



Report and Recommendation of the President to the Board of Directors

Project Number: 50299-001
September 2018

Proposed Loan, Technical Assistance Grant, and Administration of Technical Assistance Grant Democratic Socialist Republic of Sri Lanka: South Asia Subregional Economic Cooperation Port Access Elevated Highway Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 3 September 2018)

| | | |
|---------------|---|-------------------------------|
| Currency unit | – | Sri Lanka rupee/s (SLRe/SLRs) |
| SLRe1.00 | = | \$0.0061946 |
| \$1.00 | = | SLRs161.43000 |

ABBREVIATIONS

| | | |
|-------|---|---|
| ADB | – | Asian Development Bank |
| CKE | – | Colombo–Katunayake Expressway |
| EMP | – | environmental management plan |
| ETC | – | electronic toll collection |
| JICA | – | Japan International Cooperation Agency |
| km | – | kilometer |
| MOHRD | – | Ministry of Highways and Road Development |
| MOPS | – | Ministry of Ports and Shipping |
| NKB | – | New Kelani Bridge |
| OCH | – | Outer Circular Highway |
| O&M | – | operation and maintenance |
| PAM | – | project administration manual |
| RDA | – | Road Development Authority |
| SLPA | – | Sri Lanka Ports Authority |
| TA | – | technical assistance |
| TEU | – | 20-foot equivalent unit |

NOTE

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

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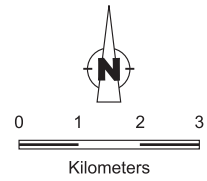
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PROJECT AT A GLANCE

| | | | |
|---|---|--|--|
| 1. Basic Data | | Project Number: 50299-001 | |
| Project Name | South Asia Subregional Economic Cooperation Port Access Elevated Highway Project | Department /Division | SARD/SATC |
| Country Borrower | Sri Lanka Democratic Socialist Republic of Sri Lanka | Executing Agency | Ministry of Highways and Road Development, Ministry of Ports and Shipping, Sri Lanka Customs |
| 2. Sector | Subsector(s) | ADB Financing (\$ million) | |
| ✓ Transport | Urban roads and traffic management | | 300.00 |
| | | Total | 300.00 |
| 3. Strategic Agenda | Subcomponents | Climate Change Information | |
| Inclusive economic growth (IEG) | Pillar 1: Economic opportunities, including jobs, created and expanded | Climate Change impact on the Project | Medium |
| Environmentally sustainable growth (ESG) | Global and regional transboundary environmental concerns | ADB Financing | |
| Regional integration (RCI) | Pillar 1: Cross-border infrastructure Pillar 2: Trade and investment | Adaptation (\$ million) | 7.65 |
| 4. Drivers of Change | Components | Gender Equity and Mainstreaming | |
| Governance and capacity development (GCD) | Client relations, network, and partnership development to partnership driver of change | Some gender elements (SGE) | ✓ |
| Partnerships (PAR) | Institutional development Organizational development | | |
| Private sector development (PSD) | International finance institutions (IFI) Official cofinancing Public sector goods and services essential for private sector development | | |
| 5. Poverty and SDG Targeting | | Location Impact | |
| Geographic Targeting | No | Urban | High |
| Household Targeting | No | | |
| SDG Targeting | Yes | | |
| SDG Goals | SDG8, SDG9 | | |
| 6. Risk Categorization: | Complex | | |
| 7. Safeguard Categorization | Environment: B Involuntary Resettlement: C Indigenous Peoples: C | | |
| 8. Financing | | | |
| Modality and Sources | | Amount (\$ million) | |
| ADB | | 300.00 | |
| Sovereign Project (Regular Loan): Ordinary capital resources | | 300.00 | |
| Cofinancing | | 0.00 | |
| None | | 0.00 | |
| Counterpart | | 60.20 | |
| Government | | 60.20 | |
| Total | | 360.20 | |
| Note: Two attached technical assistance projects will be financed on a grant basis by the Technical Assistance Special Fund (TASF-6) in the amount of \$500,000; and the Japan Fund for Poverty Reduction in the amount of \$1,250,000. | | | |

SRI LANKA SOUTH ASIA SUBREGIONAL ECONOMIC COOPERATION PORT ACCESS ELEVATED HIGHWAY PROJECT

- Project Highway
 - Existing Highway
 - Under Implementation
 - Under Construction
 - Under Planning - NKB-OCH Elevated Highway
- JICA* Japan International Cooperation Agency
NKB-OCH New Kelani Bridge–Outer Circular Highway
 Boundaries are not necessarily authoritative.



This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.



I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Democratic Socialist Republic of Sri Lanka for the South Asia Subregional Economic Cooperation Port Access Elevated Highway Project. The report also describes proposed technical assistance (TA) for the Expressway Operations Improvement Project and the proposed administration of TA to be provided by the Japan Fund for Poverty Reduction for Supporting Trade Logistics Facilitation, and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the TA and the administration of the TA.

2. The proposed project will finance the construction of about 5.3 kilometers (km) of an elevated toll highway with related facilities between the New Kelani Bridge (NKB) and Galle Face in central Colombo.¹ It will provide a direct link to the city center and the port from the Colombo–Katunayake Expressway (CKE) via the NKB, and extend the expressway network into the city.² The project will help alleviate traffic congestion in Colombo’s densely populated areas, improve last-mile connectivity between the country’s expressway network and Colombo’s international port, provide better logistics services for freight operations, and facilitate regional trade.

