus stops, and sidewalks. As a first phase of a program to improve the Gleno–Maubisse corridor, the two project roads sections (totaling 44.3 km) have been proposed based on the prioritization results of the feasibility study and the readiness for implementation. The second phase of the upgrading of the Gleno–Maubisse corridor will be defined during implementation and it is envisaged that will be financed under an additional financing to BRP or as a new standalone project. This sub-component will also finance the construction of the upgrading works and related supervision consultancy. The safeguards instruments are the Simplified Environmental Impact Statement (SEIS)/Environmental and Social Impact Assessment (ESIA), the Environmental and Social Management Plan (ESMP) and the Resettlement Action Plan (RAP). This SEIS/ESIA document covers all sections from Gleno – Letefoho (Section 3), Letefoho – Hatubuilico (Section 2) and Hatubuilico – Aituto (Section 1), however the planned investments under the Bank’s funded Timor Leste Branch Roads Project will only cover Section 2 and 3.

6. **Sub-component 1.2: Road Safety Improvements (US$2.0 million)**. This sub-component will cover civil works and/or goods to address road safety issues on roads other than on the Gleno–Maubisse corridor roads, such as road signage and pavement markings or black spot improvements at locations to be identified by GoTL. The scope of sub-component 1.2 will be decided during implementation with support of a road safety advisor to be hired under the project. The civil work in addressing road safety issues is expected to be minor. The environmental and social impacts are expected to be minor, site-specific, reversible and non-cumulative and the mitigation measures in the form of Standard Operating Procedures are readily available. Standard Operating Procedures (SOPs) has been prepared in the ESMP as safeguard instruments for minor civil works in addressing road safety issues.

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1 The remaining roads to be improved on the Gleno–Maubisse corridor are: (i) Hatubuilico Junction to Aituto road section (11.9 km); and (ii) the links to the corridor of the towns of Ermera (4.8 km) and Hatubuilico (5.2 km). The road section between Aituto and Maubisse (9.9 km) was already improved under RCRP.
7. **Component 2: Institutional Strengthening and Project Management.** This component aims at helping strengthening capabilities within MPW and DRBFC on issues related to road assets management, road safety and road maintenance. It will finance technical assistance, equipment, and operational costs associated with the implementation of the Project. It will also finance studies required for the preparation of potential future investments in the road sector. This component is split into three sub-components, as detailed below.

8. **Sub-component 2.1: Technical Assistance (US$1.6 million).** This sub-component involves knowledge, capacity building, data and funding to support transport sector development. Technical Assistance activities include: (i) data collection on road inventory, traffic and condition on national and district roads (approximately 2,240 km) to update the Road Asset Management System for supporting monitoring, planning and programing of road works; (ii) piloting of multi-year performance based maintenance contracts on national roads (two years of maintenance on approximately 125 km) through contractors using community-based groups with female participation, including strengthening supervision activities done by DRBFC; (iii) road safety capacity building program within MPW through the hiring of a road safety advisor to DRBFC; and, (iv) geotechnical capacity building program within MPW through the hiring of a geotechnical advisor to DRBFC. In conjunction with the Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank-Financed Projects and Trust Funds Administered by the Bank (issued January 2014), this is a Type 1 TA Building Client Capacity and no safeguard instrument is required.

9. **Sub-Component 2.2: Design of Future Projects (approximately US$1.4 million).** This sub-component will finance feasibility/technical studies and designs required for the preparation of potential future investments in the road sector (approximately 55 km). The road section to be designed will be selected from the following roads that GoTL showed an interest in receiving the Bank’s support for feasibility/technical studies and designs: (i) Viqueque–Uatulari–Uatucarbau–Liomar–Lospalos Road Project; (ii) Lautem–Fuíloro–Lospalos Road Project; and, (iii) Maubara–Vatabau–Sare–Callaco Road Project. In conjunction with the Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank-Financed Projects and Trust Funds Administered by the Bank (issued January 2014), Term of References (TORs) for these environmental and social studies should be made available for references in future projects.

10. **Sub-component 2.3: Project Support (US$1.0 million).** This sub-subcomponent will finance operational costs associated with implementation of the Project, training of MPW staff, GVB and SEA prevention measures, and goods needed by the Project. It also includes yearly audits of the project accounts to be submitted to the Bank.

11. **Component 3: Contingent Emergency Response (US$0 million).** Since Timor-Leste will remain vulnerable to climate change and severe weather events, even with the successful implementation of the first two components, supporting post-disaster recovery is an important feature of the project. This zero-dollar component is designed to provide swift response in the event of an Eligible Crisis or Emergency, by enabling GoTL to request the Bank to reallocate project funds to support emergency response and reconstruction. Safeguards requirement will follow the Bank Procedure on the Preparation of Investment Project Financing Under Situation of Urgent Need of Assistance or Capacity Constraint issued on October 1st, 2018. The project will prepare a CERC Project Operations Manual, including safeguard approval process, within six months of project effectiveness.

12. **Institutional Arrangement:** The project proponent is the GoTL and the implementing agency (Project Implementation Unit/PIU) is the Directorate of Roads, Bridges and Flood Control (DRBFC) under the Ministry of Public Works (MPW). The Project Management Unit (PMU) is

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2 The Road Asset Management System is being developed with ILO, ADB and JICA support.
3 The maintenance contracts will be implemented on Lots 1 and 3 of the ongoing RCRP (around 40 km) and other national roads to be selected by MPW.
4 The tasks would include: training of MPW staff, assessment of national and district roads for geotechnical hazards, preparation of road geotechnical remedies works program, and geotechnical audits of project designs. The assignment is expected to last for 12 months spread over two years.
5 The maintenance contracts will be implemented on Lots 1 and 3 of the ongoing RCRP (around 40 km) and other national roads to be selected by MPW.
established within MPW to manage and implement projects financed wholly or partially by GoTL’s development partners. The PMU will responsible for day to day management of the Project, including implementation of requisite safeguards measures. The project is expected to commence by August 2019.

13. The roles and responsibilities of various agencies in undertaking these activities have defined, including identification of the institutional strengthening activities that will be required to ensure proper management of environmental and social risks. The environmental monitoring program has been prepared and the cost associated with its implementation has been identified. The roles and responsibilities of the proponent and the institutions are identified in Annex 1.

B GEOGRAPHICAL CHARACTERISTICS OF THE PROPOSED ROAD INVESTMENTS

14. The Project will provide an expanded national road network, more efficient travel, and improved traffic flow through the improved vertical and horizontal alignment.

Figure 1: Project Location of Branch Road Aituto to Gleno

15. The existing roads in Section 2 Hatubuilico-Letefoho traverses the protected areas based on Government Decree 05/2016 (superseding UNTAET Regulation 19/2000) and important bird areas as identified by Birdlife International. The United Nations Transitional Administration in East Timor (UNTAET) Regulation no. 2000/19 on Protected Places defines the protected areas of Tatamailau Mountain as “all elevations on Tatamailau Mountain above 2,000 meters and the surrounding forest”. However, the boundaries for Tatamailau (Ramelau) Mountain protected areas have not been defined by GoTL. The highest altitude for the proposed Branch Roads is close to 2,000-meter above sea level.

16. The Key Biodiversity Area (KBA) factsheet launched by BirdLife International showed that some endemic species of Mount Tatamailau (Ramelau) were mostly birds is globally threatened species based on IUCN Red List Category. However, no threatened habitats, both plants and animals, were recorded in a protected area which traversed by the Branch Road Project, though BirdLife International has identified the endemic bird species of Mount Tatamailau (Ramelau), globally threatened species based on IUCN Red List Category. This is possibly due to highly degraded forests in the Section 1 and 2 road corridors and several spots of open areas due to
17. This Bank’s OP 4.04 on Natural Habitats is triggered as the precautionary for working thoughtfully in the protected areas, even though the boundaries/markings have not been defined. The nature of the project will focus on ground construction works and therefore, potential risks on birds’ movement shall be manageable. The project will apply land clearing procedures taking into account the prevention of adverse impacts on birds’ nests and their habitats. Guidelines for construction within the protected area section are given in the ESMP.

