



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

Appraisal Stage | Date Prepared/Updated: 10-Jun-2019 | Report No: ISDSA26130



**BASIC INFORMATION**

**A. Basic Project Data**

Country Timor-Leste	Project ID P155203	Project Name Timor-Leste Branch Roads Project	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 10-Jun-2019	Estimated Board Date 08-Aug-2019	Practice Area (Lead) Transport
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Ministry of Public Works	

Proposed Development Objective(s)

Improve road access, safety, and climate resilience on the Gleno–Maubisse corridor.

Components

- Component 1: Gleno–Maubisse Corridor Upgrading and Road Safety Improvement
- Component 2: Institutional Strengthening and Project Management
- Component 3: Contingent Emergency Response

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

**SUMMARY**

<b>Total Project Cost</b>	70.81
<b>Total Financing</b>	70.81
<b>of which IBRD/IDA</b>	59.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**

International Development Association (IDA)	59.00
IDA Credit	59.00

**Non-World Bank Group Financing**



Counterpart Funding	11.81
Borrower/Recipient	11.81

Environmental Assessment Category

B-Partial Assessment

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

**B. Introduction and Context**

Country Context

1. **Geography and demography.** Timor-Leste is a diverse, small island nation located on the edge of Southeast Asia. A former Portuguese colony, Timor-Leste neighbors Indonesia and Australia. Timor-Leste occupies the eastern half of the island of Timor in the Timor Sea, which connects with the Pacific Ocean to the East, Indian Ocean to the West, and South China Sea to the North via the Java Sea. It includes two additional small islands (Atuaro and Jaco) and a small coastal enclave (Oecusse) in the western half of the Timor island. Measuring 14,874 square kilometers, one quarter of the country is classified as agricultural land and just 2.5 percent classified as urban land. The population density is relatively low, with a population of approximately 1.296 million inhabitants in 2017. Most Timorese live in the western portion of the country, which includes the capital city, Dili.

2. The Timorese people descend from Austronesian, Melanesian, and proto-Malay populations, with some Western influence since the 16<sup>th</sup> century. There are 32 indigenous languages still spoken as mother-tongues in Timor-Leste today, with only 30 percent speaking the national language Tetum as a mother-tongue, and a further 55 percent speak it as a second language. As much as 98 percent of the population is reported as being Roman Catholic, with only 0.5 percent reporting a faith other than Christianity.

3. More than half of Timor-Leste’s population is under 20 years old. Estimates from the latest living standards survey show the poverty rate based on the national poverty line fell from 50.4 percent in 2007 to 41.8 percent nationwide in 2014. Poverty is a highly rural phenomenon, with 80 percent of the poor living in rural areas. The Central region has experienced the fastest fall in poverty. Despite having the lowest poverty rate, between 2007 and 2014, poverty in the Eastern region increased slightly. Poverty incidence remains highest in the Western region, and particularly its rural areas. While most of the poor are concentrated in rural areas, the single largest cluster of poor people can be found in Dili, where around 15 percent of the poor live (80,000 people). Poverty is higher in rural areas, at 47 percent (390,000 people) compared to 28 percent (100,000 people) in urban areas. Over half (53 percent) of all Timor-Leste’s poor are in the Central region, the most populace area, which includes Dili and the district of Ermera. The other 28 percent of the poor reside in the West and 19 percent in the East.



4. **Economy.** Timor-Leste's per capita gross domestic product (GDP) in 2017 was US\$2,672 (constant 2010 US\$).<sup>1</sup> From 2007 to 2016, GDP growth performance changed markedly: Average growth per year was 6.5 percent and real GDP per capita rose by more than 4 percent per year on average. At the heart of this dramatic reversal in economic trend was a change in government policy, to massively scale up public expenditure, particularly on infrastructure projects and cash transfers. This increased spending was made possible with financing from the Petroleum Fund (a sovereign wealth fund that was established in 2005), and with parliamentary approval, the Government of Timor-Leste (GoTL) was able to draw down large amounts of the resources held in the Fund. Currently, only one oil field is active and economic growth in the non-oil sector has slowed following a period of very rapid growth after independence, although it remains robust, averaging 4.5 percent per year over the past three years. In the coming years, the Timor-Leste's economy is expected to grow. Recent forecast by the International Monetary Fund (as of October 2018) shows an annualized rate of 4.2 percent growth of the country's GDP in 2018–2023.<sup>2</sup>

5. **Agriculture and tourism have been identified as priority economic sectors in both the Timor-Leste Strategic Development Plan (SDP) 2011-2030 and the VIII Constitutional Government program 2018–2023.** They are important contributors to the domestic economy, with agriculture representing 16 percent of (non-oil) gross value added (GVA) and tourism estimated to account for 20 percent of (non-oil) exports. Although employment in agriculture has declined from 78 percent shortly after independence to 56 percent in 2015, the sector remains a key source of income for most of the population – especially for the poor. Increasing agricultural productivity is vital, but it is equally crucial to link farmers to domestic and international markets. Improving access to markets by reducing travel times and costs is therefore key for the development of the sector. Tourism is an important sector for stimulating economic diversification and job creation, especially for women and youth, and is already a key source of foreign exchange. With nearly 75,000 foreign visitors in 2017, generating US\$78 million in travel services receipts, the sector still has significant potential to grow. Timor-Leste can become an attractive tourist destination, especially given its environmental and cultural assets. Nonetheless, the sector faces some challenges, one of which relates to poor domestic connectivity. Improving access to tourist sites would contribute to expand the current offerings and stimulate demand.

6. **Vulnerability to climate change and natural disasters.** The country's tropical climate experiences distinct wet and dry seasons. Cyclones affect Timor-Leste frequently and bring heavy rains, as do seasonal monsoon rains, that cause human and economic losses. Located in the "Pacific Ring of Fire", the country faces a substantial risk of earthquakes and potentially tsunamis in a few points on the southern coast, especially affecting public infrastructure. Timor-Leste's mountainous terrain is prone to intense rainfalls, flooding, and frequent landslides, which often damage or destroy public infrastructure and homes. In January 2012, a landslide in Ainaro district caused damage to 70 houses, while another landslide in Aileu district on the same day caused damage to 15 houses.<sup>3</sup> Destructive winds and droughts further endanger agricultural productivity. Though climate change is likely to result in relatively severe weather variation, extreme events and sea-level rise, Timor-Leste's vulnerability to natural disaster is not considered to be extraordinarily high. However, with 42 percent of its population living below the poverty line, its capacity to cope and respond to these risks means that extreme events have a much greater negative impact on people than in most other countries.

<sup>1</sup> World Bank, World Development Indicators.

<sup>2</sup> IMF, World Economic Outlook, October 2018.

<sup>3</sup> World Bank, Building Disaster/Climate Resilience in Timor-Leste, May 2015.



7. **Gender equality has been a fundamental principle in the country’s developmental efforts and remains key to achieving sustainable development into the future.** School enrollments have rapidly increased, with girls’ rate exceeding boys at each level of schooling. In 2010, 94 percent of primary school age girls and 92 percent of boys were enrolled in school. Significant gender inequalities remain – including high rates of violence against women and barriers to reproductive health care. Domestic violence is pervasive, maternal mortality remains high, and significant gender gaps continue in labor market and local governance participation. Early pregnancy is also major concern, with almost one quarter of women in the country having a baby by the time they are 20. Early pregnancies are often swiftly followed by marriages; 19 percent of girls are married by the time they are 18.