II. THE PROJECT

A. Rationale

3. With economic growth averaging 5.8% per year since 2009, Sri Lanka is close to attaining upper middle-income status.³ To serve the dynamic transformation of the economy, the transport sector is gradually changing to provide growth-oriented infrastructure, support more diversified services, promote exports, and cater to the value-adding manufacturing industry. New economic activities continue to be established close to population centers and international gateways. Colombo is the center of commercial and administrative functions and has the largest international port in the country. Western Province, which includes Colombo, contributes more than 40% to the national gross domestic product. About 48.7% of Sri Lanka’s urban population is in Colombo, a district with a population of 2.3 million. Improvement of traffic conditions in an area with great potential is key to enabling efficient economic activities. The project also follows ADB’s comprehensive approach in facilitating trade logistics under the South Asia Subregional Economic Cooperation. Improved connectivity to the port will facilitate the smooth flow of goods between domestic, regional, and international markets to develop a high-value-added economy.

4. **Road subsector overview of Colombo.** Sri Lanka has a moderately developed road network. Road transport accounts for 93% of the estimated 80 billion passenger-kilometers in passenger traffic and 97% of freight traffic.⁴ The road density, defined as ratio of road area to administrative area, is 10.7% in the Colombo municipal council, which is better than in other congested Asian cities such as Bangkok (7.1%) or Jakarta (7.3%) but lower than in other major cities such as Tokyo (16.3%), Seoul (13.6%), and Shanghai (12.3%).⁵ The number of vehicles coming to the city has increased to nearly 300,000 per day. Total person-trips are projected to

¹ Along the route, a dedicated ramp to the port will be constructed for port-related traffic.

² Japan International Cooperation Agency (JICA). 2014. [Ex-Ante Evaluation: New Bridge Construction Project over the Kelani River](#). JICA is financing the NKB.

³ World Bank. [World Bank Country and Lending Groups](#) (accessed 7 June 2018). Per capita income in 2016 was \$3,850. The World Bank defines upper middle-income economies as those with a gross national income per capita of \$3,956–\$12,235.

⁴ Government of Sri Lanka, Ministry of National Policies and Economic Affairs. 2017. [Public Investment Programme](#). Colombo.

⁵ JICA. 2014. Urban Transport Master Plan. Tokyo.

increase 2.3 times from 2013 to 2035.⁶ The road network needs to be further developed to accommodate the increasing traffic demand.⁷

5. Traffic volume on major arterial roads is almost at capacity, which causes serious traffic congestion throughout the city. The average traffic speed is less than 10 km per hour during peak hours at many intersections along major arterial roads, particularly between the north–south Baseline Road and radial roads. Constructing new roads or widening existing ones, however, has become almost economically and socially unviable because of the potentially large scale of land acquisition and resettlement requirements. The congestion hindering efficient economic activities is a growing economic and social concern in Colombo. Without further intervention in transport projects in Colombo, economic loss could reach about 3.5% of the Western Province’s gross domestic product by 2020.⁸

6. **Expansion of expressway network.** The Road Development Authority (RDA) has expanded its expressway network since it opened the Southern Expressway, Sri Lanka’s first expressway, to traffic in 2011. The CKE has been in operation since 2013 and part of the Outer Circular Highway (OCH) has been in operation since 2014. The RDA will connect the three expressways once the rest of the OCH is completed. The planned central expressway leading to the OCH will also be part of the network. Connecting the rest of the country with Colombo through the expressways will be essential for the development of the whole economy. However, without an efficient urban road network system, it will create additional traffic in the Colombo metropolitan area. The NKB, funded and implemented by the Japan International Cooperation Agency, links the CKE to the proposed elevated highway. The NKB is scheduled for completion in 2021 and is classified as collaborative cofinancing with the project, since it is part of the same plan of road development.

7. **Insufficient logistics infrastructure to Colombo port.** Colombo serves as the central transport node between domestic and international logistics. At the northwestern edge of the city is Colombo port, Sri Lanka’s main international port, which handled 5.7 million 20-foot equivalent units (TEUs) of container cargo in 2016. During the same year, the port handled about 1.3 million TEUs destined for or originating from Sri Lanka (25% of total containers handled), and this could double to 2.5 million TEUs in 2030 with Sri Lanka’s economic growth.⁹ The constrained site location forces the great majority of freight vehicles exiting and entering the port to pass only through the main gate on a four-lane, ground-level port access road.¹⁰ The existing port access road leads to an intersection with Baseline Road, which is one of the busiest trunk roads in the city.¹¹ The cargo trucks, mostly through-traffic to and from areas outside Colombo city, have no choice but to use the intersection, causing serious traffic congestion.¹² The limited access route to the port, together with the national highway network radiating out from Colombo, creates the unnecessary concentration of through-traffic in the congested city.

⁶ Government of Sri Lanka, Ministry of Megapolis and Western Development. 2016. [Western Region Megapolis Transport Master Plan](#). Colombo.

⁷ The Asian Development Bank (ADB) and other development partners are also considering supporting the government in developing other transport modalities (e.g. urban railway) to share the load on the road network.

⁸ Government of Sri Lanka, Ministry of Megapolis and Western Development. 2016. [Western Region Megapolis Master Plan](#). Colombo.

⁹ ADB. 2016. [Technical Assistance to the Democratic Socialist Republic of Sri Lanka for the National Port Master Plan](#). Manila.

