



Technical Assistance Report

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Transaction Technical Assistance (TRTA)
January 2018

Democratic Republic of Timor-Leste: Promoting Sustainable Land Transport Infrastructure

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Asian Development Bank

CURRENCY EQUIVALENT

2 January 2018

Currency unit – US dollar (\$)

ABBREVIATIONS

ADB	–	Asian Development Bank
DBRFC	–	Directorate of Roads, Bridges, and Flood Control
DNSR	–	National Directorate of Road Safety
DNTT	–	National Directorate of Land Transport
EU	–	European Union
JICA	–	Japan International Cooperation Agency
km	–	kilometer
MPWTC	–	Ministry of Public Works, Transport and Communication
PMU	–	project management unit
RNUSP	–	Road Network Upgrading Sector Project

NOTE

In this report, "\$" refers to US dollars.

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I. THE PROPOSED PROJECT

1. The project will upgrade 58 kilometers (km) of national roads from Baucau to Viqueque, with considerations for better resilience to climate change and social inclusive design. The project supports continuing efforts of the Asian Development Bank (ADB) and other development partners to upgrade and sustain the country's national road network. The project will be supported by attached technical assistance that will (i) develop a comprehensive road maintenance strategy and plan for institutions responsible for routine and periodic maintenance of the national road network; and (ii) draft legislation to establish a national land transport authority (NLTA).

II. THE TECHNICAL ASSISTANCE

A. Justification

2. Timor-Leste has an extensive road network estimated at 8,000 km long, half of which is undeveloped rural tracks. About 1,400 km of national roads connect the capital, Dili and 12 municipalities, while another 900 km of district roads link major population centers to the national roads. A road survey conducted in 2015 found that 34.6% of national roads were in good condition, 25.9% in fair condition, and the remaining 39.5% in poor or very poor condition. A deteriorated road network makes journeys longer, vehicles costlier to operate, and rural communities more isolated. It also diminishes income from agriculture and other productive sectors, which can depress social conditions. Poor transport links exacerbate the constraints on economic growth of small and isolated markets in Timor-Leste.

3. Key institutions directly involved in regulating and managing the roads subsector are the Ministry of Public Works, Transport and Communications (MPWTC) under which (i) the National Directorate of Land Transport (DNLT) is responsible for land transport regulation, and providing driver licensing and vehicle registration and inspection services, traffic management standards and operations, public transport permitting and terminal management, control of vehicle overloading, and subsector planning; and (ii) the Directorate of Roads, Bridges and Flood Control (DRBFC) is responsible for road and bridge planning, maintenance, construction and improvements, and protecting road and bridge infrastructure from flooding. In addition, the National Directorate of Road Safety was established under the Ministry of Interior in early 2016 to be responsible for planning, coordinating, and implementing national road safety policy, and applying road safety laws.

4. **Road maintenance.** The DRBFC established its maintenance unit in 2015 with 17 full-time staff supported by an ongoing 3-year capacity development program for road maintenance by the Japan International Cooperation Agency (JICA). Institutional setup and responsibilities for road network operation and maintenance (O&M) are still evolving and weak. The DRBFC has no presence and workforce to manage O&M activities at the regional level. Although responsibilities for rural roads have been decentralized to regional municipalities, capacity at the municipal levels does not exist, and it is not clear to what extent municipalities have taken full ownership in terms of planning, budgeting, and execution. Therefore, the DRBFC continues to respond to any emergency and urgent maintenance needs.

5. The DRBFC scopes out and plans road projects and presents them in budget submissions that involves the Council for the Administration of the Infrastructure Fund for projects over \$1 million. With considerable lengths of new and rehabilitated roads being developed, the road maintenance capacity and systems of the DRBFC need to be rapidly

developed and advanced. Against its maintenance budget requests of \$25 million, the DRBFC has received two cycles of road maintenance budget so far, first in 2015 for \$4.0 million and then in 2016 for \$3.8 million. The DRBFC is unable to utilize allocations in a timely manner as its institutional setup remains unclear and weak, and procurement process to outsource to private domestic contractors are lengthy. The DRBFC outsources emergency works on a direct contracting basis and primarily relies on external assistance to develop its O&M needs. In addition to JICA's maintenance support program, the Government of Australia has engaged the International Labour Organization for rehabilitation and maintenance of some 1,600 km of rural roads through the Roads for Development program, which engages domestic contractors for initial road improvement and rehabilitation works, and subcontracts basic routine maintenance operations through community maintenance groups.

6. **Road safety.** The World Health Organization estimated the number of road fatalities in Timor-Leste at 16.6 per 100,000 population (for a total of 188 fatalities) in 2013. The World Health Organization methodology factors in road crash casualty reporting limitations to predict realistic casualty rates and allow comparison of rates between countries. In 2013, Timor-Leste was ranked 90th out of 180 countries in the number of fatalities per 100,000 population, and 19th out of the 46 countries with a gross national income per capita ranging from \$2,000 to \$6,000. The economic consequences of road crashes are estimated at between 1-3 percent of GNI, or between \$24 million to \$72 million for Timor-Leste. Without proper and pro-active management, road crash and fatality rates could increase as rapid economic growth leads to more vehicles on the roads and increasing length of better roads leads to higher speeds.