#### Sectoral and Institutional Context

8. **Road network.** Roads are the primary mode of transport in Timor-Leste. The country has an extensive road network totaling 6,941 km, consisting of 1,427 km of national roads; 812 km of district roads; 1,975 km of core rural roads; and, 3,567 km of non-core rural roads.<sup>4</sup> The main network corridor runs along the northern fringe of the country from the Indonesian border in the west through the capital Dili and then eastward to the second largest city, Baucau, and beyond. The road network in the west is reasonably dense, serving a strong agricultural region. In the rest of the country, the road network consists of five north-south connectors linking the northern corridor across the mountainous spine to the east-west road along the southern coastal plain. These main road corridors are important as they connect potentially promising agricultural areas and new oil industry-related developments along the southern coast to the main population and more developed areas along the northern coast.

9. Nevertheless, much of this network is still in poor condition, mainly due to unsuitable design and underinvestment in maintenance. The results of the 2015 survey indicated that 13 percent of rural roads were rated good, 30 percent were rated fair, 44 percent were rated poor, and 13 percent were rated bad.<sup>5</sup> Timor-Leste’s slope instability and frequent landslides also pose a challenge to the provision of road transport. Data from 2011 study revealed that two-wheel drive cars could only drive at reasonable speeds on 20 percent of the national road network, and more than 6 percent were in such a poor condition that it was only passable by four-wheel drive vehicles. A deteriorated road network makes travel time longer, vehicles operating costs higher, and rural communities more isolated. It also has a negative impact on livelihoods and key basic services including employment, health, and education. In many cases, however, the roads were also not properly designed and lack sufficient drainage capacity. Due to the steep terrain, ground conditions, and local climate, slope instability is a major problem. Combined with the shortage of maintenance funds, these factors resulted in a necessary focus on emergency repairs rather than systematic maintenance.

10. **Branch Roads on the Gleno–Maubisse corridor.** The Branch Roads play an important role for central Timor-Leste, linking its east to its west, while also serving transit traffic along the project road and onward connections to the Dili–Ainaro and the Gleno–Tibar corridors. The Gleno–Maubisse corridor starts at the city of Gleno, passes through the towns of Ermera, Letefoho, Hautubuilico, and Aituto and ends at the town of Maubisse. Gleno is a city 30 km to the southwest of Dili and is the capital of the municipality of Ermera. Maubisse is a historic town in the hills 70 km south of Dili, in Ainaro District. It is a popular tourist destination and a weekend visiting spot for people from the capital. Agricultural activities are evident along the corridor. Coffee

<sup>4</sup> MPWTC, Rural Roads Master Plan, Investment Strategy 2016-2020, September 2015.

<sup>5</sup> MPWTC, Rural Roads Master Plan, Investment Strategy 2016-2020, September 2015.



producers are concentrated particularly in Ermera district. The Hatubuilico town is on the route to Timor-Leste's top tourist destination, Mount Ramelau. It is anticipated that, in addition to enhancing connectivity in the project areas, the project will help develop the agricultural and tourism sector by improving road access specifically to the country's highest coffee producing areas and tourist destination. TLBRP will improve the Gleno–Letefoho and Letefoho–Hatubuilico Junction sections of the corridor, while the Hatubuilico Junction–Aituto section and the links to the towns of Ermera and Hatubuilico will be improved at a second phase of the project. The section between Aituto and Maubisse was already improved.

11. **Traffic.** Overall traffic is low in Timor-Leste, only the northern link between the Indonesian border and Dili, and from Dili to the eastern region, having non-motorcycle traffic above 1,000 vehicles per day. Notwithstanding, there has been rapid growth in the vehicle fleet with annual growth of approximately 28 percent between 2010 and 2013. Motorcycles comprise approximately three-fourths of the fleet. In the proposed project roads, traffic is low with an Annual Average Daily Traffic (AADT) of, 843 on the Gleno–Letefoho section and 418 on the Letefoho–Hatubuilico Junction section, based on the Classified Traffic Counts conducted in May 2018, with 69 percent being motorcycles.

12. **Road safety.** Timor-Leste's poor road infrastructure condition and susceptibility to climate change and natural disasters make road safety measures utmost important for the well-being of road users. In 2016, the World Health Organization methodology for determining road fatality rates was 12.7 fatalities per 100,000 population,<sup>6</sup> with 161 estimated road traffic fatalities in Timor-Leste that year.<sup>7</sup> GoTL is in the process of developing a National Road Safety Plan that will be guided by the road safety activity framework set out in the Decade of Action for Road Safety 2011–2020. With the current administrative structure, the National Directorate of Road Safety is under the Ministry of Defense and Security; however, it is anticipated that responsibilities will be shifted to a National Land Transport Authority in coordination with Directorate of Land Transport, Timor-Leste National Police and other Government stakeholders, in leading efforts to address road safety and reduce road trauma. Improving safety of road infrastructure is the responsibility of the Directorate of Roads, Bridges and Flood Control (DRBFC).

13. **Road maintenance.** Effective road maintenance is essential to reduce high exposure to climate change and natural disasters, as well as prevent high costs for rehabilitation and reconstruction. In 2016, US\$4 million was allocated to routine and periodic maintenance of national, district, and urban roads, while US\$10 million was allocated for rural roads. A similar amount was allocated in 2017. The proposed budget to the maintenance department is just over US\$3 million, against a budget request of US\$13.6 million. Although the maintenance department has increased its capacity in past years and has managed a number of maintenance contracts, it still lacks the necessary capacity and resources to maintain even only the national roads, which have recently been updated. Periodic maintenance on national roads is rarely done and routine maintenance is done using one-year output-based contracts. Most of the maintenance budget is spent on emergency works.

14. **Institutional framework.** GoTL has prepared the Strategic Development Plan (SDP) 2011–2030 to set out the development vision and long-term guide, which aims to rehabilitate all the existing roads by 2020, and provide a comprehensive road maintenance program by 2030, which seems very ambitious. The SDP includes a transport policy statement with a view to providing the legal framework for transport infrastructure and

<sup>6</sup> This road fatality rate is comparable to that in Indonesia (12.2) and Papua New Guinea (14.2); however, it is still higher than that in Fiji (9.6), New Zealand (7.8) and Australia (5.6).

<sup>7</sup> World Health Organization, Global Status Report on Road Safety 2018, Geneva.



services, as well as to defining the organization and management of the transport system in Timor-Leste.

15. To attain this vision and the connectivity objectives of the SDP, a Transport Sector Master Plan (TSMP) launched in March 2018 sets out to develop an ‘integrated transport framework of systems, services and facilities required to facilitate and underpin inclusive economic and social development’, which has targets for road upgrading that are more realistic. A key policy objective within the roads subsector is ‘to develop the core road network with major urban roads, roads linking municipalities to each other, upgraded municipal roads linking municipal centers with sub-municipalities, and rural roads that provide access to villages and the more remote areas.’ Improvements in all levels of road network – national, municipal, urban and rural road infrastructure – are to be constructed and maintained with appropriate standards and in good condition.

16. In terms of climate change policy, the Ministry of Commerce, Industry and Environment has been given a mandate to coordinate climate change related issues. Timor-Leste signed Intended Nationally Determined Contribution in 2017, demonstrating the country’s overall commitment towards the climate change agenda. However, both the SDP and TSMP are somewhat silent on how the transport sector will address climate resilience and disaster risk reduction.

17. In June 2018, the Eighth Constitutional Government was sworn in, and the former Ministry of Public Works, Transport and Communications was separated into (i) the Ministry of Public Works (MPW); and, (ii) the Ministry of Transport and Communications (MTC). MPW is responsible for the design, execution, coordination and evaluation of the policy defined and approved by the Council of Ministers in the areas of public works, urban planning, housing, water supply, distribution and management, sanitation and electricity; while MTC is responsible in the areas of civil, maritime and air transport, auxiliary services, communications, postal services, telegraph, telephone and other telecommunications and meteorological and geophysical services. The DRBFC under MPW is responsible for planning, developing, and maintaining national road network, including rural roads.<sup>8</sup>

### C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

Improve road access, safety, and climate resilience on the Gleno–Maubisse corridor.