¹⁰ About 4,500 freight vehicles per day used the port access road in January 2017. The volume is expected to exceed 6,500 per day by 2030.

¹¹ About 300 freight vehicles per hour use Main Gate No. 6 (both directions) on Baseline Road during the daytime.

¹² The traffic origin–destination survey in Colombo port shows that less than 10% of the containers originated from and were destined for the Colombo municipal council.

8. The project also includes improvement of customs practices. Sri Lanka's performance on indicators of trade facilitation is better than that of other countries in the region, but lags many Southeast Asian economies. Current trade logistics procedures, which lack a modern risk management system and limit use of automated systems, lead to queuing of cargo traffic at the port and may hinder the elevated highway project from realizing the intended benefits (para. 25).¹³ Integrating trade logistics facilitation with the road project will then reduce congestion not only on the surrounding road network but also within the port, addressing the key physical and nonphysical barriers identified by the South Asian Association for Regional Cooperation Secretariat Regional Multimodal Transport Study for Colombo Port.¹⁴ The project will (i) significantly enhance the port's capacity for expanding distribution services, (ii) provide better services to port users, and (iii) help develop Colombo port into a logistics hub.¹⁵

9. **Challenges of traffic mobility in Colombo.** Considering (i) the increasing traffic demand in a district with the most economic potential, (ii) further development of the expressway network, and (iii) the insufficient logistics infrastructure to the port, the transport sector faces the following major challenges: (i) alleviating the intensifying congestion in Colombo without large-scale land acquisition; (ii) efficiently managing the incoming traffic through the NKB from the expressway network, while minimizing the burden on the existing road network in Colombo; and (iii) handling the increasing freight traffic for Colombo port without causing congestion in the surrounding area. The project will address these challenges by constructing the elevated highway within the port premises, which will enable the project to be implemented without considerable negative social impact. Through the attached TA projects, it also aims to enhance institutional capacity for expressway operation and to improve trade logistics efficiency.

10. **Government development strategy.** The government's development policy statement highlights the strategic importance of Sri Lanka as a hub for global logistics and commercial operations.¹⁶ The government also emphasized that export development is a top priority, with measures aimed at productivity improvement, trade facilitation, and bilateral economic integration. The Public Investment Programme, 2017–2020 provides policy directions to facilitate the country's economic growth by creating an efficient road network (footnote 4). Key strategies to achieve the policy are (i) providing efficient links between key economic centers and ports by extending the expressway network, and (ii) constructing an elevated road network to minimize traffic congestion in the Colombo metropolitan area. The project is identified as a priority road project in the Western Region Megapolis Master Plan (footnote 8).

11. **ADB intervention.** In line with the government's national strategy, the country partnership strategy, 2018–2022 of the Asian Development Bank (ADB) aims to address major constraints on Sri Lanka's development through the following pillars: (i) strengthen the drivers of economic growth, and (ii) improve the quality of growth.¹⁷ The transport sector is one of the key areas where the strategy will be implemented. For the first pillar, ADB places a high value on the provision of growth-oriented infrastructure, which includes regional cooperation, and is boosted by better connectivity to Colombo port. Emphasis is also given to institutional capacity strengthening to

¹³ Inspection requirements for import cargo is a nonphysical factor that worsens heavy traffic at the intersections. Details are in Attached Technical Assistance Report: Supporting Trade Logistics Facilitation; and Sector Background: Industry and Trade (accessible from the list of linked documents in Appendix 2).

¹⁴ South Asian Association for Regional Cooperation Secretariat. 2006. *SAARC Regional Multimodal Transport Study*. Kathmandu.

¹⁵ Related port trade facilities to provide better logistics services will also be implemented under the project. Details are in para. 15 and the Project Administration Manual (accessible from the list of linked documents in Appendix 2).

¹⁶ From the Prime Minister's statements to Parliament on 27 October 2016.

¹⁷ ADB. 2017. [Country Partnership Strategy: Sri Lanka, 2018–2022—Transition to Upper Middle-Income Country Status](#). Manila.

support financial management and operation and maintenance (O&M). Support for improving customs practices is in line with the operational priorities identified under the South Asia Subregional Economic Cooperation Operational Plan's strategic objective of enhancing trade facilitation.¹⁸ Improved trade logistics will strengthen competitiveness and thus also aligns with the country partnership strategy's thematic priority of supporting private sector development.

12. **Value added by ADB assistance.** The project involves port-related activities and multiagency coordination, including with customs, and requires government intervention. ADB assistance in the toll road and its linkage with the NKB will add value by strengthening the institutional capacity of the RDA in the operation of the expressway network. As all expressways will become interconnected, the current project-by-project basis of tolling operation needs to be changed. Among the challenges the RDA could face is the need (i) to develop a fair, consistent, and accountable toll rate policy; and (ii) to introduce a technically unified modern toll collection system. The attached TA for the Expressway Operations Improvement Project will support the toll policy formulation, which aligns with lessons learned from past ADB interventions.¹⁹ The project design also includes an advanced technology of the multi-lane free flow electronic toll collection (ETC) with support from the loan and the attached TA to charge tolls without physical tollbooths.

