



Technical Assistance Report

Project Number: 51108-001
Knowledge and Support Technical Assistance (KSTA)
September 2017

Democratic Socialist Republic of Sri Lanka: Railway Master Plan

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 30 August 2017)

Currency unit	–	Sri Lanka rupee/s (SLRe/SLRs)
SLRe1.00	=	\$0.0065
\$1.00	=	SLRs152.79

ABBREVIATIONS

ADB	–	Asian Development Bank
km	–	kilometer
MOTCA	–	Ministry of Transport and Civil Aviation
SLR	–	Sri Lanka Railways
TA	–	technical assistance

NOTE

In this report, “\$” refers to US dollars.

Vice-President	W. Zhang (Operations 1)
Director General	H. Kim, South Asia Department (SARD)
Director	H. Yamaguchi, Transport and Communications Division, SARD
Team leader	M. Roesner, Principal Transport Specialist, SARD
Team members	J. Georget, Transport Specialist, SARD
	A. Nanayakkara, Senior Project Officer (Road and Transport), SARD
	T. Mora, Project Analyst, SARD
	M. Tamayo, Operations Assistant, SARD
	S. Wenceslao, Operations Assistant, SARD
	K. Yangzom, Senior Environment Specialist, SARD
	S. Zhao, Social Development Specialist, SARD

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

CONTENTS

	Page
KNOWLEDGE AND SUPPORT TECHNICAL ASSISTANCE AT A GLANCE	
I. INTRODUCTION	1
II. ISSUES	1
III. THE TECHNICAL ASSISTANCE	3
A. Impact and Outcome	3
B. Outputs, Methods, and Activities	3
C. Cost and Financing	3
D. Implementation Arrangements	3
IV. THE PRESIDENT'S DECISION	4
APPENDIXES	
1. Design and Monitoring Framework	5
2. Cost Estimates and Financing Plan	6
3. List of Linked Documents	7

KNOWLEDGE AND SUPPORT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 51108-001	
Project Name	Railway Master Plan	Department /Division	SARD/SATC
Nature of Activity	Policy Advice	Executing Agency	Ministry of Transport and Civil Aviation
Modality	Regular		
Country	Sri Lanka		
2. Sector		ADB Financing (\$ million)	
✓ Transport	Transport policies and institutional development		1.50
		Total	1.50
3. Strategic Agenda		Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development	No gender elements (NGE)	✓
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	Yes	Nation-wide	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG9, SDG11		
6. Risk Categorization		Low	
7. Safeguard Categorization		Safeguard Policy Statement does not apply	
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		1.50	
Knowledge and Support technical assistance: Technical Assistance Special Fund		1.50	
Cofinancing		0.00	
None		0.00	
Counterpart		0.00	
None		0.00	
Total		1.50	

I. INTRODUCTION

1. The technical assistance (TA) will support the preparation of the master plan for the development of Sri Lanka's railway sector, 2020–2040 through policy and advisory work to be provided in Colombo. The Government of Sri Lanka asked the Asian Development Bank (ADB) for assistance in preparing the master plan on 14 February 2017. ADB approved the TA concept paper on 4 April 2017. In July 2017, an ADB fact-finding mission held discussions with the Ministry of Transport and Civil Aviation (MOTCA), the Department of Sri Lanka Railways, and the Ministry of National Policies and Economic Development. The mission reached an understanding with the government on the TA project's impact, outcome, scope, implementation arrangements, and terms of reference.¹

II. ISSUES

2. **Country context.** Sri Lanka has been successful in promoting inclusive and sustainable growth. Gross domestic product growth averaged 6% per year over the past decade. The incidence of poverty has declined, and the country has achieved most of the Millennium Development Goals. With Sri Lanka on the path to becoming an upper middle-income country, the main challenges to consolidate and advance this status are to (i) promote rapid, inclusive, and sustainable growth to reduce poverty and inequality; (ii) shift from a development model driven by debt-financed public spending to greater reliance on private investment, foreign direct investment, and exports; (iii) develop export capacity for future growth as the limited size of the domestic market (and demand) is a constraint; and (iv) diversify production and increase productivity across sectors to expand exports, participate in global value chains, and create productive jobs. Infrastructure development, especially in the Western Province and along the South-Western and North-Eastern development corridors, is essential to tackle these challenges.