18. As the first phase of a program to improve the Gleno–Maubisse corridor, the two project roads sections (totaling 44.3 km) have been proposed based on the prioritization results of the feasibility study and the readiness for implementation. The second phase of the upgrading of the Gleno–Maubisse corridor will be defined during implementation and it is envisaged that will be financed under an additional financing to the BRP or as a new standalone project. This sub-component will also finance the construction of the upgrading works and related supervision consultancy.

19. The Project will upgrade the Gleno-Letefoho and Letefoho-Hatubuilico Junction road section, which include the Gleno-Letefoho section (25.8 km) and Letefoho-Hatubuilico Junction (18.5 km) road sections of the Gleno-Maubisse corridor (66.1 km) to a national road standard, see Figure 2. The existing carriageway Gleno to Letefoho road section is on average 5-7 meters (5 – 7.5 meters of right of way). The current traffic is 843 vehicles per day with 64 percent motorcycles. Several parts of this section have been widened through an on-going GoTL’s road emergency project, which started in 2018 and is expected to conclude by end of 2019. The existing carriageway between Letefoho to Hautubuilico is on average 3-4 meters (4-5 meters right of ways). The current traffic is 418 vehicles per day with 79 percent motorcycles. Topographical feature on which the road traverses includes mountainous terrain and the road is in poor condition along narrow widths.

20. Widening of the above select sections will vary but is generally estimated to require between 0 to 3 meters on each side to bring the current roads’ Right of Way (ROW) to the national standard. The minimum requirement of the ROW for the Branch Road is on average 9 meters (6-meter carriage-way, 1-meter road shoulder on each side and 1-meter for drainage) on flat land. In areas with steep topography, such ROW width requirements may add-up. Reflecting from the on-going Dili-Ainaro road project, additional 1 – 5 meters for slope cutting and installation of embankments can be anticipated.

21. The upgrading of Section 2 (Hatubuilico to Letefoho) will require land acquisition, asset removal and resettlement community houses. Potential impacts on Section 3 are currently assessed as low since the existing roads have been widened through the on-going GoTL’s road emergency project. The project’s further assessment on impacts on land and properties, along with a complete inventory of lossess has been prepared and provided in a standalone RAP.

22. The design will incorporate climate resilience considerations, considering (i) pavement upgrading with selective widening to bring the project roads to national standards; (ii) improvement of drainage structures to meet forecasted rainfall volumes and intensities; and, (iii) construction or reinforcement of slope stabilization structures. Where roads served pass through urban areas, attention will be given to safety improvements, orientation signage, bus stops, and sidewalks.

23. The improvement of the Branch Road Aituto – Gleno is expected to yield positive environmental and social outcomes through improved access and mobility amongst surrounding communities by enabling more efficient, and safe travels and improved traffic flows. In the long-run, this project is expected to boost local economies by improving access to commodity trades and tourism. The improvement of crossing drains will reduce the chances of erosion due to uncontrolled run-off and hence improve the safety of road users and local communities along the corridor. In addition, smoother asphalt pavement and improved roadside gutters and drainage are expected to reduce accumulation of roadside dusts due to increased traffic.
24. The environment climate and weather in the project area is tropical, hot and humid, dominated by rugged mountain landscape, steep terrain, and gorge, and some are flat areas where there are several settlements. Most of the population relies on agriculture such as coffee plantation and vegetable farming and livestock for livelihoods.

25. The design will incorporate climate resilience considerations, considering (i) pavement upgrading with selective widening to bring the project roads to national standards; (ii) improvement of drainage structures to meet forecasted rainfall volumes and intensities; and, (iii) construction or reinforcement of slope stabilization structures. Where roads served pass through urban areas, attention will be given to safety improvements, orientation signage, bus stops, and sidewalks.

26. The construction works will take place along the entire corridor in Sections 2 and 3 up to 5.0 meters on either side of the existing road centreline, or about 6.5 meters of either side to allows availability of working space. Such permanent and temporary use of land and space will be
consulted with affected communities and relevant compensations for losses will be further
detailed in the RAP. At the time of the development of this SEIS/ESIA, the locations of the
associated facilities as indicated above have not been identified since such identification will only
be finalized as part of the contract implementation.

27. The locations for associated facilities will be identified at the pre-construction stage after
the contractor has been mobilized. For this reason, this SEIS/ESIA only includes mitigation
measures for the main road works. Whereas, for the the associated facilities, relevant procedures
have been established in the ESMP because the types and scales of such activities are broadly
known through the on-going and previous road project implementation. Relevant site-specific
environmental and social assessments will be undertaken and the ESMP will be updated at the
pre-construction stage whereby relevant provisions and budget requirements shall be
incorporated in the CESMP which will be subject to PMU and World Bank’s review and approval
at the pre-construction stage.

B RISK ASSESSMENT

28. The screening, assessment, and management/mitigation implementation of
environmental and social impacts of the Project will be governed by laws, regulations, and
standards for environmental assessment and management of GoTL. The Basic Law of
Environment (April 2012) covers all relevant aspects of environmental protection and the Decree-
Law 5/11 covers requirements for applying environmental license and environmental
assessment. In addition to GoTL’s requirements, the Project must comply with WB’s Operational
Policy (OP) 4.01 Environmental Assessment, OP 4.04 Natural Habitats, OP 4.10 Indigenous
Peoples, OP 4.11 Physical Natural Resources and OP 4.12 Involuntary Resettlement.

29. In accordance with Timor-Leste’s law (DL 5/211, Annex II), the Project was screened as
Category B based on the classification that rehabilitation of an existing road, in all scale, defined
as Category B Project. The Project consists of improvement and rehabilitation activities which
potential adverse environmental impacts are site-specific, hence mitigation measures can be
designed readily. There is likelihood that slope cutting and backfilling may alter the landscape
of the area. Efforts to reduce such impacts have been considered through engineering design such as
designating specific soil disposal sites, installation of retaining walls and replanting to reduce erosion.
The project category based on OP Environmental Assessment will be subject to World Bank’s
appraisal.

30. Following the requirements of GoTL, a Simplified Environmental Impact Statement (SEIS)
has been prepared for the Project for the purpose of obtaining environmental permits. The SEIS,
with an additional analysis to cover both direct and indirect risks and impacts also serves as an
Environmental and Social Impact Assessment (ESIA), which is a requirement under the World
Bank’s Operational Policies. The Bank requires ESIA and its associated Environmental and
Social Management Plan (ESMP) to ensure that unintended adverse environmental and social
impacts are avoided or properly mitigated.

31. Potential impacts on land and structures: The project will acquire some 27.10 hectares of
land for the construction of the Branch Road for all sections. Out of the total impacted land, there
are approximately 12.06 hectares of agricultural and, 3.66 hectares of residential land, 10.85
hectares of vacant land and 0.67 hectares of government and church land. No communally and/or
customarily-owned land and commercial land owned by companies will be affected by the
proposed Branch Road. There are 248 households (AHs) will be directly impacted by land
acquisition of the Branch Road. Based on land used type, 140 PAPs will be affected from
acquisition of 8.46 hectares of cultivated land; 42 PAPs of fallow shifting agriculture land; 37 PAPs
of resident/compound land.