13. ADB's strong ties with the implementing agencies for road, port, and regional cooperation will enable an integrated and multidisciplinary approach to the project. The Employer's detailed design has been prepared by the RDA under the Transport Project Preparatory Facility, and the project has been fully reviewed by ADB's TA for the National Port Master Plan to conform with future port development plans.²⁰ The project requires coordination between the Sri Lanka Ports Authority (SLPA) and the RDA for its location inside the port, where ADB has played a critical nodal role. Furthermore, ADB's comprehensive approach in facilitating trade logistics under the South Asia Subregional Economic Cooperation will enhance the value of the project. TA support for efficient trade logistics through customs modernization will contribute to improved economic efficiency. The TA also supports an innovative technology of electronic cargo tracking system to monitor real-time container movement. Leveraging information and communications technology, customs practices, and maritime operations will be further integrated with trade logistics.

B. Impact and Outcome

14. The project is aligned with the following impact: economic growth and regional trade and cooperation of the country facilitated (footnote 4). The project will have the following outcome: transport efficiency along the project road increased.²¹

C. Outputs

15. **Output 1: Elevated toll highway and related infrastructure constructed, upgraded, and installed.** About 5.3 km of elevated toll highway between the NKB and Galle Face with a ramp to the port and related facilities will be constructed and installed.²² An advanced ETC system

¹⁸ ADB. 2016. [South Asia Subregional Economic Cooperation Operational Plan, 2016–2025](#). Manila.

¹⁹ Attached Technical Assistance Report: Expressway Operations Improvement Project (accessible from the list of linked documents in Appendix 2); ADB. 2016. [Country Assistance Program Evaluation for Sri Lanka](#). Manila. The country assistance program evaluation emphasized that policy dialogue in the infrastructure sectors needs to be intensified for financial sustainability.

²⁰ ADB. 2016. [Report and Recommendation of the President to the Board of Directors: Proposed Technical Assistance Loan to the Democratic Socialist Republic of Sri Lanka for the Transport Project Preparatory Facility](#). Manila; and footnote 9.

²¹ The design and monitoring framework is in Appendix 1.

²² The elevated highway and port ramp construction requires related facilities, including an interterminal road, workshops, port security gates, customs offices, surveillance cameras, scanners, and an automated logistics

will be installed on the elevated toll highway, and will eventually be installed on the entire expressway network. The project will upgrade about 1.4 km of the ground-level port access road from four to six lanes.²³ A maritime facilitation center will be constructed (i) to relocate and gather the administrative and operational functions, many of which will be affected by the elevated highway construction; and (ii) to provide better services to port users.

16. **Output 2: Tolling operation capacity of expressways strengthened.** The attached TA for the Expressway Operations Improvement Project will strengthen the operational capacity of the expressway regarding its toll rate policy and the ETC system. The project team will hire a consultant firm and individual consultants to prepare deliverables under the TA.

17. **Output 3: Support for trade logistics facilitation provided.** The attached TA for Supporting Trade Logistics Facilitation will help (i) prepare diagnostic studies, standard operating procedures, and an action plan, and provide capacity building to improve risk management practices; (ii) undertake a feasibility study for a new customs inspection facility to improve process flow and timeliness; and (iii) conduct a study on the technical design and business case for an electronic cargo tracking system to monitor and facilitate cargo movement to and from the port. The project team will hire a consultant firm and individual consultants to prepare deliverables under the TA.

D. Summary Cost Estimates and Financing Plan

18. The project is estimated to cost \$360.2 million (Table 1).

Table 1: Summary Cost Estimates
(\$ million)

| Item | Amount ^a |
|---|---------------------|
| A. Base Cost^b | |
| 1. Output 1 | 323.8 |
| a. Civil works | 277.9 |
| b. Equipment | 29.6 |
| c. Consulting services | 12.9 |
| d. Recurrent costs (project management) | 3.4 |
| 2. Output 2 ^c | - |
| 3. Output 3 ^c | - |
| Subtotal (A) | 323.8 |
| B. Contingencies^d | 20.2 |
| C. Financial Charges During Implementation^e | 16.2 |
| Total (A+B+C) | 360.2 |

^a Includes taxes and duties of \$42.2 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of \$42.2 million as exemption and/or cash contribution.

^b In mid-2018 prices as of 31 March 2018.

^c Outputs 2 and 3 are funded through the attached technical assistance projects.

^d Physical contingencies computed at 5% for civil works, equipment, and consulting services. Price contingencies computed at an average of 5.2% on foreign exchange costs and 1.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges. Interest during construction for the ordinary capital resources (OCR) loan has been computed at the 5-year United States dollar fixed swap rate plus an effective contractual spread of 0.50% and maturity premium of 0.20%. Commitment charges for the OCR loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

system, which will improve port logistics services together with the elevated highway. The SLPA will implement these facilities.

²³ The project scope also includes rehabilitation and widening of the existing inner port road that leads to the ground-level port access road, since it will be partially affected by the elevated highway structure.

19. Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).²⁴ Civil works, equipment, and consulting services are the major expenditure items under the project.

20. The government has requested a regular loan of \$300 million from ADB's ordinary capital resources to help finance the project. The loan will have a 29-year term, including a grace period of 8 years; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year (the interest and other charges during construction to be capitalized in the loan); and such other terms and conditions set forth in the draft loan and project agreements. Based on the straight-line method, the average maturity is 18.75 years, and the maturity premium payable to ADB is 0.20% per year.²⁵

21. The summary financing plan is in Table 2. ADB will finance the expenditures in relation to civil works, equipment, consulting services, recurrent costs, and finance charges during construction. The government will finance taxes and duties and part of contingencies, for a total of \$60.2 million.