Key Results

#### PDO Level Indicators

18. Progress will be measured against the following proposed PDO-level results indicators:
- (a) Passenger car travel time on the project roads (Minutes);
  - (b) Number of villages with road safety measures (Number); and,
  - (c) Roads upgraded with climate resilience measures (Kilometer).

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<sup>8</sup> DRBFC has six-line departments: (i) Roads Department; (ii) Projects Department; (iii) Analysis and Evaluation Department; (iv) Construction Department; (v) Maintenance and Conservation Department; and, (vi) Highways Construction and Management Department. These departments are supported by (i) Cooperation and Training Department; and (ii) Admin and Finance Support Unit.



### Intermediate Indicators

19. The following intermediate indicators will be monitored during project implementation:
- (a) Roads rehabilitated (Kilometers);<sup>9</sup>
  - (b) Number of people with enhanced access to transportation services (Number);
  - (c) Design and construction stages technical audits on the project road including road safety and climate resilient aspects (Yes/No);
  - (d) National and district roads with updated road condition and traffic survey (Kilometers);
  - (e) National roads under multi-year maintenance contracts supported by the project (Kilometers);
  - (f) Adoption of CERC manual (Yes/No);
  - (g) Grievances responded and/or resolved within the stipulated service standards (Percentage); and,
  - (h) Percentage of women working on maintenance activities of multi-year maintenance contracts supported by the project (Percentage).

### D. Project Description

20. **Component 1: Gleno–Maubisse Corridor Upgrading and Road Safety Improvements (US\$65.8 million of which expected IDA financing is US\$54.0 million).** 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:

- (a) **Sub-component 1.1: Gleno–Letefoho and Letefoho–Hatubuilico Junction roads sections upgrading (US\$63.8 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 and will provide for maintenance of the road sections for two years after the defect liability period. 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, including installation of bioengineering measures. Where roads pass through urban areas, attention will be given to safety improvements, orientation signage, bus stops, and sidewalks. GoTL proposed as a first phase of a program to improve the Gleno–Maubisse corridor, the two project roads sections (totaling 44.3 km) based on the prioritization results of the feasibility study and the readiness for implementation. GoTL will define the second phase of the upgrading of the Gleno–Maubisse corridor<sup>10</sup> during implementation and envisages that will be financed under an additional financing to TLBRP or as a new standalone project. This sub-component will finance the upgrading works and related supervision consultancy, the updating of the Gleno–Letefoho engineering design and safeguards documents, and maintenance for two years of the project roads, as well an allocated amount of US\$4.0 million, to be used for the upgrading of the Gleno–Letefoho section if needed according to the revised engineering design.

<sup>9</sup> This is one of the World Bank's Corporate Results Indicators (CRI) used in the road sector and is divided into (i) Rural; and, (ii) Non-rural Roads.

<sup>10</sup> 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.





- (b) **Sub-component 1.2: Road Safety Improvements on National Roads (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, subject to a prioritization exercise. The project will support GoTL in identifying the locations of the road safety interventions and will confirm the scope of sub-component 1.2 during implementation with support of a road safety advisor hired under the project.

21. **Component 2: Institutional Strengthening and Project Management (US\$5.0 million of which expected IDA financing is US\$5.0 million).** 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.

- (a) **Sub-component 2.1: Technical Assistance (US\$2.0 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 (about 2,240 km) to update the Road Asset Management System<sup>11</sup> network data for supporting monitoring, planning and programming of road works; (ii) piloting of multi-year performance-based maintenance contracts on national roads<sup>12</sup> 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;<sup>13</sup> (iv) geotechnical capacity building program within MPW through the hiring of a geotechnical advisor to DRBFC; and, (v) training activities for MPW and related entities staff.<sup>14</sup>
- (b) **Sub-Component 2.2: Design of Future Projects (US\$1.0 million).** This sub-component will finance feasibility/technical studies and designs required for the preparation of potential future investments in the road sector (about 40 km). It will finance the preparation of the second phase of the program to improve the Gleno–Maubisse Corridor, including: (i) the 5.2 km Hatubuilico Junction–Hatubuilico town section; and, (ii) the 4.8 km Humboe junction–Ermera town section, and other road sections, totaling 30 km, to be selected during project implementation by GoTL and the World Bank.
- (c) **Sub-component 2.3: Project Support Contingency (US\$2.0 million).** This sub-subcomponent will finance operational costs associated with implementation of the Project, funding PMU staff and

<sup>11</sup> ILO, ADB and JICA are supporting the development of the Road Asset Management System.

<sup>12</sup> GoTL will implement the maintenance contracts on Lots 1 and 3 of the ongoing RCRP (around 40 km) and other national roads to be selected by MPW during project implementation.

<sup>13</sup> The tasks would include: training of MPW staff, assessment of national and district roads for road safety risks, preparation of road safety improvement works program, and road safety audits of project designs. GoTL expects the assignment to last for 8 months spread over two years.

<sup>14</sup> 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. GoTL expect the assignment to last for 12 months spread over two years.



operating costs, if needed, gender-based violence (GBV) and sexual exploitation and abuse (SEA) prevention measures, and goods needed by the Project. It also includes yearly audits of the project accounts that MPW will submit to the World Bank.

22. **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 World Bank to reallocate project funds to support emergency response and reconstruction. The project will prepare a CERC Project Operations Manual within six months of project effectiveness.

23. **Consumers, producers and traders along the Gleno to Maubisse corridor will benefit from reduction in transit costs and times for goods and passengers and from increase in agricultural and tourism activities.** The main beneficiaries of the project will be the 188,838 people (male 95,738, female: 93,100), accounting for 16 percent of the total population, living in the two districts (Ainaro and Ermera) directly served by the project road.<sup>15</sup> These people will benefit from improved road access to markets and services along the project road and onward connections to the Dili–Ainaro and the Gleno–Tibar corridors, with better road conditions resulting in reduced travel times and lower public transport costs. In some cases, the public transport options will also be likely to be improved, with buses and microlets complementing the trucks, pick-up or four-wheel drive vehicles on some routes, thereby increasing the safety and comfort of passengers using these services.

24. **Agricultural activities.** The proposed project road runs along the areas that produce various crops, including rice, maize, cassava, sweet potato, vegetables, beans, coffee, coconut, and fruits. Among these, coffee is Timor-Leste’s second largest export commodity (after petroleum products) and the unique Timorese Arabica Robusta hybrid variety is well-regarded as an organic, single-source product, earning between US\$10 million and US\$20 million annually. While coffee producers are located throughout the country, they are concentrated particularly in Ermera district. It is anticipated that the proposed project will generate traffic associated with agricultural productivity in response to access improvements. Furthermore, better road access provided to farms will help reduce cost on road transportation, thus creating a higher value for the farm products and as a result bring a better income to the farmers and rural households. Road improvements will also improve access to markets and social services for women who play an essential role of providing for their families through their contributions to agriculture, fisheries, and raising livestock.<sup>16</sup>

25. **Tourism activities.** Hatubuilico town is on the route to Timor-Leste’s top tourist destination, Mount Ramelau. The Ministry of Tourism recently reported 30,000 visitors (both domestic and international) to the mountain within the last 6 months alone. The Asia Foundation tourism survey found in 2017 that 90 percent of leisure travelers to the Ainaro district visited to hike Mount Ramelau and they would have passed through Hatubuilico town. To reach Hatubuilico, the road from Dili to Maubisse and continuing to Aituto is already vastly improved, and Hatubuilico has sufficient accommodation, guides and tourist facilities – the main obstacle holding back this town is the poor road conditions of the roads from Hatubuilico to Maubisse and from Hatubuilico to Gleno. GoTL anticipates that the project will help develop the tourism sector by improving road access to one of the country’s most important tourist destination. In addition, there are plans to develop eco-tourism in the areas along the project road.