32. On the basis of severity of impacts, road widening in Section 3 is predicted to result in
more impacts compared to other sections. In terms of types of impacts, impacts on residential
land are expected to be more significant in Section 2 compared to other sections. Whereas in
Section 3, impacts on agricultural land, particularly coffee plantations, are expected to be more
significant compared to other sections. However, since the DED for Section 3 is currently being prepared and the on-going GoTL’s emergency road construction (refer to Tracer Assessment in the ESIA and Land Acquisition and Resettlement Action Plan/LARAP) is yet to be completed, impacts will likely change and hence, need to be revisited. Further assessments of these impacts are provided in the Land Acquisition and Resettlement Action Plan (LARAP) for the project.

33. Slope failures and increased landslide risks: Slope failure and landslides are also anticipated as a result of land clearing, slope cutting, and excavation activities. Therefore, visual and technical inspection by the Project Implementation and Supervision Consultant should be conducted regularly and if needed, retaining walls will need to be installed in some of the very sensitive areas. These measures will have to be reflected in the DED to the extent possible.

34. Previous road project experiences showed that there is likelihood of slope failures during slope cutting activities, resulting in slope ruptures and landslides. It is noticeable in several sections; secondary vegetation growths have covered past slope failures. The first critical mitigation is to avoid impacts by designing slope cutting based on the classification of soil and rock characteristics. Similar to the above, such identification will need to be reflected in the DED. Key important measures to minimize landslides and slope failures include construction of catchment walls and embankment at the foot of the slopes. In this case, the height of the walls should be considered for the elevation of 45° from the top of the wall, and the embankment structure should be decided based on factors such as slope condition and geological structures.

35. Vegetation removal: The census survey indicates that impacts on agricultural crops are more severe in Section 3 (i.e. approximately 19,238 coffee trees need to be removed for the purpose of road widening) and hence, may warrant further considerations with regards to mitigation measures associated with livelihood impacts. In total, there will be approximately 27,652 mature coffee, 517 timber and 1,055 fruit trees that will be impacted. Compensation for tree owners is further described in the project’s LARAP on the entitlement matrix. As part of safeguards measures, replanting assistance will be offered to tree owners in addition to compensation payments and livelihoods assistance. Impacts on livelihoods as a consequence of productive tree losses are addressed in the project’s Land Acquisition and Resettlement Action Plan (LARAP), which is an integral instrument for the overall management of environmental and social risks.

36. Community and health and safety risks: the establishment of the site office, work yards and work sites may have implications on community and health safety, which may stem from sanitation, exposure to chemicals and leakages/seepages, social contacts with construction workers. Furthermore, there may be risks that the presence of outside workers may crowd-out the availability of local services. The degree of such potential risks and impacts will vary and greatly depend on the number of outside workers across construction cycles.

37. Labor Risks: risks associated with workers’ safety and their wellbeing have been assessed as part of the ESIA. Previous road construction experiences in Timor Leste indicate that there could be around 250 temporary road construction workers to be mobilized at a time by a contractor for one road section (for a length on average 25 km). Most of these workers are usually locally outsourced from the affected Sucos and employed to perform semi-skilled and non-skilled works. Road engineers and skilled workers are usually foreign workers, with a typically a smaller ratio to the overall workforce (one fifth). These foreign would typically reside in an enclosed camp near the construction site. While the overall number of foreign workers appears to be relatively small than bigger construction projects, the presence of construction workers concentrated in specific sites over an extended period (can be up to 30 months) present potential environmental and social implications, including risks of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) that have been considered as part of the ESIA. Relevant management measures, including GBV/SEA prevention mechanism, community feedback and grievance redress mechanism (FGRM), and Labor Management Procedures have been included as part of the project’s ESMP.

38. Female workers safety needs to be specifically considered. A major threat to women workers relates to risks of work-related sexual harassment, including sexual abuse. Sexual
harassment is prohibited under the Labour Law of Timor-Leste, which provides for its definition. Considering the remoteness of the road project, the fact that workers who are not locally recruited are to be accommodated in a work camp and/or the expected higher number of male workers, there is the unequivocal need to ensure women safety is promoted.

39. **Dusts and noise**: During the construction phase of proposed Project, there is likelihood of temporary impacts on local air quality through emission of exhaust from construction vehicles and aggregate crushing plants; as well as through dust generation from vehicles transporting materials and from exposed stock-piles of construction materials. Slope cutting, excavation, and rock crushing activities will be the main sources of dust. The works in any road section will generally be of short duration and in several locations, there will be sufficient buffer distance such that no significant impact is expected from the construction works on residential sensitive receivers in terms of noise, vibration, and dust. In addition, works will not take place at night except in special circumstances justifiable to the PMU. However, at the road operationalization phase, dust and noise levels will likely get reduced due to improved road conditions and hence, the project will generate positive impacts over the long-term.

40. **Decrease in water quality**: Project construction areas which adjacent to river and stream (culvert replacement, bridge repair, major bridge works), has the potential to create some temporary and minor adverse impacts on water quality including (i) increased turbidity and downstream siltation created during the removal of gravels; (ii) an increase in silt loads at culverts to be replaced and/or constructed; (iii) construction materials such as small gravel, sand, and fill, being ‘washed out’ into streams, rivers during rain; (iv) oil and fuel leakage and/or spills from vehicles and plant or workshop/storage locations; and, (v) discharge of waste-water and sewage from construction camp, canteen, site office and work yard to local streams and rivers.

41. The drainage systems and water resources on surrounding lands will be affected by construction as follows: a) surface and subsurface water resources near the proposed Project road sections could be contaminated by fuel and chemical spills, solid waste, and effluents generated by the kitchen and toilets at construction’s campsites. Mitigation measures proposed by confining activities into dry season when there will be little or no water in the rivers and streams crossing the project road. It will be sufficient to monitor other physical mitigation measures in place at the major river crossings where bridge repairs and replacement will be undertaken as well as on stream sections close to construction camps (i.e., rivers that could receive run-off/discharge from construction/camps).

42. **Solid and liquid waste production**: Waste disposal operations can cause significant impacts when uncontrolled, therefore mitigation measures will seek to reduce, recycle and reuse waste as far as practicable. The PMU will be responsible to monitor the Contractor’s progress of implementing the provision of the waste management of the ESMP and all mitigation measures. The waste management section of the CESMP will also include consideration of all matters related to solid and liquid waste disposal including the following: (i) expected types of waste and quantities of waste arising; (ii) waste reduction, reuse and recycling methods to be employed; (iii) agreed reuse and recycling options and locations for disposing receive endorsement from DNCPIA and local groups; (iv) methods for treatment and disposal of all solid and liquid wastes; (v) methods of transportation to minimize interference with normal traffic; and (vi) establishment of regular disposal schedule.

43. **Hazardous materials disposal**: Hazardous substances such as oils and lubricants can cause significant impacts if uncontrolled or not disposed of properly. Mitigation measures proposed to control access and usage of hazardous substances, including control of hazardous waste disposal. The PMU will responsible to monitor the contractor’s progress of implementing the hazardous materials and waste management to avoid or minimize impacts of the hazardous substance usage.

44. **Impacts on public utilities**: Public utilities include two water tanks, 200 meters of water pipes, one multi-function classroom room, 51 electric poles. These utilities/facilities will need to be rebuilt or relocated. The project will provide complete restoration/rebuilding costs as well as replacement costs for these entire utilities. As part of the project’s Environmental and Social
Management Plan (ESMP), these utilities will need to be fully relocated and/or replaced prior to any land clearance or construction works to minimize activity and service disruption. Such relocation and/or replacement will be coordinated with respective agencies responsible for the maintenance of these utilities/facilities and all replacement costs will be borne by the GoTL.