3. **Transport sector.** Transport in Sri Lanka is mainly on the road network, which is centered on the capital and commercial hub, Colombo. Road transport accounts for about 93% of land transport in Sri Lanka. The country has 12,000 kilometers (km) of national highways and 152 km of expressways. The state-run Sri Lanka Transport Board and private companies provide bus services, the principal mode of public transport. The Sri Lanka Transport Board serves both urban and rural routes, which are often unprofitable. The railway network consists of a heavy-rail intercity network connecting the main cities of all nine provinces in the country with Colombo, and commuter rail services in Colombo and the Western Province. Sri Lanka has four deep-sea ports including Colombo Port, a major transshipment port in South Asia. It also has two international airports, one in Colombo and the other in Hambantota in the south.

4. **Railway subsector.** The Sri Lanka Railway Department under MOTCA, which is branded Sri Lanka Railways (SLR), is the owner and primary operator. It began in 1858, and at its peak in the first half of the 20th century shouldered more than 80% of total freight transport and more than 35% of the passenger market. Successive governments focused mainly on running the rail network at the existing service level with limited investments in modernization, expansion of the capacity and network. The widespread expansion of the road network, gradual advancement of road-based motorized transportation, policy neglect of the railway system, and bureaucratic and noncommercial nature of the management system contributed to the stagnation. This weakened SLR's performance and eroded its market share. SLR now handles less than 1% of freight and only about 5% of passengers.

¹ The TA first appeared in the business opportunities section of ADB's website on 21 March 2017.

5. The railway network covers 1,508 km with 1,676 millimeter broad gauge. SLR operates about 396 trains, including 67 long-distance and 16 intercity trains. Almost 90% of the railway network of the country is single track, with 126 km of double tracks, 14 km with three tracks, and 3 km with four tracks. All multiple lines are in the Western Province. The railway network is centered in Colombo and the Western Province, which has a population of 5.8 million (29% of the country) and produces about 43% of the national gross domestic product. It has the highest per capita income at \$2,922 (2012). The suburban network in the Western Province totals about 230 km and carries more than 80% of SLR's passengers. The railway network includes a link to Colombo Port, the country's main seaport.

6. **Government strategy.** The government's strategy for public transport and the railway system, as outlined in the Public Investment Program, 2017–2020, is to meet the current and future passenger and goods transport demand by ensuring quality, safety, and affordability with the widest possible modal mix and technological innovations to provide for mobility requirements.² By 2020, the program intends to (i) double the share of railway passenger transport to 10% from 5% in 2015, (ii) increase the share of railway freight transport to 5% from 1%, and (iii) increase the share of public transport passenger movement to 65% from the present level of 58% in 2015. The government intends to achieve these targets by improving the railway system's institutions and management, harmonizing land use planning with infrastructure development, and enhancing multimodal integration. The railway system would have a competitive advantage in three strategic market segments: (i) suburban passenger service (in Colombo and Kandy, in particular); (ii) long distance express service, where the railway could be faster and more comfortable than road transportation and more economical than air transportation; and (iii) redevelopment of freight transportation, which could generate significant socioeconomic benefits, while bringing in revenues to improve the overall institutional economics.

7. **ADB's strategy.** ADB is supporting the government's inclusive and sustainable growth strategy to consolidate and advance its upper middle-income country status by (i) strengthening the drivers of growth to promote diversification of economic activities and increase productivity; and (ii) improving the quality of growth to reduce poverty and inequality in priority areas, such as upgrading and expanding infrastructure in key sectors (e.g., transport, energy, and urban development). The TA is in line with the government's priority investment areas for projects and programs identified in the forthcoming country partnership strategy for Sri Lanka. These include upgrading and expanding infrastructure by supporting strategic investments and policy reforms in key sectors such as transport, energy, and urban development.