Table 2: Summary Financing Plan

| Source | Amount (\$ million) | Share of Total (%) |
|---|------------------------|-----------------------|
| Asian Development Bank | | |
| Ordinary capital resources (regular loan) | 300.0 | 83.3 |
| Government | 60.2 | 16.7 |
| Total | 360.2 | 100.0 |

Source: Asian Development Bank.

22. Climate adaptation is estimated to cost \$7.65 million.²⁶ ADB will finance 100% of adaptation costs. Details are in the climate change assessment.²⁷

E. Implementation Arrangements

23. The implementation arrangements are summarized in Table 3 and described in detail in the PAM.

Table 3: Implementation Arrangements

| Aspects | Arrangements |
|------------------------------------|--|
| Implementation period ^a | September 2018–June 2025 |
| Estimated completion date | 30 June 2025 |
| Estimated loan closing date | 31 December 2025 |
| Management | |
| (i) Oversight body | Project Steering Committee Co-chairs: Secretary of MOHRD and Secretary of MOPS Members: Ceylon Electricity Board, Colombo Municipality Council, Department of Motor Traffic, ERD, Ministry of Megapolis and Western Development, MOHRD, MOPS, National Water Supply and Drainage Board, RDA, SLCD, SLPA, Sri Lankan Railway, and other agencies to be invited by the co-chairs |
| (ii) Executing agencies | MOHRD, MOPS, and SLCD (TA for Supporting Trade Logistics Facilitation) |
| (iii) Key implementing agencies | RDA (road facilities and TA for the Expressway Operations Improvement Project) and SLPA (port trade facilities) |
| (iv) Implementation unit | RDA, 27 staff members (including seconded SLPA staff) SLPA, 6 staff members |
| Procurement | OCB (international) 3 contracts \$297.7 million |

²⁴ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

²⁵ This is based on the above loan terms and the government's choice of repayment option and dates.

²⁶ This includes increase in pier height and construction of new canals to help drain water.

²⁷ Climate Change Assessment (accessible from the list of linked documents in Appendix 2).

| Aspects | Arrangements | | |
|--|--|---|---------------|
| | advertisement): civil works and equipment | | |
| | OCB (national advertisement): civil works and equipment | 8 contracts | \$9.8 million |
| Consulting services | Project supervision consultants (QCBS 90:10) with full technical proposal | 153 person-months of international and 1,611 person-months of national services | \$8.2 million |
| | Toll collection system management consultants (QCBS 90:10) with full technical proposal | 58 person-months of international and 110 person-months of national services | \$3.5 million |
| | Individual consultants | 16 person-months of international and 180 person-months of national services | \$1.3 million |
| Retroactive financing and/or advance contracting | RDA and SLPA will use retroactive financing and advance contracting for civil works, equipment, and consulting services. ADB will provide retroactive financing for expenditures incurred prior to loan effectiveness but not earlier than 12 months before the date of signing of the loan agreements and not exceeding 20% of the loan amount. | | |
| Disbursement | The loan proceeds will be disbursed following ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB. | | |

ADB = Asian Development Bank, ERD = External Resources Department, Ministry of National Policies and Economic Affairs, MOHRD = Ministry of Highways and Road Development, MOPS = Ministry of Ports and Shipping, OCB = open competitive bidding, QCBS = quality- and cost-based selection, RDA = Road Development Authority, SLCD = Sri Lanka Customs Department, SLPA = Sri Lanka Ports Authority, TA = technical assistance.

^a The implementation period includes 3-year construction period for the elevated highway and 3-year defect notification period after the completion of the civil works.

Source: Asian Development Bank.

III. ATTACHED TECHNICAL ASSISTANCE

24. Two attached TA projects are proposed (i) to improve expressway operations capacity, and (ii) to support trade logistics facilitation. The expansion of the expressway network will require a fair, consistent, and accountable toll policy, and a modern and unified collection system. The current toll rate policy and toll collection system were developed on a project-by-project basis, resulting in differing toll rates and collection systems among expressways. The TA for the Expressway Operations Improvement Project will assist in developing a new accountable toll rate policy to address the long-term operational sustainability of the expressway network and support a newly introduced ETC system by creating an enabling policy environment and strengthening the RDA's information and communications technology capacity.²⁸

25. Current trade logistics procedures may prevent the project from maximizing its economic and social benefits, particularly (i) the high inspection rate of about 80% for import goods, (ii) the lack of a real-time cargo tracking system, and (iii) the location of customs inspection facilities inside Colombo that create unnecessary traffic congestion. Without improving these procedures, intersections on trunk roads will continue to be heavily congested. The TA for Supporting Trade Logistics Facilitation will assist in (i) improving the risk management system of customs to reduce the inspection rate, (ii) preparing a study for a new customs inspection facility, and (iii) preparing the technical design and business case for using an electronic cargo tracking system.²⁹

²⁸ Attached Technical Assistance: Expressway Operations Improvement Project (accessible from the list of linked documents in Appendix 2).

²⁹ Attached Technical Assistance: Supporting Trade Logistics Facilitation (accessible from the list of linked documents in Appendix 2).

26. **Expressway Operations Improvement Project.** The TA is estimated to cost \$550,000, of which \$500,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-6). The government will provide counterpart support in the form of counterpart staff, office space, and other in-kind contributions. The RDA will be the implementing agency for the TA, which will be implemented from October 2018 to September 2023 with 50.5 person-months of consultant inputs (10.0 international, 40.5 national). The project team will recruit a consulting firm and individual consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.