45. Plans will be obtained from utility/service providers showing all underground facilities and/or services in order to avoid damage or disruption during works. Where plans and drawings are not available, the Contractor will review by field observation and report locations to PMU in the pre-construction phase.

46. Impacts on Physical Cultural Resources: consultations and observations indicated that there will be six cultural sites that will be indirectly affected by the Project. Three of sites, however, has been spared from development through re-alignment of the RoW. The three sites will require the implementation of proper customary rituals prior to the commencement of work in the area. No main parts of churches will be affected from rehabilitation work, however, given the close proximity of the religious sites to the alignment, careful consideration should be given as not to disturb them during construction and to preserve access for devotees.

47. Increased traffic and road safety risks: the project will cause temporary negative impacts through the presence of vehicles and equipment. Inconvenience, minor disruptions to traffic on the road as well as on local access to and from the villages along the road Project during the Construction phase. Improved road conditions may induce speeding behavior. Such risks have been considered as part of the ESIA and the project will invest in road safety awareness training, signage, protective measures/guardrails, and road maintenance.

48. Improved accessibility and people mobility: the operation of the project is not likely to induce people to the forest area to hunt timber, flora or fauna as it does not comprise the provision of additional access to previously inaccessible areas. The new road already exists and does not provide access to the interior and existing forested areas. Deforestation is not an impact attributable to the Project because (i) single selective logging for traditional and/or cultural purposes is permitted; and (ii) logging companies purchase licenses to fell trees within prescribed areas and construct their own roads to provide access to these areas, and in any case, logging has not been a major activity in the Project area. Therefore, there will be no impacts on flora and fauna as a consequence of road rehabilitation during the operational phase. There is no rare or endangered fauna that could be impacted by the operation of a rehabilitated road. There will be no impacts on existing or proposed conservation area as a result of road rehabilitation.

49. Climate change induced impacts: climate change may also impact the road through increased rainfall; the climate change resilience measures proposed to integrate both civil-engineering and bio-engineering solutions and increased maintenance to reduce the risk of damage to the road infrastructure.

50. Information was provided on the scale and scope of the Project works and the expected impacts and the proposed mitigation measures. The process also gathered information on relevant concerns of the local community, and feedback was incorporated into the ESMP to address the issues. Project documentation will be disclosed in a place and language accessible to stakeholders.

C MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

51. Management of Environmental and Social Risks and Impacts will be mainstreamed within the project’s institutional arrangement. Collaboration with relevant Non-Governmental Organizations (NGOs) and service providers, as well as Suco administrations will be sought to address potential impacts as well as grievances, for instance land acquisition and impacts on structures, GBV/SEA incidents.

52. The impacts from construction and operation will be avoided through technical design and mitigation measures; hence it is predicted that there will be no insurmountable impacts. Subsequently, PMU will ensure that the ESMP is included in the contract documents and
implemented thoroughly. In the event that any design details change the locations or scope of the proposed Project works the environmental and social assessment and ESMP shall be reviewed and revised accordingly. The findings of the SEIS/ESIA are that the environmental and social impacts of the proposed rehabilitation of the Gleno – Letefoho – Hatubulico will be manageable if the mitigation measures established in the ESMP are implemented thoroughly. The SEIS/ESIA also sets out the requirements for monitoring.

53. The PMU shall update the ESMP based on Detailed Engineering Design (DED) and integrate it into the bid and contract documentation, to ensure these impacts are mitigated to the greatest extent feasible. The contractor will prepare a site-specific Construction ESMP (CESMP) and elaborate on how they propose to implement the works. The CESMP will include the contractor’s method statements and proposed actions to cover: waste management and spoil disposal; tree removal and replanting; utilities, electrical re-provisioning; drainage; construction materials management; runoff control, landslide and excavation protection (erosion and sediment control); noise and dust control; traffic management and road safety; including occupational health and safety.

54. The Project’s boundary has been defined by considering direct and indirect potential impacts. However, the current scope of the SEIS/ESIA does not include any additional areas required for spoil disposal and temporary stockpiles and associated facilities such as engineers’ offices and laboratory facilities, contractor camp and yard, including quarries, borrow pits, manufacturing areas (crushers, batching plant and asphalt mixing plant) etc. These associated facilities will only be determined during the project implementation and to the extent possible, reflected in the DED being prepared to enable identification of potential impacts. The latter will be subject to future assessments whereby their mitigation measures will be developed prior to any construction and physical works once the locations have been selected. The PMU and World Bank will retain review and clearance functions for any environmental and social assessments and mitigation measures developed during project implementation by the contractors.

55. Understanding the potential locations of the above associated facilities is important to confine geographical footprints to select locations where potential environmental and social impacts are assessed as manageable and hence, relevant provisions can be reflected in the bidding documents and contracts. In the current DED, potential temporary stockpiles are proposed to be located in unused land plots with stable topography to avoid risks of run-off. Associated facilities such as offices and laboratory facilities, and contractor camps are usually located within the proximity of the project sites (i.e. within 1,000 m) to minimize travel time and fuel consumption. These locations are yet to be identified following the preparation of the project’s DED for sections 2 and 3. Procedures for reviewing, assessing environmental and social risks, and clearing contractors’ proposals for these associated facilities have been included as part of the ESMP.

56. Understanding that there will be several selected disposal areas of soil and other construction material needed as a result of slope cutting and road widening, location selection for these sites shall take into consideration the Protected Natural Areas (PNA) determined by the GoTL, as well as trees, community claims and land use of these sites and geological stability of the impacted areas. The quarries and borrow pits will be located at relevant material sources at a safe distance from community use and to the extent possible are concentrated to limit footprints and enable proper management. Location selection for the manufacturing facilities (i.e. crushers, batching plants, and asphalt mixing plants) etc. will be screened against environmental and social risks and impacts and approved by the PMU and World Bank. Relevant requirements for these associated facilities include minimizing community health and safety risks, avoidance of access and land use restriction risks, and potential impacts on the protected areas.

57. Summary of key environmental and social impacts & mitigation measures can be found in Annex 2.
STAKEHOLDER ENGAGEMENT AND CONSULTATIONS

58. A series of focus group discussions/public consultations at the village/Suco levels was undertaken as part of the SEIS/ESIA process between 12th September and 26th September 2018. Prior to these consultations, information about project activities was disseminated to potentially impacted communities along the Branch Road corridor through Suco leaders and information boards as well as the general public and authorities through district meetings and survey assessments.

59. A summary of these consultations can be found in Annex 3. The above public consultations were attended by about 450 participants (with 75 women or about 17% of participants) representing all Sucos to be affected as well as related departments of GoTL, representatives of NGOs, officers from local and municipalities, including representatives of veterans and churches. The participants actively involved in the discussions related to the Project’s goals, environmental and social issues, as well as the related risk mitigation measures and impact avoidance of sites with historical and cultural values. Women equal participation in consultation meetings showed to be a challenge which the Contractor needs to rectify during the project through proactive steps to engage more women. No data are available so far on participation of persons with disabilities.

60. The key elements in the current public opinion are summarized as follows:
   a. The public generally welcomes the proposed road Project and expressed appreciation of the public consultation events conducted since these provided them with opportunities to raise concerns early on during the project design;
   b. Water supply facilities such as water pipelines, water tanks and water springs adjacent to the proposed road Project will require protection and/or replacement prior to the construction works. Measures will need to be put in place by the contractor to ensure that services and water supply are not disrupted;
   c. Employment opportunities were perceived to benefit the communities as expressed in all Sucos. Recruitment is expected to be coordinated by each Suco chief to ensure community access and participation;
   d. Landslide risks in several critical areas will need to be considered as part of the design development and careful implementation will be needed particularly with regards to slope cutting in areas adjacent to the education facilities and;
   e. Improper soil disposal on the productive land owned by the community (i.e. coffee plantation) is of a sensitive concern

61. Key concerns and feedback discussed during the public consultations are summarized in Annex 3. Further documentation, which includes meeting notes and the list of participants are included in both ESIA and ESMP documents.