<sup>15</sup> These are based on the 2015 census.

<sup>16</sup> Timor-Leste: Gender Country Assessment. Asian Development Bank. 2014.



26. **Women as beneficiaries.** The project will improve access to markets and social services, which will have a positive impact on women who rely mostly on public transport for their mobility. Improvements in women's mobility will also contribute to their empowerment as family duties are a major constraint to women's participation in the labor force. These family duties may include subsistence agriculture activities where women are producing foods for the family, which is not counted as being in the labor force. Due to the improved roads, public transport services will become both safer and more frequent. Safety is a major issue to pedestrians, especially women and children who tend to walk mostly as their main mode of transport. The project will improve safety to pedestrians through the provision of speed reduction measures, sidewalks and signalized crossings near schools, markets and health facilities. In addition, the project will incorporate bus shelters on project design. The participation of women in all community consultations will be ensured and promoted. Resettlement activities will deal with both men and women including equal compensation for both.

## E. Implementation

### Institutional and Implementation Arrangements

27. The executing agency will be the Council for Administration of the Infrastructure Fund (CAFI),<sup>17</sup> while the implementing agency will be MPW through DRBFC. The project will be implemented by the multi-donor Project Management Unit (PMU) which is responsible for managing the Asian Development Bank (ADB), Japan International Cooperation Agency (JICA), and World Bank-funded projects, including the ongoing World Bank-funded RCRP on the Dili–Ainaro road. The PMU manages externally supported major road upgrading projects, being a single PMU in charge of project monitoring and reporting as well as the safeguards assessments and monitoring system, thereby reducing the project management costs. The PMU is under the responsibility of MPW, and is headed by a project manager, staffed with local and international consultants.<sup>18</sup> In January 2019, GoTL started a process of restructuring the staffing of the PMU to promote more effective capacity building of MPW staff, include more MPW staff to support the PMU activities, and strengthen the management of the PMU's portfolio of projects, with an intention to integrate more the PMU into the MPW structure. The restructuring of the PMU will take place during the first semester of 2019, with support of ADB, World Bank and other donors, when the PMU will have very little capacity. The PMU staff will be strengthened under the project by the hiring of a Project Coordinator who will deal only with the World Bank projects. The National Procurement Commission (NPC)<sup>19</sup> handles all public procurement above a value of US\$1 million and will procure the civil works under the project using international competitive bidding in accordance with World Bank regulations. The project implementation period will be four years with an expected closing date of December 31, 2024.

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<sup>17</sup> CAFI is the government's infrastructure fund, which is administratively and technically supported by the government's Major Projects Secretariat.

<sup>18</sup> In 2018, the PMU had 22 established positions. Among these, 16 were employed (of which eight were international) and six were about to be or planned to be employed. However, in 2019, the PMU is undergoing a restructuring of its staff, thus, starting on January 2019, the contracts of the international consultants were not renewed and the contracts of six national staff were extended temporarily for six months.

<sup>19</sup> NPC's directive is to provide procurement services to the line ministries and other public entities in major infrastructure projects and achieve proper transparency for the State procurement process.



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

Section 2 (Hatubuilico–Letefoho): The length of this section is approximately 18.5 km and has a 3-4 meter carriage way (4-5 meter existing ROWs) and the overall traffic volume is low. Topographical feature on which the road traverses includes mountainous terrain and are in poor condition along narrow widths. The section passes through in whole or in part the protected area southeastern of Tatamailau Mountain based on Government Decree 05/2016, overlapping with a Key Biodiversity Area for Birds as indicated in the Integrated Biodiversity Assessment Tool (IBAT). However, the boundaries for Tatamailau (Ramelau) Mountain’s protected areas have not been defined. Aerial mapping and ground-truthing show that the protected forest areas have already been cleared and accessible due to the presence of an existing road and settlements at both ends of the section (i.e., Suco Katrai Karaic, Ducurai and Haupu). There are no endangered plants and animal species in the project area. Potential impacts associated with land taking and removal of assets are expected to be minor in this section, except in Suco Haupu and Ducurai where permanent and semi-permanent structures and coffee trees will be affected. There are public facilities, including schools, churches and a market that may be temporarily affected due to project activities.

Section 3 (Letefoho–Gleno): The length of this section is approximately 25.8 km, with an existing carriageway 5-7 meters (5–7.5 meters of ROW). The traffic slightly increased in this section. Several parts of this section have been widened through an ongoing Government of Timor-Leste’s road emergency project, which started in 2018 and is expected to conclude by end of 2019. An initial tracer assessment to establish baseline of impacts has been carried out and will be revisited following the completion of the work, prior to the construction activities of Section 3 by the Branch Road project. The total length at the initial tracer assessment is approximately 8.35 km. However, this figure may increase since the project is still ongoing. Letefoho and Gleno are known for their coffee production. This section passes five Sucos (villages), namely Haupu, Guololo, Eraulo, Estado, and Humboe. This section will pass schools, markets, as well as sacred sites and hence, pre-construction and construction related impacts are anticipated.

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

Fajar Argo Djati, Social Specialist  
 Agustina Parwitosari, Environmental Specialist

**SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	Relevant project components and sub-components that have been assessed to have safeguards implications include: (i) upgrading of Gleno–



Letefoho and Letefoho–Hatubuilico Junction roads sections (Sub-component 1.1—approximately US\$63.8 million); (ii) installation of road safety improvement measures (Sub-component 1.2—approximately US\$2 million); and, (iii) technical assistance (Sub-component 2.2), which includes feasibility/technical studies and designs required for the preparation of potential future investments in the road sector.

Under Sub-component 1.1, road upgrading will likely entail a range of interventions, including pavement reconstruction, road widening, drainage improvements, and slope stabilization along a total length of approximately 44.3 km Gleno–Letefoho and Letefoho–Hatubuilico Junction road (also known as Sections 2 and 3). Road widening is expected up to 9 meters, with the following breakdown: 2-meter road shoulders, 1-meter drainage and 6-meter carriage-way.

Potential direct environmental impacts are mostly associated with civil works, such as dust, noise, decreasing water quality and pollution from construction wastes. These are expected to be short-lived, occurring along the alignment of the selected road segments and mostly confined within the ROW. However, other potential impacts likely occur outside the ROWs, and these are associated with slope cutting for widening and spoil material disposal as well as operations of ancillary facilities such as quarries, asphalt mixing plants, batching plants, and workers' camps. The construction or operation of these facilities will require their own site-specific ESMP (CESMP) in addition to the overarching requirements in the ESMP, which will be prepared by the contractors and further reviewed and approved by PMU and the World Bank.

The proposed project activities in the existing road are not envisaged to cause long-term change in land and water use and will not involve massive land clearing, permanent flooding, or replacement of natural vegetation. Since the existing environmental baseline indicates that the protected areas in Section 2 have been degraded, road upgrading is not



expected to have any significant impact on the ecological function of the protected areas. In summary, based on the aerial mapping and the assessment, the road rehabilitation in Section 2 will not involve significant conversion or degradation of either critical or natural habitat. There is also prohibition of disposing or discharging materials in the protected areas. These requirements will be stated in the Construction bidding document. Therefore, the construction activities at this section will be managed accordingly and should not have any direct adverse impacts on the protected area. Guidelines for construction within the protected area section were also defined in the ESMP.