8. The TA will prepare a strategy for the development of the railway transport subsector and the integration of railways with other modes of transport. Institutional reforms to improve efficiency within the subsector will be studied, and recommendations for improvements provided. This TA will therefore complement ongoing support by a project preparatory TA for a feasibility study and and a TA-loan for detailed design of improvements in the suburban railway network in Colombo.^{3,4} The TA will help develop a pipeline with priorities for strategic interventions in the railway subsector for infrastructure development and capacity building. The TA will pave the way for a coordinated approach into subsector development by ADB and development partners. This will supplement prior and ongoing investments in the road subsector in rural roads, national roads, and expressways, as well as investments in the maritime subsector, i.e., the Colombo Port project.

² Government of Sri Lanka, Ministry of National Policies and Economic Affairs. 2017. *Public Investment Program, 2017–2020*. Colombo.

³ ADB. 2015. *Project Preparatory Technical Assistance Report: Colombo Suburban Railway Project*. Manila.

⁴ ADB. 2016. *Report and Recommendation of the President to the Board of Directors: Proposed Technical Assistance Loan Democratic Socialist Republic of Sri Lanka for the Transport Project Preparatory Facility*. Manila.

The TA is timely as ADB is also supporting the preparation of the National Port Master Plan for Sri Lanka and an update of the road master plan.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

9. The TA is aligned with the following impact: mobility through a safe and affordable integrated public land transport system with wide multimodal mix and technological innovation provided (footnote 2). The TA will have the following outcome: strategy for the development of the railway sector established.⁵

B. Output, Methods, and Activities

10. **Output: Railway master plan prepared.** The TA will support the preparation of a railway master plan (2020–2040) through a study to (i) assess the expected future railway demand based on the targeted market share, (ii) forecast the expected number of passengers traveling by rail, and (iii) suggest the means to achieve the targeted role of the railway in the transport sector. The TA will assess the characteristics of existing railway operations, as well as of existing and planned infrastructure and other assets such as rolling stock and equipment. It will prepare the overall railway development framework. The TA will also study the institutional setup of the railway subsector in Sri Lanka and prepare an institutional development plan. The TA will also prioritize investments in key elements such as infrastructure, rolling stock, and equipment. It will identify potential future projects for public and private sector funding, including projects for possible ADB financing. The master plan will be made available to the public on the ADB and MOTCA websites.

C. Cost and Financing

11. The TA is estimated to cost \$1.8 million, of which \$1.5 million will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF 6). The key expenditure items are listed in Appendix 2. The government will provide counterpart support in the form of staff, office accommodation, existing reports and studies, and other in-kind contributions.

D. Implementation Arrangements

12. ADB will administer the TA. The Transport and Communications Division of the South Asia Department will select, supervise, and evaluate consultants.

Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	November 2017–June 2020		
Executing agency	Ministry of Transport and Civil Aviation		
Consultants	To be selected and engaged by ADB		
	Quality- and cost-based selection	78 person-months	\$1.494 million
Advance contracting	Advance contracting is proposed for consulting services under the TA.		
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		

⁵ The design and monitoring framework is in Appendix 1.

Aspects	Arrangements
Asset turnover upon TA completion	All equipment procured under the consulting contract will be turned over to the executing agency upon TA completion.

TA = technical assistance.

Source: Asian Development Bank estimates.

13. **Project coordination and oversight body.** The government will establish an interministerial steering committee to monitor the preparation of the railway master plan. It will comprise secretaries of ministries involved in transport development and land-use issues. Further a project implementation coordination committee chaired by the Secretary of MOTCA and including senior officials from the ministry and the general manager, the additional general managers, and other senior officers of MOTCA and SLR will be established. Both committees will meet at least monthly.