FEEDBACK AND GRIEVANCE REDRESS MECHANISM (FGRM)

62. Proposed project’s Grievance Redress Mechanism (FGRM) procedures has been prepared as part of the ESMP and LARAP (See Annex 4). These mechanisms are being proposed to support resolve issues associated with the Project. The aim of GRM is to provide an accessible, timebound and transparent mechanism for the affected persons to voice and resolve social and environmental concerns linked to the Project. Resolution of these issues and concerns will be undertaken expeditiously and according to the procedures of the GRM. The complaints registry maintained at the site Project office and by the contractor will be subject to monitoring. The GRM is based on the mechanism established by PMU for other projects and which is currently working well.

63. A Grievance Redress Mechanism will be provided for all PMU workers and contracted workers by each contractor selected. This mechanism is expected these workers to raise workplace concerns. Such workers will be informed of the GRM available to them at the time of
recruitment and the measures put in place to protect them against any reprisal for its use. Measures will be put in place to make the mechanism easily accessible to all such project workers. Mitigation measures and environmental monitoring are required to minimize the environmental impacts in the design, construction, and operational phases. The main issues are related to planning and design of the Project such as structures and roadside drainage, control of construction impacts such as spoil and waste disposal, water quality impacts, health and safety concerns, tree felling, traffic interruption, re-provisioning of electrical and utilities, noise and dust during construction.

64. A specific FGRM for GBV/SEA cases has also been prepared (see Annex 4). Whereas land-related FGRM has been developed and included as part of the project’s LARAP.

65. The details of the Project Proponent are presented below.

<table>
<thead>
<tr>
<th>Table 2.1. Project Proponent Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Address:</strong></td>
</tr>
<tr>
<td><strong>Telephone:</strong></td>
</tr>
<tr>
<td><strong>Name:</strong></td>
</tr>
<tr>
<td><strong>Email:</strong></td>
</tr>
</tbody>
</table>
# ANNEX 1: INSTITUTIONAL ROLES AND RESPONSIBILITIES

## Table 1. Responsibilities for Environmental and Social Management & Monitoring

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
</table>
| Ministry of Public Works (MPW) | - Overall responsibility for project construction and operation;  
  - Ensure that funds are available to properly implement all agreed environmental and social safeguards measures;  
  - Ensure that the project, complies with the provisions of WB’s Operational Policy (OP), revised 2011;  
  - Ensure that Project complies with GoTL environmental laws and regulations;  
  - Ensure that tender and contract documents for civil works include all relevant parts of the environmental and social assessment and project agreements;  
  - Submit at least quarterly safeguards monitoring reports to WB;  
  - Promote institutional cooperation with General Labor Inspectorate to enforce compliance with labour laws, including occupational, health and safety rules;  
  - Ensure that MPW has obtained the necessary environmental license(s) from DNCPIA/DEIA prior to award of civil works contracts;  
  - Assist MPW to establish a Grievance Redress Mechanism, as described in the SEIS/ESIA, to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances about the Project's environmental and social performance;  
  - Undertake monitor of the implementation of the ESMP (mitigation and monitoring measures);  
  - Prepare quarterly or semi-annual environmental and social monitoring reports for submission to WB;  
  - Based on the results of ESMP monitoring, identify environmentally corrective actions and prepare a corrective action plan, as necessary, for submission to WB and other co-financiers as necessary;  
  - Implement all mitigation and monitoring measures for various project phases specified as PMU’s tasks in the ESMP;  
  - Work with DRBFC to undertake any additional environmental and social assessment for Projects prior and submit to WB and DNCPIA for review and clearance. |
| Project Management Unit (PMU) | - Ensure that ESMP provisions are implemented to mitigate environmental and social impacts to acceptable levels;  
  - Ensure that Project complies with WB's OP (2011) and government laws and regulations;  
  - Engage and retain two staff within PMU as environmental safeguards officer (ESO) and social safeguards officer (SSO);  
  - Ensure issues related to sexual harassment and gender-based violence between workers and with communities are effectively dealt with respect to the applicable laws and rules;  
  - Ensure that environmental and social protection and mitigation measures in the SEIS/ESIA and ESMP are incorporated into the detailed design including climate change adaptation measures;  
  - Ensure that requisite measures from the SEIS and ESMP are incorporated into the bid and contract documents;  
  - Undertake environmental and social management capacity building activities for MPW and orientation and awareness training for contractors;  
  - Ensure that contractors obtain a necessary environmental license(s) from DNCPIA/DEIA prior to the commencement of civil works contracts;  
  - Assist MPW to establish a Grievance Redress Mechanism, as described in the SEIS/ESIA, to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances about the Project's environmental and social performance;  
  - Undertake monitor of the implementation of the ESMP (mitigation and monitoring measures);  
  - Prepare quarterly or semi-annual environmental and social monitoring reports for submission to WB;  
  - Based on the results of ESMP monitoring, identify environmentally corrective actions and prepare a corrective action plan, as necessary, for submission to WB and other co-financiers as necessary;  
  - Implement all mitigation and monitoring measures for various project phases specified as PMU’s tasks in the ESMP;  
  - Work with DRBFC to undertake any additional environmental and social assessment for Projects prior and submit to WB and DNCPIA for review and clearance. |
| Project Implementation and Supervision | - Provide training and capacity to building to MPW and PMU staff (including management) and provide training to contractors prior |
| Consultant (PISC) | to the submission of contractor's CESMP;  
| | ▪ Engage and retain two full-time staff within PISC as national environmental consultant officer (NEC) and national social safeguards consultant (NSC);  
| | ▪ Incorporate into the project design the environmental and social protection and mitigation measures identified in the ESMP for the design stage including climate change adaptation measures included in the SEIS;  
| | ▪ During the detailed design phase provide all necessary information to the MPW to facilitate obtaining environmental licenses from DNCPIA prior to award of civil works contracts;  
| | ▪ During detailed design notify PMU of any change in alignment or project design/components and provide all necessary information to the PMU to facilitate preparation of any additional environmental and social assessment prior to project construction as required in the ESMP (e.g., preparation of new or supplementary environmental and social assessment in case of change in alignment that will result in adverse environmental and social impacts that are not within the scope of the SEIS/ESIA prepared during loan processing, etc.);  
| | ▪ Update, based on detailed design, the ESMPs and other environmental and social protection and management measures to be incorporated in bid and contract documents;  
| | ▪ Assist PMU in the review and approval of the contractor's CESMP for each road section;  
| | ▪ Assist PMU to undertake monitoring of the implementation of the ESMP (mitigation and monitoring measures) including the incorporation of reports from the contractors;  
| | ▪ Assist PMU to prepare quarterly progress reports and semi-annual safeguards monitoring reports for submission to WB and MPW as necessary including the incorporation of reports from the contractors and corrective action requests to Contractor;  
| | ▪ Based on the results of CESMP monitoring, identify environmental and social corrective actions and prepare a corrective action plan, as necessary, for submission to WB and other co-financiers as necessary. |
| Contractors | ▪ Participate in the induction training on ESMP provisions and requirements delivered by the PMU;  
| | ▪ Prepare the CESMP and submit to PMU for approval;  
| | ▪ Obtain necessary environmental license(s) from DNCPIA for associated facilities for Project works, quarries, Asphalt Mixing Plant etc. prior to the commencement of civil works contracts;  
| | ▪ Ensure that all workers, site agents, including site supervisors and management participate in training sessions delivered by PMU and PISC. Maintain a record of training and conduct of awareness sessions for staff to ensure compliance with environmental and safety statutory and contractual obligations including the approved CESMP;  
| | ▪ Ensure compliance with environmental and social statutory and contractual obligations and proper implementation of WB requirements including approved CESMP;  
| | ▪ Based on the results of CESMP monitoring, cooperate with the PISC and PMU to implement environmental and social corrective actions and corrective action plans, as necessary;  
| | ▪ Based on the results of ESMP monitoring, cooperate with the PMU to implement environmental and social corrective actions and corrective action plans, as necessary;  
| | ▪ Respond promptly and efficiently to requests and instructions from PMU for environmental corrective actions and corrective actions and implement additional environmental and social mitigation measures, as necessary;  
<p>| | ▪ Provide sufficient funding and human resources for the proper and timely implementation of required mitigation measures in the |</p>
<table>
<thead>
<tr>
<th>Environmental and Social Management Plan.</th>
</tr>
</thead>
</table>
| **National Directorate of Environment (DNCPIA)** | • Review and approve environmental and social assessment reports required by the Government of Timor-Leste (GoTL);  
• The issue, and renew environmental licenses as required by the GoTL during the life of the Project;  
• Undertake monitoring of the project’s environmental performance  
• based on their mandate. |
| **General Labour Inspectorate** | • Undertake spot-inspection of workers condition  
• Support awareness raising of women workers rights, including through access to Hotline for Women Workers; |
## Table 2. Summary of Key Environmental and Social Impacts and Mitigation Plan