Land acquisition and asset removal, particularly productive agricultural crops likely have livelihoods impacts. While potential impacts on livelihoods are expected to be overall moderate and short-term since the road upgrading works follow the existing road carriageway and affected households are expected to relocate in-situ, several households may likely experience more severe impacts than the rest due to a combination of losses, which include agricultural land, productive crops (particularly coffee), as well as impacts on residential and/or commercial structures. There are approximately 4 and 13 households who will likely suffer from such combination of losses in Sections 2 and 3 respectively. These households, in addition to single-headed households (i.e., widows, widowers), people with disabilities and the elderly, have been categorized as vulnerable. These vulnerable households will be entitled to additional livelihoods assistance and land replacement, subject to further impact validation following the DED finalization. These agreed measures have been reflected in the Land Acquisition and Resettlement Action Plan (LARAP), which will be subject to the World Bank's clearance.

Other risks that have been considered include labor influx and community health and safety, including child labor and Gender Based Violence (GBV) risks and Occupational, Health and Safety (OHS) risks.



An Environmental and Social Impact Assessment (ESIA) has been prepared through community consultative processes to properly identify both environmental and social risks above, as well as contextual risks for both Section 2 and 3. In addition, the PMU has also undertaken an initial impact assessment for Section 1 (Aituto to Hatubuilico), which is currently outside the scope of the project and will be revisited once financing has been determined for its inclusion under a subsequent phase of the project. On the basis of the ESIA, an ESMP and Land Acquisition and Resettlement Action Plan (LARAP), which includes an initial tracer study for Section 3 have been prepared. The LARAP prepared by GoTL outlines compensation approaches, calculation of replacement costs as per the entitlement matrix, consultation requirements, institutional arrangement and FGRM has been prepared. The ESMP has also incorporated labor influx management procedures, including child labor and GBV prevention procedures. A safeguards incident response procedure has also been prepared by GoTL as part of the ESMP.

The key stakeholders are the road users and the residents along the roads to be improved. Project information has been disclosed in Tetum to potentially affected communities using village information boards and Suco chiefs prior to initial engagements. Following such disclosure, a series of initial engagements/consultations and field assessments were held at the Suco/village level between September 12–26, 2018 involving affected communities and district government officers. The field assessments were conducted to ensure that all potential environmental and social risks and impacts have been identified and addressed. Feedback from the communities was incorporated in the design process and disclosures were made to ensure that the designs meet the needs and expectations of the communities. These activities have been documented in the ESIA Section 11 and Appendix 5.

Sub-component 1.2 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. Potential environmental and social impacts are expected to be positive after the installation/improvement. Standard Operating Procedures (SOPs) are being prepared as safeguard instruments for minor civil works in addressing road safety issues.

Under sub-component 2.2, the project provides financing for feasibility/technical studies and designs required for the preparation of potential future investments in the road sector (approximately 40 km). These road sections to be designed will be selected during project implementation and as of the date of the project preparation, road links to Hatubuilico town and Ermera town (total 10 km) are being considered. No environmental and social assessments have been conducted for the two road links since final site selection will be confirmed during implementation. Additional 30 km of road design has not been determined. GoTL confirmed that the design of future projects will be limited to road rehabilitation/improvements, not new roads.

Potential environmental and social risks and impacts from the above proposed road sections will be assessed through separate ESIA's and accordingly the associated risk mitigation instruments (ESMPs and Land Acquisition and Resettlement Action Plan/LARAPs) as part of the TA support to GoTL. 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), a Term of Reference (TOR) for these environmental and social assessments has been developed and included as part of the project's overall ESMP.

Under Component 3, Contingent Emergency Response is reserved for US\$0 million. 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 1, 2018. A Project Operation Manual (POM) will include procedures for activation of this component including safeguards approval processes. In line with the Bank Guidance on Contingent Emergency Response Component (CERC) dated October 16, 2017 and OP/BP 8.00 Rapid Response to Crises and Emergencies, an Appendix in the ESMP (Appendix 14) has been incorporated to include a section on management of environmental and social safeguards under Component 3.

The public consultation for the project at national level is scheduled on May 23, 2019 in Dili following the in-country safeguards documents disclosure in MOF website on May 2, 2019. Input from public consultation will be incorporated in the final safeguards documents (ESIA, ESMP and RAP) and disclosed in-country and in World Bank's InfoShop.

Whole sections of Branch Roads are owned and operated by GoTL. There is no plan to privatize the road.

According to the preliminary information in the concept stage, biological values areas maps (source: EMP Dili – Ainaro Road Project, 2011) showed that some sections of the Branch Roads (i.e. Aituto to Hatubuilico and Hatubuilico to Letefoho) would pass through protected area of Tatamailau Mountain and important bird areas. The task team has utilized the IBAT software as the tool to preliminary screen the area and found that the area was not IUCN protected and there was no uniquely/highly threatened ecosystem, however 0.225% proposed project footprint was considered as a Key Biodiversity Area for Bird (Important Bird Areas) based on Tata Mailau area of 20,000 hectares.

Further in the project design, it was confirmed that the existing roads in Section 2 would traverse the

Performance Standards for Private Sector Activities OP/BP 4.03 No

Natural Habitats OP/BP 4.04 Yes



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.

Based on aerial mapping and ground-truthing during the preparation of the ESIA, the surrounding environmental conditions of Section 2 (Hatubuilico to Letefoho) in the proposed Branch Roads are found to be highly degraded forests and open areas due to reported past burning/clearing for military operations in 1990s. With very little natural tree cover remaining, there are no endangered plants and animal species, including the birds listed in IUCN red-list category. No such birds were reported to exist in the project area by the community.

Nevertheless, OP 4.04 is triggered as a precautionary measure to establish procedures to monitor potential indirect and/or induced impacts in the secondary forest areas and to ensure that the projects operates thoughtfully in these protected areas. Required risk mitigation measures to address indirect and induced impacts in the protected areas have been incorporated in the ESMP. Furthermore, the PMU environmental specialists will be responsible to carry out periodic monitoring and management of indirect risks in the project area.

The ESMP requires to ensure that revegetation and replanting to reduce land erosions use native species.

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



		<p>account the prevention of adverse impacts on birds' nests and their habitats. A bird specialist will be mobilized to provide technical support for further screening prior to construction and impact monitoring during construction on the basis of which required mitigation measures will be established during project implementation. Guidelines for construction within the protected area section are given in the ESMP.</p>
Forests OP/BP 4.36	No	<p>The project will not have impacts on the health and quality of forests since the surrounding areas of the proposed road are highly degraded forests and some are open areas. The project will not affect the rights and welfare of people and their level of dependence upon or interaction with forests; and the project is not designed to address the changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned.</p>
Pest Management OP 4.09	No	<p>The program intervention will not procure or use any pesticides.</p>
Physical Cultural Resources OP/BP 4.11	Yes	<p>There is no list of existing historical and archaeological sites in Timor-Leste which is officially disclosed. However, there are several historical, religious and cultural sites and objects along the road corridors which have been identified in the ESIA. These includes sacred trees, cultural objects and traditional houses of cultural, religious and social values to the communities along the road corridors. Efforts have been made to avoid potential impacts on these Physical Cultural Resources (PCRs) through engineering measures. These include road re-alignment and installation of protective measures, such as retaining walls and fences. In the event that unidentified PCRs were discovered during pre-construction and construction activities, a "chance finds" procedure has been developed and is included in the project's ESMP. The project will require contractors to integrate such a procedure in their Contractors' ESMP.</p>
Indigenous Peoples OP/BP 4.10	Yes	<p>While the ESIA and the World Bank's due diligence assessment confirms that no community groups who meet OP 4.10 criteria for Indigenous Peoples were identified in both Sections 2 and 3, this policy is</p>



triggered as a precautionary measure to address Sub-Component 2.2 on Design of Future Projects.