14. **Consulting services.** A firm with experts in transport planning, transport policy and institutions, transport economics, railway design and operations, traffic engineering and modeling, and multimodal transport will provide consulting services over a 20-month period. ADB will engage the consultants in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time) using the quality- and cost-based selection method with a quality–cost ratio of 90:10.⁶

15. All office support equipment for the TA will be procured under the consulting contract according to ADB's Procurement Guidelines (2015, as amended from time to time) and will be transferred to the government upon TA completion. Disbursements under the TA will be made in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

16. The consultants will submit (i) an inception report within 2 months of starting their services; (ii) an interim report within 11 months of starting their services, including the findings of a first stakeholder consultation workshop to be scheduled within the first 6 months of the assignment; (iii) the draft final report after 18 months of services; and (iv) the final report on TA completion, incorporating comments by the government and ADB, to be completed 4 weeks after receipt of the comments. Two stakeholder consultation workshops will be held.

IV. THE PRESIDENT'S DECISION

17. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$1,500,000 on a grant basis to the Government of Sri Lanka for the Railway Master Plan, and hereby reports this action to the Board.

⁶ Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 3).

DESIGN AND MONITORING FRAMEWORK

Impact the Project Is Aligned with			
Mobility through a safe and affordable integrated public land transport system with wide multimodal mix and technological innovation provided. (Public Investment Program, 2017–2020) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Strategy for the development of the railway sector established	By 2020 a. Railway master plan endorsed by the Government of Sri Lanka (2016 Baseline: not applicable) b. Project pipeline with priorities for strategic interventions for railway infrastructure development and capacity building identified (2016 Baseline: not applicable)	a-b. Ministry of Transport and Civil Aviation	Insufficient funds for timely project implementation
Outputs Railway master plan prepared	By 2019 Railway master plan completed (2016 Baseline: not applicable)	Railway master plan	No sufficiently qualified consulting firms participate Not all required input data available
Key Activities with Milestones			
Railway master plan prepared			
<ol style="list-style-type: none"> 1. Consultant mobilization (January 2018) 2. Completion of inception report (March 2018) 3. Data collection, surveys, assessment of existing situation (September 2018) 4. Interim report and stakeholder workshop (December 2018) 5. Finalization of railway development plan and institutional development plan (April 2019) 6. Draft final report and stakeholder workshop (June 2019) 			
Inputs			
ADB: \$1,500,000 (grant)			
Note: The government will provide counterpart support in the form of staff, office accommodation, existing reports and studies, and other in-kind contributions.			
Assumptions for Partner Financing			
Not applicable			

^a Government of Sri Lanka, Ministry of National Policies and Economic Affairs. 2017. *Public Investment Program, 2017–2020*. Colombo.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	775.0
ii. National consultants	265.0
b. Out-of-pocket expenditures	
i. International and local travel	40.0
ii. Reports and communications	25.0
2. Equipment ^b	45.0
3. Training, seminars, and conferences ^c	
a. Stakeholder consultation workshops	24.0
b. Training program	40.0
4. Surveys	100.0
5. Miscellaneous administration and support costs ^d	30.0
6. Representative for contract negotiations	6.0
7. Contingencies	150.0
Total	1,500.0

Note: The technical assistance (TA) is estimated to cost \$1.8 million, of which contributions from the Asian Development Bank are presented in the table. The government will provide counterpart support in the form of staff, office accommodation, existing reports and studies, and other in-kind contributions. The value of government contribution is estimated to account for 20% of the total TA cost.

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

^b Equipment necessary for TA implementation, such as powerful information technology systems to handle the data collected. Equipment will be handed over to the executing agency upon TA completion.

^c Includes the cost for two stakeholder workshops planned during TA implementation and other training as deemed necessary to produce the TA outputs.

^d For miscellaneous administration and support cost incurred by the consultant during TA implementation, e.g., secretarial support and communication cost.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=51108-001-TARreport>

1. Terms of Reference for Consultants