<table>
<thead>
<tr>
<th>PROJECT ACTIVITIES AND IMPACTS</th>
<th>ENVIRONMENTAL &amp; SOCIAL IMPACTS</th>
<th>TYPE OF IMPACT</th>
<th>MEASURES</th>
<th>MONITORING RESPONSIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-CONSTRUCTION PHASE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land acquisition and involuntary resettlement</td>
<td>Social disruption</td>
<td>Negative</td>
<td>Cash compensation for asset &amp; resettlement for housing</td>
<td>PISC, PMU</td>
</tr>
<tr>
<td>Climate change resilience action</td>
<td>Decreased landslides and damage on to road infrastructure</td>
<td>Positive</td>
<td>Climate change adaptation measures incorporate into DED</td>
<td>PISC, PMU</td>
</tr>
<tr>
<td>Surveying and staking out of road corridor</td>
<td>Minor loss of vegetation during demarcation</td>
<td>Negative</td>
<td>Visual inspection</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Site clearing, digging, excavations</td>
<td>Discovery of cultural heritage &amp; historical property</td>
<td>Positive</td>
<td>Stop work order and consultation with community and authority</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td></td>
<td>Slope failure/landslide</td>
<td>Negative</td>
<td>Visual inspection</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td></td>
<td>Removal of trees and forest</td>
<td>Negative</td>
<td>Compensation and replanting Prevention on adverse impacts on bird’s nests and their habitat.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Mobilization of Contractor</td>
<td>Social disruption</td>
<td>Negative</td>
<td>Consultation with local authorities and women local representatives</td>
<td>Contractor, PMU</td>
</tr>
<tr>
<td></td>
<td>Employment opportunities for individuals at local level</td>
<td>Positive/Negative</td>
<td>Promote equal access to opportunities thorough minimum percentage of women and persons with disabilities in Bidding documents; Consultation with local authorities and women local representatives; Consultation with relevant CSOs and associations [Women Engineers, Women Business Association, ADTL, RHTO]</td>
<td>Contractor, PMU</td>
</tr>
<tr>
<td>HSE Management</td>
<td>Positive</td>
<td>Observation and consultation</td>
<td>Contractor, PMU</td>
<td></td>
</tr>
<tr>
<td>The spread of communicable diseases</td>
<td>Negative to Neutral</td>
<td>Pre-construction – awareness training - check records</td>
<td>Contractor; PMU</td>
<td></td>
</tr>
<tr>
<td><strong>CONSTRUCTION PHASE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation of construction equipment</td>
<td>Emissions and dust from plant and materials</td>
<td>Negative</td>
<td>Apply of emission filter &amp; water sprayer to reduce</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Works adjacent to water bodies/drainage systems</td>
<td>Slope failure/landslide &amp; physical changes to river bed, culverts &amp; other areas</td>
<td>Negative</td>
<td>Check design, visual observation, and consultation with communities</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td></td>
<td>Increase risk of SEA (use of water bodies for washing and playing for children and women)</td>
<td>Negative</td>
<td>Approval Code of Conduct; Community awareness raising; Agreement with local community to protect/mitigate child protection risks</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Sourcing of materials (river gravels and sands)</td>
<td>Extraction gravel and sand, altering channel and erosion; quarries or borrow pits</td>
<td>Negative</td>
<td>Visual inspection, and review of mineral extraction plan and rehabilitation to meet Government licensing requirements</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Activity</td>
<td>Impact Area</td>
<td>Impact</td>
<td>Mitigation措施</td>
<td>Responsible Person</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
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<td>-------------------</td>
</tr>
<tr>
<td>Spoil disposal or discarded macadam pavement</td>
<td>Impacts on habitats and watercourses</td>
<td>Negative</td>
<td>Visual inspection, and define disposal location agreed by local authority &amp; landowner, and waiver records kept. Prohibition of disposing or discharging materials in the protected areas.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Clearing, cut and fill activities, embankments; Stockpile and staging areas</td>
<td>Slope failure/landslide and sediment contamination of rivers and turbidity</td>
<td>Negative</td>
<td>Visual inspection, and define disposal location agreed by local authority &amp; landowner, and waiver records kept.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Run-off, discharges, generation of liquid wastes</td>
<td>Impacts on water quality</td>
<td>Negative</td>
<td>Visual inspection, issue restriction to discharge liquid waste.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>General activities - solid &amp; liquid waste arising</td>
<td>Uncontrolled unmanaged waste disposal</td>
<td>Negative</td>
<td>Visual inspection, issue restriction to discharge solid &amp; liquid waste.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Use of hazardous materials</td>
<td>Spillage, leakage, accidents</td>
<td>Negative</td>
<td>Inspection of storage &amp; review emergency response plan.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Accidental damage to existing services</td>
<td>Interference with existing infrastructure; water supply, power, telecommunications</td>
<td>Negative</td>
<td>Plan with utility providers and avoid.</td>
<td>Contractor; PCM</td>
</tr>
<tr>
<td>Activities outside road encroach habitats</td>
<td>Workers poach animals, eggs, feathers, gather fuelwood &amp; impact habitats</td>
<td>Negative</td>
<td>Inspections to camp, fuel &amp; work sites to check food supply, re-vegetation and no wild animal/parts collected.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Accidental impacts of historical/cultural sites</td>
<td>Impacts on PCR or cultural property sites</td>
<td>Negative</td>
<td>Stop work and deal with community appropriately. Pre-consultation with Centro Nacional Chega! to identify known sites (public institute on memorization of historical sites related to 1975-1999 period).</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Noisy construction plant and equipment</td>
<td>Impacts community and workers</td>
<td>Negative</td>
<td>Review work schedule &amp; provide appropriate noise equipment, and GRM register from the community and resolve.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Vehicle parking, traffic safety and access to people's land</td>
<td>Traffic disruption and safety affected</td>
<td>Negative</td>
<td>Inspection, review traffic management and consult with landowners.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>General work activities</td>
<td>Health, Safety and Environment Risks</td>
<td>Positive</td>
<td>Inspection and review of HSE Plan in CESMP.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Presence of construction workers</td>
<td>Disruption, or antagonism,</td>
<td>Negative</td>
<td>Regular communication with community local representatives;</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td></td>
<td>Communicable diseases and community health</td>
<td>Negative</td>
<td>Awareness raising campaign to local community.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td></td>
<td>Risk of Gender-Based Violence (GBV) and sexual harassment</td>
<td>Negative</td>
<td>Prevention awareness training to workers; awareness raising campaign and complaint procedure accessible local community; approval of Code of Conduct.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>The spread of communicable diseases</td>
<td>Roads act as a pathway for the spread of communicable diseases such as HIV and STIs</td>
<td>Negative to Neutral</td>
<td>Every 6 months, for 2-year, mid-term and post-evaluation. Consultations with villagers; Review health records (STIs data)</td>
<td>MPW/WB</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Site office, water use, and electricity supplies</td>
<td>Stress on existing resources and infrastructure</td>
<td>Negative to Neutral</td>
<td>Consult with villages along road and power provider</td>
<td>Contractor; PMU</td>
</tr>
</tbody>
</table>