For the road upgrading works under Component 1, an Indigenous Peoples Plan (IPP) is not expected as there are no community groups with Indigenous Peoples characteristics were observed in both Sections 2 and 3 where such activities are currently being planned. Potential social risks and impacts, including impacts on livelihoods are being addressed under the provisions of OP 4.01 and 4.12.

A screening process to identify the presence of community groups who meet the World Bank's criteria for the identification of Indigenous Peoples has been conducted as part of the ESIA consultations. The assessment indicates that while Suco communities who reside along the road corridors still preserve some forms of allegiance to their kinships and observance to traditional systems and institutions, these communities represent the dominant group in the region. No ethnic minorities nor traditionally distinct groups or with collective attachment to geographically distinct habitats or ancestral territories were observed in the entire road corridor. Land and its associated properties are mostly privately-owned, although there are some cultural sites (i.e. Uma Lulik) that are collectively owned by Suco communities or kinfolks. The majority of the communities in Section 2 primarily consists of settled rural agriculturalists, with coffee being the main commodities. Whereas in Section 3, a mixed group of rural and peri-urban populations were observed and coffee farming, small-enterprises (i.e. kiosks, food stalls) and trades jobs represent the main livelihoods sources. Tetum, which is a lingua franca in Timor-Leste, is the main language spoken in the region.

Under sub-component 2.2 on the Design of Future Projects, financing is being offered for feasibility and technical design studies for selected roads. These cover (i) the 5.2 km Hatubuilico Junction–Hatubuilico town section; (ii) the 4.8 km Humboe junction–Ermera town section; and, (iii) additional 30 km road sections to be identified during project



implementation. For this purpose, an Indigenous Peoples Planning Framework (IPPF) has been developed to form the overarching Terms of Reference (TOR) to guide the project’s technical assistance (TA) activities (Annex 9 of the ESMP).

The policy is triggered. Widening of road sections, which also involves slope cutting and spoil material disposal, requires land taking, removal of permanent and semi-permanent structures and trees. The project impacts include loss of different types of agriculture land, residential land, government land, residential structure, commercial structure, ancillary structures, and trees/crops due to land acquisition and land clearance. Previous road experiences in Timor-Leste also show that improper spoil material disposal may potentially affect private properties, including coffee plantations. In addition, slope cutting in a geographically unstable area, as experienced in the ongoing Timor-Leste Road Climate Resilience Project (RCRP), may increase the likelihood of landslides, and hence have impacts on private land, particularly coffee plantations. The scale of the potential impacts associated with land acquisition for each section is summarized in the following:

Involuntary Resettlement OP/BP 4.12      Yes

Section 2 Hatubuilico–Letefoho: land acquisition and potential impacts on residential properties, including associated assets such as kiosks are mostly anticipated in Suco Haupu, which is relatively peri-urban compared to other Sucos along the entire corridor. Within the proposed new alignment, 12 permanent housing units and one semi-permanent residential structure will be either partially or fully affected. Since such structural demolition will compromise the existing structures, these affected households may likely be relocated. In addition, 11 semi-permanent kiosks and 1 permanent kiosk will likely be affected and similarly need to be relocated. In-situ relocation is currently being sought by GoTL to minimize potential impacts on livelihoods, which will be subject to a further assessment once the detailed engineering design (DED) has been finalized.

Section 3 Letefoho–Gleno: impacts on agricultural land, particularly coffee plantation, tend to be



greater in this section compared to section 2. Based on an initial DED, there is a total estimate of 19,263 coffee trees owned by 71 PAPs which need to be removed for the purpose of road widening and slope stabilization. With regards to impacts on residential and commercial structures, 8 households need to be relocated and 10 commercial structures, which include permanent and semi-permanent kiosks and workshops will likely be affected. Similar with the above, in-situ relocation as well as engineering measures to minimize potential impacts/footprints are currently being sought.

At the preparation stage of the Branch Road Project, GoTL commissioned an “Emergency Roads” project in select segments of the Section 3. This construction has been undertaken by the DRBFC of the MoPW to address road damages and blockages due to landslides. Construction activities cover road widening and basic repairs of the existing road infrastructure such as installation of road-side drainage and retaining walls in some critical/landslide prone segments. A total length of 8.35 km (STA 37+450 to STA 40+900 and STA 46+100 to STA 51+000) has been completed at the time of the assessment. Existing impacts have been documented through a tracer assessment, which forms the project’s overall ESIA. The tracer indicates that there are 49 land owners in Suco Humboe, Goulolo and Haupu whose land parcels, including coffee plantations were impacted to a varying degree. No impacts on residential and commercial structures were reported. Some of these coffee tree owners reported to have received compensation from the contractors at varying amounts. Hence, the tracer serves as a baseline to integrate corrective measures in the project’s LARAP to ensure that these impacts are addressed in conjunction with OP 4.12.

In both sections, there are potential impacts on public facilities, such as water tanks, water pipes, electricity poles, school and church facilities. As part of the safeguards requirements, GoTL will be required to ensure that replacements or temporary facilities and protective measures have been installed prior to any construction works to minimize



activity disruptions and ensure the safety of the public.

While potential impacts on livelihoods are expected to be between low to medium since the road upgrading works follow the existing road carriageway and affected households are expected to relocate in-situ, several households may likely experience more severe impacts than the rest due to a combination of losses, which include agricultural land, productive crops (particularly coffee), as well as impacts on residential and/or commercial structures.

There are approximately 4 and 13 households who likely suffer from such combination of losses in Section 2 and 3 respectively. These households, in addition to single-headed households (i.e. widows, widowers), people with disabilities and the elderly, have been categorized as vulnerable. These vulnerable households will be entitled to additional livelihoods assistance and land replacement, subject to further impact validation following the DED finalization.

As agreed with GoTL, negotiated settlements will be pursued for the purpose of land acquisition and resettlement processes, including compensation for lost assets. The project will not resort to forced evictions through any means. Relocation in-situ or localized relocation will be sought and land owners will be assisted to identify land replacements or land improvements if their original land plots are considered not viable or safe to be re-developed. Such assistance will also apply to coffee farmers whose livelihoods may be significantly impacted as a result of project activities.

Under Sub-Component 2.2 on Design of Future Project, which is expected to finance selected roads which GoTL indicated interest in receiving the World Bank's support for feasibility and/or technical studies and designs, a Resettlement Planning Framework has been prepared to form the overarching Terms of Reference (TOR) to guide the project's technical assistance (TA) activities. A Land



		Acquisition and Resettlement Planning Framework (LARPF) has been prepared as part of the TOR to guide land acquisition and resettlement planning for future feasibility/design studies as well as unidentified land acquisition needs for ancillary facilities.
Safety of Dams OP/BP 4.37	No	The project will not finance dams, nor the rehabilitation or any activities related to dam operation and safety. It will not depend on the operation of an existing dam.
Projects on International Waterways OP/BP 7.50	No	The project will not affect the efficient utilization and protection of international waterways.
Projects in Disputed Areas OP/BP 7.60	No	The project will not finance any activities within territorially disputed areas.

**KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT**

**A. Summary of Key Safeguard Issues**

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

The primary project investment supports road rehabilitation works along the Aituto–Hatubuilico–Letefoho–Gleno corridor. The current scope of the project is the development of the 44.3 km Hatubuilico–Letefoho–Gleno section (Sections 2 and 3) or hereafter Phase 1, where many of the economic activities take place. Further assessments of Section 1 (Aituto–Hatubuilico) potential future investment will be provided once a decision on financing have been made. The road development program has good potential for complementary tourism and agricultural development. Hence, this ISDS provides an assessment of environmental and social risk aspects in Phase 1.