27. **Supporting Trade Logistics Facilitation.** The TA is estimated to cost \$1,437,500, of which \$1,250,000 will be financed on a grant basis by the Japan Fund for Poverty Reduction. The government will provide counterpart support in the form of counterpart staff, office space, and other in-kind contributions. The Sri Lanka Customs Department will be the executing agency for the TA, which will be implemented from December 2018 to November 2020 with 66 person-months of consultant inputs (24 international, 42 national). The project team will recruit a consulting firm and individual consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.

IV. DUE DILIGENCE

A. Technical

28. The project team considered the alignment and elevated concrete box girder structure as the best among the proposals it reviewed during project preparation in terms of land acquisition, the number of affected SLPA facilities, current and future port operation requirements, climate resilience, and economic feasibility and sustainability. The Employer's detailed design has been prepared by the RDA under the Transport Project Preparatory Facility (footnote 20). The design considers future extensions to Marine Drive along the coastline and to Pettah to address future traffic demand generated by ongoing urban developments. The RDA adopted a higher standard of vehicle loading for heavy cargo traffic. The RDA will secure a minimum vertical clearance of 10 meters from the ground level for the port operation, which will also increase resilience to climate change risks.

B. Economic and Financial

29. **Economic analysis.** The economic analysis of the project follows ADB guidelines and compares life cycle costs in with- and without-project scenarios, using a 9.0% discount rate and the economic internal rate of return decision criteria.³⁰ The project will cater to traffic, including cargo trucks, destined for the port. Quantified benefits include savings in vehicle operation costs and travel time, as well as a reduction in carbon dioxide emissions. The economic internal rate of return is estimated to be 14.0%.³¹ Sensitivity analysis demonstrated the robustness of the project.

30. **Financial analysis.** The project is revenue generating as a toll road. The RDA conducted a financial analysis on an incremental basis using the discounted cash flow method and calculated the financial internal rate of return following ADB guidelines. Capital costs include the construction of the elevated highway and the toll collection system. Operation and maintenance (O&M) costs include routine and periodic maintenance as well as operational costs of the tollway. The financial internal rate of return is 2.11%, which is above the estimated weighted average cost of capital of 1.01%. The cash flow projections indicate that the project will generate sufficient resources to meet its O&M costs.

³⁰ ADB. 2017. [Guidelines for the Economic Analysis of Projects](#). Manila.

³¹ Excluding carbon dioxide emissions savings, the economic internal rate of return is 13.9%.

C. Governance

31. **Policy, legal, and institutional capacity.** The Ministry of Highways and Road Development (MOHRD) and the Ministry of Ports and Shipping (MOPS) will act as executing agencies. They will formulate the policies and monitor the performance of the road and port subsectors. The RDA, the implementing agency for road facilities under the road development component, was established as a statutory authority with independent legal status through the Road Development Authority Act, 1981. The SLPA, the implementing agency for port facilities under the road development component, was established as a statutory authority with independent legal status under the Sri Lanka Ports Authority Act, 1979. The executing and implementing agencies have sufficient capacity and experience to procure civil works and equipment, select consultants, and administer contracts. Implementation of the advanced ETC system will be fully supported by project management consultants. The RDA has adequate capacity for the O&M of expressways. However, private sector participation will be brought into the operation of the new ETC system, through a service agreement, to improve toll operation efficiency.³² The Sri Lanka Customs Department will be the executing agency of the TA for Supporting Trade Logistics Facilitation.

32. **Financial management.** The RDA and the SLPA have prior and ongoing experience in implementing ADB-funded projects. Assessments of the RDA and the SLPA found that the financial management risk is *moderate*, mainly because of staffing and internal audit arrangements. The RDA and the SLPA have project accounting and finance teams with suitably qualified accountants. The implementing agencies will establish and maintain separate project records and accounts to identify the financing resources received and expenditures made for the project, thus ensuring an adequate audit trail. The government's Auditor General's Department will audit project accounts and financial statements annually following international auditing standards.

33. **Procurement and anticorruption measures.** The implementing agencies have shown satisfactory performance in procurement under ADB-funded projects; the procurement risk is assessed as *moderate*. Procurement of works, equipment, and consulting services will follow the ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The civil works contract for the elevated highway is under procurement; concurrently, the RDA is recruiting construction supervision consultants. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the executing and implementing agencies. The specific policy requirements and supplementary measures are described in the PAM (footnote 24).

D. Poverty, Social, and Gender

34. **Poverty and social.** Colombo district has a population of 2.3 million and is home to 48.7% of Sri Lanka's urban population. The smooth flow of goods and people in the port area is a key component to developing the country's high-value-added economy. Increased port efficiency will indirectly benefit those living in Sri Lanka through reduced shipping costs. At the local level, beneficiaries will include transport providers and businesses (including locally run businesses) supporting construction and port operations.

35. **Gender and development.** The design of the maritime facilitation center and other physical infrastructure will include gender-inclusive features, such as women's washrooms on every floor, and other design features that may benefit female workers or help raise the

³² The Expressway Operation Maintenance and Management Division of the RDA has operated and maintained 171 km of expressways since 2011.

percentage of female workers in the SLPA.