**OPERATION PHASE**

<table>
<thead>
<tr>
<th>Operation of vehicles creating emissions</th>
<th>Emissions increase locally but surface dust reduces</th>
<th>Negative to positive</th>
<th>Visual inspection &amp; road maintenance</th>
<th>MPW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine and ongoing maintenance</td>
<td>Blocked drains; gravel repair materials</td>
<td>Positive</td>
<td>Routine maintenance records</td>
<td>MPW/WB</td>
</tr>
<tr>
<td>Drainage system maintenance</td>
<td>Alteration of natural flood cycles</td>
<td>Positive</td>
<td>Monitor wet periods and review flood occurrence</td>
<td>MPW/WB</td>
</tr>
<tr>
<td>Run-off from road</td>
<td>Loss of soils and water quality in streams &amp; river</td>
<td>Negative</td>
<td>Routine maintenance</td>
<td>MPW/WB</td>
</tr>
<tr>
<td>Climate change issues</td>
<td>Unexpected and costly failure of road &amp; Depletion.</td>
<td>Positive</td>
<td>Visual inspection; review rainfall, flood, and landslide</td>
<td>PMU</td>
</tr>
<tr>
<td>Easy access to previously difficult to reach areas</td>
<td>Economy improves, hunting and poaching increase.</td>
<td>Positive &amp; Negative</td>
<td>Monitoring and consultations</td>
<td>MPW</td>
</tr>
<tr>
<td></td>
<td>Increase risk of human trafficking and sexual exploitation</td>
<td>Negative</td>
<td>Prevention messaging to newly opened up communities; approval of Code of Conduct</td>
<td>MPW</td>
</tr>
<tr>
<td></td>
<td>Increased access to GBV services available in nearby Municipalities</td>
<td>Positive</td>
<td>Specialized NGO recruited for the project; village focal points trained and prevention measures and support services provided in line with the existing national response protocol for addressing GBV incidents.</td>
<td>Contractor; PMU</td>
</tr>
<tr>
<td>Increased traffic</td>
<td>Noise, nuisance, accidents</td>
<td>Negative</td>
<td>Monitoring and evaluation, data collection</td>
<td>MPW/WB</td>
</tr>
<tr>
<td>Any other</td>
<td>Unintended or unanticipated impacts</td>
<td>Negative/Positive</td>
<td>As above, as required</td>
<td>MPW/WB</td>
</tr>
</tbody>
</table>
# ANNEX 3: CONCERNS RAISED AND RESPONSES

Table 2. Summary of Main Concerns Raised on Public Consultation

<table>
<thead>
<tr>
<th>CONCERNS EXPRESSED/COMMENTS</th>
<th>HOW CONCERNS ARE ADDRESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally, local communities are very happy with the proposed road upgrades. They feel the project is beneficial and can support tourism and local economic growth.</td>
<td>Consultation and coordination with local communities will be continued into the implementation stages to preserve the commitment and support of the public.</td>
</tr>
<tr>
<td>Water supply is essential for the village community, as they still lack water, though they have pipelines and water tanks. Most of the water tanks are adjacent to roadsides, whereas water pipelines are often rightly located on the roadsides, thus all water supply facilities must be protected prior to the construction works.</td>
<td>Water supply facilities will be identified and inventory during pre-construction and will be replaced or transferred to other places prior to the commencement of works. The utility’s reinstatement will be discussed and agreed with the local authority and stated in the Utilities and Infrastructure Section of the Environmental &amp; Social Management Plan (ESMP).</td>
</tr>
<tr>
<td>There are sacred places, religious sites, and cemeteries close to the roads. These places must be considered when a road improvement Project will be implemented.</td>
<td>Sacred sites and cultural heritage locations will be considered during detail design. Furthermore, those will be recognized and protected in the ESMP.</td>
</tr>
<tr>
<td>There are some concerns and comments asking to build pavement/walkpaths for pedestrians as well as installation of guardrails along steep gorges. There were also expectations that the project will also improve culverts and drainage at the same time.</td>
<td>The road will be widened with sealed hard shoulders, road markings, include safety signs as part of road safety. Footpaths or wider hard shoulders will be recommended in villages, particularly near the schools.</td>
</tr>
<tr>
<td>While project affected people do not expect any major impacts, especially related to their house, land and other assets, they signaled support for the road improvement provided that any loss will be duly compensated in a fair and transparent manner. Close coordination with municipal governments, Suco communities and their representatives and leaders, particularly in understanding of project impacts and agreeing on mitigation measures has been requested.</td>
<td>Consultation and coordination with local communities will be continued into the implementation stages in order to maintain agreed commitments and public support of the public. Selected contractor(s) will commit to implementing the agreed mitigation measures identified in the Project’s ESMP and their respective CESMPs. Implementation of these plans will be monitored by PMU on behalf of Ministry of Public Work. The GRM will be strengthened to be able to receive and process grievances in a transparent and responsive manner.</td>
</tr>
<tr>
<td>Potential impacts such as dusts and improper soil disposal should be minimized through the coordination and consultations with local leaders and community representatives.</td>
<td>The ESMP outlines required mitigation measures for all impacts foreseeable at the preparation stage. However, there is understanding of the need to ensure adaptability of safeguards management to respond to emerging impacts.</td>
</tr>
<tr>
<td>Landslide is common due to soil fragility and run-off effects during heavy rains. Communities expected that as part of the project design, installation of retaining walls can be included in the engineering design particularly in road sections with steep slopes and geological instability. If slope cutting and construction are anticipated to generate landslide risks in</td>
<td>The ESMP requires the DED to incorporate risk mitigation measures in road sections which prone to landslides. During the construction phase, an erosion control plan will be implemented as per ESMP to control run-off as well as avoid slope failures.</td>
</tr>
</tbody>
</table>
properties adjacent to the road, these measures must be addressed prior to any construction.

<table>
<thead>
<tr>
<th>Few communities were concerned about the project's potential impacts on their assets and properties. Close coordination and consultations with local leaders and affected community members are mandatory to agree on mitigation measures as well as compensation packages. Such processes are expected to be conducted in a fair and transparent manner.</th>
<th>Land acquisition and subsequent asset removal are envisaged for road widening. In the event that land acquisition or resettlement are required for the project’s purposes, appropriate compensation in line with the World Bank’s OP 4.12 will be included in the Land Acquisition and Resettlement Action Plan (LARAP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are some houses and water springs to be protected since their locations are close to the main roads. Impact avoidance measures will need to be considered as part of the project’s design.</td>
<td>The ESMP outlines relevant mitigation measures for all impacts foreseeable at this stage and impact avoidance measures are to be reflected in the DED.</td>
</tr>
</tbody>
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ANNEX 4: CONCERNS RAISED AND RESPONSES

The Minister of Public Work with assistance from the PMU will establish a Grievance Redress Mechanism (GRM) for the Branch Road to address grievances about the project’s environmental and social performance and facilitate resolution of complaints by affected people. The GRM will be facilitated by the PMU and be applicable to all contractors who will be required to maintain a grievance registry or record. The PMU will designate two officers (a male and a female) to liaise with the Suco leaders and GRM committees at the municipal level.