The project is limited to relatively medium-scale road rehabilitation works, including additional maintenance and bridge construction works. The potential environmental and social impacts are assessed to be moderate if the following measures are properly implemented: (i) temporary use of land and its rehabilitation post-construction; (ii) best practices applied during construction activities; (iii) meaningful consultations and engagement with affected communities, (iv) due compensation at replacement costs for lost assets and temporary livelihoods support, (v) strict enforcement of environmental clauses and conditions included in project bid documents, the contract and technical specifications; (vi) adherence to the Environmental and Social Management Plan (ESMP) contained in the Environmental and Social Impact Assessment (ESIA) and Construction Environmental Management Plan (CEMP) prepared by the Contractor; and, (vii) effective supervision of the work by the Project Management Unit (PMU).

The potential direct environmental impacts associated with the proposed road rehabilitation project are generally generated from the site clearing, digging, excavations in the pre-construction phase, and the cut and fill activities, operation of construction equipment, sourcing of materials (river gravels and sands) and spoil disposal in the construction phase. Potential environmental impacts will also be generated in the operation phase, which will be from the operation of vehicles creating emissions, routine maintenance, and increased traffic. The adverse environmental impacts associated with the civil works are expected to be mostly limited to construction related impacts only. The





impacts are expected to be temporary, occurring mostly along the alignment of the selected road sections and mostly confined to the right of way. Some impacts are expected to occur at offsite locations such as quarry sites and spoiled material disposal sites. These impacts can be avoided or minimized through site selection, careful designs and good construction practices, or otherwise effectively mitigated during construction by use of appropriate mitigation measures. Since not all potential locations for these associated facilities have been identified/confirmed at the time of SEIS/ESIA development process, the siting and management of these facilities will be subject to review and clearance by the PMU and the World Bank.

Direct impacts associated with land acquisition, resettlements and removal of productive assets are expected to be moderate, although there are approximately 4 and 13 households who likely suffer from such combination of losses in Section 2 and 3 respectively. These households, in addition to single-headed households (i.e., widows, widowers), people with disabilities and the elderly, have been categorized as vulnerable. These vulnerable households will be entitled to additional livelihoods assistance and land replacement, subject to further impact validation following the finalization of Detailed Engineering Design.

Measures to minimize such impacts, particularly resettlements, have been considered in the DED, which include re-routing and engineering design (i.e., underground culverts). Potentially impacted households whose houses and assets will need to be demolished will be compensated at replacement costs as established in the LARAP and are expected to be able to rebuild in-situ and hence no physical displacement is expected. Households whose productive activities will be disrupted due to construction activities (i.e., kiosk and workshop owners) will be provided with temporary livelihoods support in the form of cash assistance until their economic activities recover. These measures are further detailed in the project's LARAP.

Specific to Section 3, parts of this section have been widened through support from the ongoing GoTL's emergency road rehabilitation, which involved cut and fills in several areas. An initial tracer assessment has been conducted, noting that the extent and magnitude of environmental and social impacts remain to be observed since the construction works are expected to continue (to be confirmed on the completion date) and hence, needs to be updated prior to the commencement of construction activities. Under this on-going emergency project, impacts associated with slope cutting, improper soil disposal, lack of proper soil compacting and stabilization as well as construction-related impacts such as absence of dust suppression, Protective Personal Equipment (PPE) as well as road-safety measures were reported. The World Bank has agreed with the Ministry of Public Works (MPW) to integrate remedial measures into the project's DED to address these ongoing impacts, in addition to compensation of lost assets (i.e. land and coffee trees) prior to the start of construction activities.

Construction-related risks associated with labor-influx and community health safety, including Gender Based Violence (GBV) and child labor have been assessed as part of the project's ESIA. A road construction project with an average length of 25 km will typically require 250 temporary road construction workers to be mobilized at a time by a contractor. Most of these workers are usually locally outsourced from the affected Sucos and employed as semi-skilled and non-skilled workers. In all five Sucos affected, communities express their aspirations to be involved in road construction works and there appears an adequate local workforce to be mobilized. Road engineers and skilled workers are usually foreign workers, with a typically a smaller ratio to the overall workforce (one fifth). Incoming foreign would typically reside in an enclosed camp near the construction site and language barriers can be anticipated. However, some of these workers may have been rotated from other road projects in Timor Leste and some basic understanding of the language and culture can be expected. While the overall number of foreign workers appears to be relatively small, the presence of construction workers concentrated in specific sites over an extended period (can be up to 30 months) may present potential environmental and social implications. As part of the project's ESMP, a



Labor Influx Management Procedure, GBV prevention procedure, as well as a safeguards incident response procedure have been established by GoTL.

An initial GBV assessment indicates that significant gender inequalities exist in the country – including high rates of violence against women, barriers to reproductive health care, high rates of maternal mortality, and significant gender gaps in labor market and local governance participation. Both the gender report and the ESIA prepared during the design of the project have identified the main GBV risk for the project.

The project will mitigate and respond to GBV risks, including sexual exploitation and abuse (SEA) risks, based on previous activities developed in similar country contexts and lessons learned from prior projects and international experience. GBV activities, ranging from prevention to providing support services to survivors of any GBV incidents, will be based on the approach recommended by the "Good Practice Note on Addressing Gender-Based Violence in Investment Project Financing involving Major Civil Works" issued by the World Bank in September 2018. Terms of Reference (TOR) for monitoring and supervising services will cover training for contractor's employees and monitoring of the contractors' activities on labor issues and the prevention of GBV and SEA. This will include analyzing and describing all occupational health and safety concerns brought about by activities during all the phases of the project.

The mitigation measures will also cover potential risks for sexual abuse and violence against women and children during all phases of the project, and designing and implementing training programs on corrective and remedial measures to be implemented and monitored under the ESMP.

Any GBV/SEA-related complaints will be channeled through a specific redress mechanism in coordination with the local authorities in charge of the national GBV strategy and with support from a specialized NGO recruited to supervise the mitigation of GBV/SEA related aspects. A dedicated GBV GRM will ensure that survivor information remains confidential and services are provided with survivor's consent. Once the procurement activities commence on the project, the Bank will assess the technical proposals submitted so that the technical elaboration of the labor and prevention of sexual exploitation and abuse becomes a competitive parameter of the consultant technical evaluation. In addition, the Bank will review the wording of the Works Contracts with particular attention to 'enforceable mitigation measures' on the above based on lessons.

Labor influx for construction works can lead to a variety of adverse social and environmental risks and impacts and such risks have been considered under the ESIA and mitigation measures have been proposed under the project's ESMP (Annex 10). Such risks may have been present already or might occur regardless of the labor influx, they are likely to be exacerbated by it. The actual type and degree of impact varies significantly depending on the actual project implementation and contractors' performance. This includes the impacts from workers' camps. It may be difficult to separate some impacts from non-project related factors, specifically if the project area experiences broader social, economic and cultural change during the project period, which may be difficult to assess or predict as part of the ESIA. Hence, measures to strengthen supervision by PMU and Project Implementation Supervision Consultants (PISCs) and community FGRM will be critical components as part of the proposed safeguards measures.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area: The project development objective is to improve road access, safety, and climate resilience on the Gleno–Maubisse corridor. Due to the steep terrain, ground conditions, and local climate, slope instability is a major problem. Indirect



impacts are increased landslide risks, community use of spoil materials for soil compacting which pose safety hazards and road safety risks due to increased speeding behavior.