36. **Health and labor.** The project team will make sure the contractor includes provisions for promoting awareness and preventing the spread of communicable diseases, including sexually transmitted infections. The contractor will conduct semiannual awareness-building sessions for all workers in a form and language understandable to them. The construction supervision consultants will monitor the sessions. The contractor will display awareness-raising materials in strategic areas of the port. The civil works contractor will follow national core labor standards.

E. Safeguards

37. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.³³

38. **Environment (category B).** The project expects no significant irreversible environmental impacts. The RDA has prepared initial environmental examination reports for the highway construction and the maritime facilitation center.³⁴ Anticipated environmental impacts are restricted to the project construction stage and entail typical issues related to road or building construction such as generation of dust, noise, exhaust, and waste from construction sites; and occupational health and safety. The most sensitive impact expected during construction is potential noise and vibration impacts on old historic buildings along the elevated road alignment. The environmental management plan (EMP), which forms part of the initial environmental examination, incorporated mitigation measures to address all expected impacts, including stringent measures to control and monitor noise and vibration levels. The EMP will be included in the bidding documents and implementation by the contractor is mandatory. The RDA held consultations with stakeholders, such as local government officials and utility agencies, during project preparation and will continue to hold them during project construction. A grievance redress mechanism will be in place to address the concerns of any individual or agency during project implementation. The RDA's Environment and Social Safeguard Division will monitor overall management and implementation of environmental safeguards under the project. The contractor and the construction supervision consultants will also include an environment specialist to ensure proper EMP implementation and monitoring.

39. **Involuntary resettlement and indigenous peoples (category C).** For all project outputs involving civil works, thorough due diligence confirmed that the project will be implemented within the existing secured port area and port-owned land. The government owns the project site, no titleholders or non-titleholders occupy the area, and no private structures will be affected. The RDA held consultations with stakeholders during project preparation. Due diligence found that the project will have no impact on livelihood and indigenous peoples. The social development specialist of the project supervision consultant will perform annual monitoring to verify that there are no impacts during implementation and that information disclosure and consultation are continued throughout the construction period.

F. Summary of Risk Assessment and Risk Management Plan

40. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.³⁵ The integrated benefits and impacts are expected to outweigh the costs.

³³ ADB. [Safeguard Categories](#).

³⁴ Initial Environmental Examination: Elevated Highway; and Initial Environmental Examination: Maritime Facilitation Center (accessible from the list of linked documents in Appendix 2). ADB disclosed both reports on the ADB website on 29 June 2018.

³⁵ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Table 4: Summary of Risks and Mitigating Measures

| Risks | Mitigation Measures |
|---|--|
| Unpredicted port operation requirements lead to delay in implementation of civil works. | The RDA and the SLPA signed a memorandum of understanding on 3 July 2018 to confirm the SLPA's fundamental requirements during construction and to make clear the relevant procedures for obtaining the SLPA's approval for site access. |
| Implementation is delayed because of delay in site handover of the sections where SLPA facilities need to be relocated. | The RDA adopted a phased site handover approach according to the progress of the relocations. The sections will be handed over to the contractor 24 months after the commencement of the civil works. The RDA will consider temporary relocation of the facilities in case the relocations cannot be achieved by the due date. |
| Delay in implementation of trade facilitation agreement may affect smooth trade-related activities | Sri Lanka ratified the WTO TFA on 31 May 2016. In August 2017, the Cabinet of Ministers approved the new NTP which was formulated by the Ministry of Development Strategies and International Trade. NTP underscores that being a signatory to the WTO TFA, a NTFC was established in June 2014. NTFC will serve as an institutional mechanism to oversee the planning and implementation of the trade facilitation reforms. |
| Unpredicted administrative and policy changes in port operation requirements not covered by the MOU delay civil works | General coordination mechanism is in place between RDA and SLPA for unpredictable events which may affect implementation of civil works. |

MOU = memorandum of understanding, NTFC = National Trade Facilitation Committee, NTP = National Trade Policy, RDA = Road Development Authority, SLPA = Sri Lanka Ports Authority, TFA = Trade Facilitation Agreement, WTO = World Trade Organization.

Source: Asian Development Bank.

V. ASSURANCES

41. The government, MOHRD, MOPS, RDA, and SLPA have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents.

42. The government, MOHRD, MOPS, RDA, and SLPA have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreement and project agreements.

VI. RECOMMENDATION

43. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$300,000,000 to the Democratic Socialist Republic of Sri Lanka for the South Asia Subregional Economic Cooperation Port Access Elevated Highway Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 29 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Takehiko Nakao
President