The community will be made aware of the relevant contact numbers and contact persons in PMU and each contractor through village and notice boards at the construction sites, and local authority offices. The contractors and the PMU are required to enforce an open-door policy whereby project affected communities will be informed about relevant contacts and ensure confidentiality of the complainants at their request. The GRM will address affected people's concerns and complaints promptly, using an understandable and transparent process based on traditional methods for resolving conflicts and complaints. The GRM will provide a framework for resolving complaints at the project level as well as beyond the Project (involving relevant government offices such as Municipal and Suco Committees, DNCP1A, etc.), using the existing judicial or administrative remedies. GBV and land acquisition related grievances will be further detailed in the ESMP and RAP respectively.

Traditional methods for resolving conflicts and complaints, if needed. When dealing with specific complaints against a worker which constitutes gender-based violence, the GRM procedure shall ensure sharing of information on support service providers, confidentiality of the information and start a disciplinary procedure against the relevant worker. Traditional conflict resolution methods are not to be used for GBV. A specific Grievance Redress Mechanism (GRM) will be designed specifically for reporting GBV and SEA incidents and to respect confidentiality in coordination with local leading partners.

The GRM has been designed to receive, evaluate and facilitate the resolution of affected people’s concerns, complaints and grievances about the environmental and social performance at the level of the project. The PMU will maintain an open-door policy to accept complaints at all levels concerning the environmental performance of the project. The GRM will aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the Project.

A Project Information Booklet will include information on the GRM and shall be widely disseminated throughout the project corridor by the safeguard officers in the PMU. Grievances can be made verbally at the Construction site to the liaison officers. Grievances can be also filed in writing or by phone by any member of the PMU, construction sites and other key public offices, all of which will accept complaints.

Building on the existing GRM for the Timor-Leste Road Climate Relisience Project, alternative arrangements for redressing of grievances through a cascaded approach starting from the village/suco level committees up to the municipal government and PMU will also be retained and strengthened. This GRM route is envisaged to address not only administrative issues, such as compensation payments and wages, but also other construction-related grievances that may not be documented or reported to the contractor and/or PISC. However, this route shall not be used in cases of GBV

**GRM Steps and Procedures**

**First Level.** The Contractor and/or PMU are the first level of GRM which offers the fastest and most accessible mechanism for the resolution of grievances. One of the two safeguards officers or designated officer in the PMU shall be the key officers for grievance redress. Resolution of complaints will be done within fifteen (15) working days and will include disciplinary actions in relation to workers behaviour in violation with the Code of Conduct. The safeguards officers in PMU will provide the support and guidance in grievance redress matters. Investigation of grievances will
involve site visits and consultations with relevant parties (e.g., affected persons, contractors, traffic police, etc.). When the grievance relates to a specific worker behaviour, investigation shall be undertaken within the disciplinary procedure. Grievances will be documented and personal details (name, address, date of the complaint, etc.) will be included unless anonymity is requested. Confidentiality of the disciplinary procedure will be secured, including confidentiality in relation to gender-based violence.

A tracking number shall be assigned for each grievance, and it will be recorded including the following elements: (i) initial grievance record (including the description of the grievance), with an acknowledgement of receipt handed back to the complainant when the complaint is registered; (ii) grievance monitoring sheet, describing actions taken (launching a disciplinary procedure, investigation, corrective measures); and (iii) closure sheet, one copy of which will be handed to the complainant and the respondent once the procedure is concluded after he/she has agreed to the resolution and signed-off. The updated register of grievances and complaints which do not relate with behaviour of individual worker, will be available to the public at the PMU office, construction sites, and other key public offices along the project corridor (offices of the suco and municipalities). Should the grievance remain unresolved it will be escalated to the second level.

**Figure 3: Grievance Redress Mechanism**
Second Level. At the second level GRM specific procedure will take place dependant on the nature of the grievance. The PMU will activate the second level of GRM by referring to the unresolved issue (with written documentation) to the PMU who will pass unresolved complaints upward to the Grievance Redress Committee (GRC). The GRC shall be established by MPW before the commencement of site works. The GRC will consist of the following persons: (i) Project Director; (ii) representative of Municipality and Suco; (iii) representative of the affected person(s); (iv) representative of the local land office; and (v) representative of the National Directorate of Environment (DNCPIA) (for environmental-related grievances). As it relates to grievances caused by worker in violation of the Code of Conduct, the second level will be activated when an appeal is made related to the conclusion of the disciplinary action taken at the first level or when the complexity of the disciplinary procedure meant that the procedure could not be concluded at the first level.

A hearing will be called with the GRC, if necessary, where the affected person can present his/her concern. The process will facilitate resolution through mediation. The Grievance Redress Mechanism and procedure is depicted in Figure 9.4.

**Figure 4 - Grievance Redress Mechanism for Gender-Based Violence Cases**

The Grievance Redress Committee will meet as necessary when there are grievances that cannot be solved at the first level and within thirty (30) working days will suggest corrective measures at the field level and assign clear responsibilities for implementing its decision and a timeframe that must be adhered to. The functions of the GRC are as follows: (i) resolve problems and provide support to affected persons arising from various environmental issues and including dust, noise, utilities, power and water supply, waste and soil disposal, landslides, traffic interference and public safety as well as social issues land acquisition (temporary or permanent); asset acquisition; and eligibility for entitlements, compensation and assistance; (ii) resolve appeals against decisions on disciplinary measures against a worker or unsatisfactory disciplinary outcome from the complaint
perspective; (iii) reconfirm grievances of displaced persons, categorize and prioritize them and aim to provide solutions within a month; and (iii) report to the aggrieved parties about developments regarding their grievances and decisions of the GRC.

The PMU will responsible for processing and placing all papers before the GRC, maintaining a database of complaints, recording decisions, issuing minutes of the meetings and monitoring to see that formal orders are issued, and the decisions are carried out. The Contractor will have observer status on the committee. If unsatisfied with the decision, the existence of the GRC shall not impede the complainant’s access to the GoTL’s judicial or administrative remedies.

Third Level. In the event that a grievance cannot be resolved directly by the Contractor or PMU officers (first level) or GRC (second level), the project affected person can seek alternative redress through the Suco or Municipal Committees under the existing arrangements for redress of grievances for affected persons. The PMU or GRC will be kept informed by the district, municipal or national authority.

Monitoring reports shall include information about the GRM including: (i) the cases registered, level of jurisdiction (first, second and third levels), number of disciplinary procedures, decisions made, and the status of pending cases; and (ii) an appendix which lists cases in process and already decided upon may be prepared with details such as name, ID with unique case serial number, date of notice/registration of grievance, date of hearing, decisions, remarks, actions taken to resolve issues, and status of grievance (i.e., open, closed, pending) and if it is a repeat of a previous grievance. In relation to GBV complaints the name included in the appendix refers to the worker name and not that of the complainant or the survivor and the GRM shall look at it within a labour disciplinary measure. A specific reporting protocol will be established for the project to help maintain confidentiality of GBV survivors and ensure timely referral of survivors to adequate services.