7. **Land transport management.** Private sector operators provide the country's land transport services, with the government's role limited to licensing and setting basic vehicle and road safety requirements. However, enforcement of regulations is poor. Minibuses and taxis provide passenger service in the urban areas. Minibuses and light and medium-sized trucks are licensed to carry both passengers and freight in the rural regions, but trucks are generally used where road conditions are poor. A small number of heavy trucks transport containers and large equipment loads, but the narrow roads and difficult terrain severely limit their use. Accessible and affordable public transport is essential for those without access to other means of transport, although it is perceived to fall below reasonable needs and expectations. There is a lack of public transport terminals, defined routes, consistency on fares and freight charges, and reliable scheduled services. Long-distance and local services are not integrated, there is no reliable ticketing system, and vehicles providing public transport are old, and offer a low level of comfort and cleanliness.

B. Outputs and Activities

8. **Output 1: Comprehensive road maintenance strategy and plan.** Support will be provided to the DRBFC maintenance unit to develop a comprehensive national road maintenance strategy and plan that will focus on (i) carrying out organizational reform to implement a 20-year road maintenance strategy; (ii) defining the levels of service expected from the national road network; (iii) formulating an asset management plan linked to an appropriate asset management system; and (iv) developing an operational manual focusing on planning, budgeting, procurement, supervision, and monitoring and evaluation for the maintenance unit. This output will complement road maintenance initiatives by JICA and the Roads for Development program financed by the Government of Australia (para. 5). It will prepare a programmatic approach for road maintenance in coordination with other development partners. An initial concept proposal for the programmatic approach has been shared with the government and development partners, and broad support has been received.

9. **Output 2: Draft legislation to establish a national land transport authority.** Support to update national land transport legislation and regulations will be provided so that an autonomous and financially sustainable NLTA can be established. The NLTA will be responsible for the implementation and enforcement of land transport regulations and national plans related to vehicle registrations, driver licensing, road safety, and vehicle weight limits. Establishment of a successful NLTA will involve preparatory work prior to legislation enactment, followed by the implementation of new policies, rules, procedures, and systems after its formal creation. The TA will provide the initial guidance and support needed for the NLTA to be launched and become operationally effective.

C. Cost and Financing

10. The technical assistance (TA) is estimated to cost \$1 million, which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF 6). The key expenditure items are listed in Appendix 1.

11. The government will provide counterpart support in the form of counterpart staff, and other in-kind contributions. The government was informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

12. MOF will be the executing agency for the TA. ADB will support the government in selecting and jointly supervising and evaluating consultants for both outputs. The implementing agency for output 1 of the TA will be the DRBFC maintenance unit, and the implementing agency for output 2 of the TA will be the DNTT.

Table 1: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	1 March 2018 – 31 December 2020		
Executing agency	MoPF-DPMU		
Implementing agencies	Output 1: DRBFC maintenance unit Output 2: DNTT		
Consultants	To be selected and engaged by ADB		
	QCBS 90:10	17 person-months	\$0.670 million
	ICS	12 person-months	\$0.230 million
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		
Asset turnover or disposal arrangement upon TA completion	Fixed assets such as the asset management system and the driver licensing and vehicle registration system will be turned over to the DRBFC maintenance unit and DNTT upon TA completion.		

ADB = Asian Development Bank; DNTT = Direção Nacional Transporte Terrestres (National Directorate of Land Transport); DRBFC = Directorate of Roads, Bridges and Flood Control; ICS = individual consultant selection; MoPF-DPMU = Ministry of Planning and Finance, Development Partnership Management Unit; MPWTC = Ministry of Public Works, Transport and Communications; QCBS = quality- and cost-based selection; TA = technical assistance.
Source: ADB.

13. **Consulting services.** The TA will require two consulting assignments. The first assignment—to develop the comprehensive road maintenance strategy and plan—will require a consulting firm with, at a minimum, the following international experts: a team leader/road asset management specialist (12 person-months), road maintenance contracting specialist (3 person-months), and information technology specialist (2 person-months). The consulting firm will be selected by ADB using quality- and cost-based selection (90:10), and will use an output-based, lump-sum contract with provision of fixed out-of-pocket expenditures. The second assignment—to draft legislation to establish a NLTA—will require an individual land transport institutions specialist (12 international person-months). The specialist will be selected by ADB using individual consultant selection, and will use an input-based contract with liquidation of advance. Selection of consultants will commence in March 2018, with mobilization of consultants targeted by September 2018. Inputs are indicative and may be realigned to the TA's requirements. The consultants will be engaged by ADB in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time).

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Asian Development Bank^a	
1. Consultants (Firm)	
a. Remuneration and per diem	
i. International consultants	550.0
b. Out-of-pocket expenditures	
i. International and local travel	25.0
ii. Goods	50.0
iii. Surveys	20.0
iv. Training, seminars, and conferences	10.0
v. Reports and communications	6.0
vi. Printed external publications	9.0
2. Consultant (Individual)	
a. Remuneration and per diem	200.0
b. Out-of-pocket expenditures	
i. International and local travel	15.0
ii. Training, seminars, and conferences	5.0
iii. Reports and communications	5.0
iv. Printed external publications	5.0
3. Contingencies	100.0
Total	1,000.0

Note: The technical assistance (TA) is estimated to cost \$1,000,000, of which contributions from the Asian Development Bank are presented in the table above. The government will provide counterpart support in the form of counterpart staff, and other in-kind contributions. The value of government contribution is estimated to account for 10% of the total TA cost.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF 6).

Source: Asian Development Bank estimates

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=51115-001-TARreport>

1. Terms of Reference for Consultants