3 September 2018

DESIGN AND MONITORING FRAMEWORK

| Impact the Project is Aligned with Economic growth and regional trade and cooperation of the country facilitated (Public Investment Programme, 2017–2020) ^a | | | |
|--|---|--|--|
| Results Chain | Performance Indicators with Targets and Baselines | Data Sources and Reporting Mechanisms | Risks |
| Outcome Transport efficiency along the project road increased | By 2026: a. Average travel time from Galle Face to the Colombo–Katunayake Expressway reduced to 7 minutes (2018 baseline: 30 minutes) ^b b. Average daily vehicle-km using the project road increased to 111,500 (2018 baseline: 0) c. Ratio of import cargo traffic using the project road from the port increased to 25% (2018 baseline: 0%) ^c | a.–c. RDA and SLPA surveys | Delay in implementation of trade facilitation agreement may affect smooth trade-related activities |
| Outputs 1. Elevated toll highway and related infrastructure constructed, upgraded, and installed | By 2025: 1a. About 5.3 km of elevated highway with a ramp to the port constructed (2018 baseline: 0) 1b. About 1.4 km of the existing port access road upgraded to 6 lanes (2018 baseline: 4 lanes) 1c. ETC system installed and commissioned (2018 baseline: not applicable) 1d. Port trade facilities constructed, installed, and commissioned (2018 baseline: not applicable) ^d 1e. Maritime facilitation center constructed with inclusive features for the elderly, women, children, and people with disability, in line with ADB and Sri Lanka practices (2018 baseline: 0) | 1a.–e. RDA and SLPA progress reports | Unpredicted administrative and policy changes in port operation requirements not covered by the memorandum of understanding delay civil works. |
| TA project 2. Tolling operation capacity of expressways strengthened | 2a. By 2019, new toll rate policy guideline endorsed by the RDA (2018 baseline: not endorsed) 2b. By 2019, operational and management parameters to be obtained from the ETC system approved (2018 baseline: not approved) 2c. By 2020, organization structure and human resources plan for IT division submitted to the RDA (2018 baseline: not applicable) | 2a.–c. Reports by the TA consultants | |

| Results Chain | Performance Indicators with Targets and Baselines | Data Sources and Reporting Mechanisms | Risks |
|--|--|---|-------|
| | 2d. By 2022, at least 10 RDA IT staff reported increased knowledge and skills in ETC (2018 baseline: not applicable) | 2d. Reports by the TA consultants and participant surveys | |
| TA project 3. Support for trade logistics facilitation provided | 3a. By 2019, at least two diagnostic studies on risk management systems submitted to the SLCD (2018 baseline: 0) 3b. By 2020, feasibility study for a new customs inspection facility submitted to the SLCD (2018 baseline: not applicable) 3c. By 2020, technical design and business case for the ECTS submitted to the SLCD (2018 baseline: not applicable) | 3a.–c. Reports by the TA consultants | |

Key Activities with Milestones

1. Elevated toll highway and related infrastructure constructed, upgraded and installed

- 1.1 Award the maritime facilitation center construction contract by 2019
- 1.2 Award road construction contract by 2018
- 1.3 Award toll collection system contract by 2019
- 1.4 Relocate 49 affected SLPA facilities by 2020
- 1.5 Complete maritime facilitation center by 2020
- 1.6 Complete road construction works and toll collection installation by 2021

2. Tolling operation capacity of expressways strengthened

- 2.1 Mobilize TA consultants by 2019
- 2.2 Develop toll rate policy and guidelines by 2019
- 2.3 Prepare action plan to create enabling policy environment for the toll collection system by 2020
- 2.4 Develop action plans for the establishment of an IT section by 2020
- 2.5 Conduct training program by 2022

3. Support for trade logistics facility provided

- 3.1 Mobilize TA consultants by 2019
- 3.2 Prepare reports on risk management and cross-border compliance by 2019
- 3.3 Prepare technical design and business case for the ECTS by 2020
- 3.4 Prepare a study for a new customs inspection facility by 2020

Inputs

ADB: \$300,000,000 (regular loan); \$500,000 (TASF-6 grant)
Government: \$60,200,000
Japan Fund for Poverty Reduction: \$1,250,000 (TA grant)

Assumptions for Partner Financing

Output necessary to reach design and monitoring framework outcome that is not administered by ADB includes:
New Kelani Bridge constructed (Japan International Cooperation Agency)

ADB = Asian Development Bank, ECTS = electronic cargo tracking system, ETC = electronic toll collection, IT = information technology, km = kilometer, RDA = Road Development Authority, SLCD = Sri Lanka Customs Department, SLPA = Sri Lanka Ports Authority, TA = technical assistance, TASF = Technical Assistance Special Fund.

^a Government of Sri Lanka, Ministry of National Policies and Economic Affairs. 2017. [Public Investment Programme 2017–2020](#). Colombo.

^b The travel time includes 2 km of the New Kelani Bridge section.

^c The target indicator is linked to outputs of the TA for Supporting Trade Logistics Facilitation and the implementation progress of the trade facilitation agreement, particularly through the physical inspection rate.

^d The port trade facilities include the construction of a customs office and security gates at the port ramp, construction of internal roads from the security gates to an existing road and between container terminals, and procurement of a cargo inspection scanner.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=50299-001-3>

1. Loan Agreement
2. Project Agreement: Road Development Authority
3. Project Agreement: Sri Lanka Ports Authority
4. Sector Assessment (Summary): Transport (Urban Roads and Traffic Management)
5. Project Administration Manual
6. Contribution to the ADB Results Framework
7. Development Coordination
8. Economic and Financial Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Risk Assessment and Risk Management Plan
12. Attached Technical Assistance Report: Expressway Operations Improvement Project
13. Attached Technical Assistance Report: Supporting Trade Logistics Facilitation
14. Climate Change Assessment
15. Initial Environmental Examination: Elevated Highway
16. Initial Environmental Examination: Maritime Facilitation Center

Supplementary Documents

17. Summary of Technical Aspects of the Elevated Highway
18. Multi-Lane Free Flow Electronic Toll Collection
19. Sector Background: Industry and Trade
20. Resettlement Due Diligence Report: South Asia Subregional Economic Cooperation Port Access Elevated Highway Project
21. Resettlement Due Diligence Report: South Asia Subregional Economic Cooperation Port Access Elevated Highway Project (Maritime Facilitation Center)