To address these above, the project 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, including installation of bioengineering measures. It is anticipated that the design and construction of the proposed project will enable the upgrade road more climate resilience and will therefore reduce long term impact from rain and the resulting flood damage to the roads. Furthermore, the project will also finance installation of road safety measures as well as awareness raising on road safety under sub-component 1.2.

The improved roadway is expected to provide easier access to Mt. Ramelau and increase tourism activities, however based on assessment, it is not estimated to be a very significant change in increasing the number of tourists. It will be the responsibility of the Department of Protected Areas and National Parks, Directorate of Forestry in Ministry of Agriculture and Fisheries to ensure that forests on Ramelau Mountain are protected, irrespective of the condition of the roadway.

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

The alternatives were considered for specific locations in the road section to help avoid or minimize adverse environmental and social impacts. These measures include shortcut route at Humboe School zone, shortcut route at Goulolo Suco, Letefoho Church Service Road with installed sidewalks. Further details are described in the ESIA Section 9.1. In addition, an alternative alignment is currently being considered in the DED for Section 2 to minimize land acquisition and resettlement impacts in Suco Haupu.

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

The Directorate of Roads, Bridges and Flood Control (DRBFC) under MPW has amassed a wide range of experience managing various investments in rehabilitation and improving the road networks being financed by Multilateral Development Banks (MDB) and other financiers including the World Bank, ADB, JICA and DFAT. This includes preparation of environmental and social assessments and mitigation measures required by these financiers as well as ensuring conformity to the National Directorate of Pollution Control and Environmental Impact (DNCPIA) requirements in recent years; largely as DNCPIA is still developing as the regulatory agency under the Environmental License Law. MPW and DRBFC's current approach to manage environmental issues is on a project level basis and varies with the requirements of the funding agency. Consultations with the various agencies indicated that there has not been a permanent structure or division to handle environmental concerns in project planning and implementation for the ongoing projects. The in-house capacity in MPW to check the adequacy of the Project EMPs is limited, or that they are being implemented effectively by a Contractor. In the long term it is recommended that a new unit responsible for environmental management be set up to improve capacity in MPW.

A dedicated PMU staffed with qualified national and international specialists has been established as an extended arm of the ministry. However, recent changes in staffing have resulted in the discontinuation of international staff without replacement. This has consequently impacted the current capacities in the PMU to provide oversight as well as address environmental and social issues emerging from the current road construction activities. At present there are only one national environmental specialist and one national social specialist employed by PMU with direct responsibility for addressing environmental and social issues on all donor-funded (WB, ADB, JICA, etc.) projects.



While GoTL has a wide range of experience in road projects, the overall institutional experience with regards to land acquisition appears to be limited. Previous projects funded by MDBs and other international financiers mostly involved widening of carriageway within the ROW and therefore, past practices have relied on compensation of lost assets and temporary livelihood support. However, since this project will be implemented in roads where the existing ROWs are on-average narrow in widths (4-5 meters in Section 2, and 5-7.5 meters in Section 3), acquisition of private land is anticipated. A new law on land expropriation for public utilities (Law No. 8/2017) was recently passed in 2017. However, its technical guidelines are yet to be developed. In the interim, a negotiated settlement process along with a resettlement entitlement matrix in the LARAP will be followed, and no eviction will be allowed under the project.

Contractors' track-records to date on similar road works have been considered to be moderately satisfactory. Also noted is that the GoTL administrative procedure (e.g., issuing of environmental license or mineral license) can be time consuming and cause delay in civil work if not properly managed in a timely manner. Environmental aspects that require a greater focus from contractors relate to road safety (e.g., lack of signage), occupational health and safety (e.g., improper PPE) and basecamp housekeeping. Contractor training workshops will be conducted periodically to share experience in the implementation of the works and the monitoring report on the implementation of the ESMP, to share lessons learned in the implementation and to decide on remedial actions, if unexpected environmental and social impacts occur. In the medium to long term as the environmental responsibilities of MPW develop, dedicated staff officers will be trained and developed with the aim of taking over the role currently undertaken by consultants and specialists.

Measures to address the above capacity constraints have been considered under the current project's proposal. The World Bank requested MPW to review the existing PMU's structure and offers financing under the proposed project to build in-house capacity of the PMU and MPW, as well as external capacity of key agencies in the management of environmental and social aspects of the project. Some of the key gaps that need to be addressed cover recruitment of an international environmental and social manager, additional social/resettlement and environment officers to assist the existing national specialists, a gender/social development specialist. In addition, under a TA component of the TLBRP, there will be financing made available for training and capacity building activities for internal PMU staff as well as relevant stakeholders, including contractors as well as supervision consultants to carry out monitoring and implement required environmental and social management measures to address the World Bank's safeguards policies.

The PMU will be financed by donors and the Bank will provide input to the TOR of the positions to be hired. The TOR for the PMU Environmental and Social Safeguards team will include provisions of advisory services and training to relevant authorities responsible for the management of protected areas, particularly the Department of Protected Areas and National Parks of the Ministry of Agriculture and Fisheries.

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

The key stakeholders are the road users and the residents along the roads to be improved. Project information has been disclosed in Tetum to potentially affected communities using village information boards and Suco chiefs prior to initial engagements. Following such disclosure, a series of initial engagements/consultations and field assessments were held at the Suco/village level between September 12– 26, 2018 involving affected communities and district government officers. The field assessments were conducted to ensure that all potential environmental and social risks and impacts have been identified and addressed. Feedback from the communities was incorporated in the design process and disclosures were made to ensure that the designs meet the needs and expectations of the communities. These activities have been documented in the ESIA Section 11 and Appendix 5.



A national public consultation for the project was held on May 23, 2019 in Dili following the in-country safeguards documents disclosure at Ministry of Finance (MOF) website on May 2, 2019. This consultation was attended by 104 participants representing central and municipal government agencies, community representatives, suco governments, academia and NGOs/CSOs. Input from public consultation has been incorporated in the final safeguards documents (ESIA and ESMP) and disclosed in-country and in World Bank’s ImageBank.

**B. Disclosure Requirements**

**Environmental Assessment/Audit/Management Plan/Other**

Date of receipt by the Bank  11-Mar-2019	Date of submission for disclosure  25-Mar-2019	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
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**"In country" Disclosure**

Timor-Leste  
02-May-2019

Comments

Draft ESIA and ESMP were disclosed in GoTL MOF website on May 2, 2019.

**Resettlement Action Plan/Framework/Policy Process**

Date of receipt by the Bank  11-Mar-2019	Date of submission for disclosure  25-Mar-2019
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**"In country" Disclosure**

Timor-Leste  
02-May-2019

Comments

DRAFT RAP was disclosed in GoTL MOF website on May 2, 2019.

**Indigenous Peoples Development Plan/Framework**

Date of receipt by the Bank  11-Mar-2019	Date of submission for disclosure  25-Mar-2019
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**"In country" Disclosure**



Timor-Leste  
02-May-2019

Comments

DRAFT IPPF was disclosed in GoTL MOF website on May 2, 2019.

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

**OP/BP/GP 4.01 - Environment Assessment**

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

Yes

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

Yes

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

Yes

**OP/BP 4.04 - Natural Habitats**

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

No

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

NA

**OP/BP 4.11 - Physical Cultural Resources**

Does the EA include adequate measures related to cultural property?

Yes

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

Yes

**OP/BP 4.10 - Indigenous Peoples**

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?

Yes

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

Yes

If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?

Yes



**OP/BP 4.12 - Involuntary Resettlement**

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

Yes

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

Yes

**The World Bank Policy on Disclosure of Information**

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

Yes

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

Yes

**All Safeguard Policies**

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

Yes

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

Yes

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

Yes

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

Yes

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