



Completion Report

Project Number: 50184-001
Technical Assistance Number: 9161
January 2021

Sri Lanka: National Port Master Plan

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TECHNICAL ASSISTANCE COMPLETION REPORT

TA Number, Country, and Name: TA 9161-SRI: National Port Master Plan		Amount Approved: \$1,500,000	
		Revised Amount: \$1,500,000	
Executing Agency: Sri Lanka Ports Authority	Source of Funding: Japan Fund for Poverty Reduction	Amount Undisbursed: \$145,774	Amount Used: \$1,354,226
TA Approval Date: 29 August 2016	TA Signing Date: 21 September 2016	TA Completion Date	
		Original Date: 30 November 2018	Latest Revised Date: 30 November 2019
		Financial Closing Date: 16 January 2020	Number of Extensions: 1
TA Type: Policy and advisory TA		TA Arrangement: Not applicable	

Description

Sri Lanka, as an island nation, needs to keep strengthening its ports' capacity and competitiveness by improving infrastructure, operational efficiency, and institutions, in order to maintain its role as a regional transport hub despite severe competition with the ports of other nations. In view of the country's national economic growth and rapid growth of international container shipping demand, the country urgently needs to strengthen its port capacity.

The policy and advisory technical assistance (TA) aimed to support the Government of Sri Lanka in developing the National Port Master Plan (NPMP), including the restructuring of the Sri Lanka Ports Authority (SLPA). The TA was expected to identify priority projects which will contribute to scaling up future ADB interventions in the nation. Some of the priority projects identified in the TA are being further prepared through the Transport Project Preparatory Facility.¹ The TA was also to support SLPA in the technical verification of the design of the South Asia Subregional Economic Cooperation (SASEC) port access elevated highway (PAEH) through coordination with the road sector and ensuring that the operation and development of the Colombo port in future will not be unduly constrained by the planned road development which would run through the port.²

Expected Impact, Outcome, and Outputs

The intended impact was the realization of the most competitive and preferred ports and shipping destination in the region, in line with the Government of Sri Lanka's Public Investment Programme, 2016–2018.³ The intended outcome was harmonized and balanced port development facilitated in the nation. The expected outputs were (i) National Port Master Plan finalized for approval, and (ii) technical review of the final design of the port access elevated highway submitted.

Implementation Arrangements

SLPA, the executing agency, provided policy guidance and national-level coordination in relation to the TA and the ensuing projects, and was responsible for managing daily implementation activities. A TA advisory committee headed by SLPA's managing director was established within the organization to guide and support the TA team for smooth implementation. SLPA appointed a project director (the Chief Engineer) to supervise the consultant team.

An international consulting firm, Maritime & Transport Business Solutions B.V., was recruited in accordance with ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time) using quality- and cost-based selection with a quality–cost ratio of 90:10. Consultant selection started on 10 June 2016. The request for proposals (RFP) was issued on 29 July 2016; technical evaluation was completed on 21 September 2016, and financial evaluation on 30 September 2016. Contract negotiations were held with the first-ranked firm from 9 to 11 November 2016 at the ADB headquarters, with government representatives from SLPA as observers. The consulting firm was mobilized on 30

¹ 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. (Loan 3425-SRI).

² ADB. 2018. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the South Asia Subregional Economic Cooperation (SASEC) Port Access Elevated Highway Project*. Manila. (Loan 3716-SRI).

³ Government of Sri Lanka, Ministry of National Policies and Economic Affairs. 2016. *Public Investment Programme 2016–2018*. Colombo.

November 2016. Some fieldwork of the international consultants were reallocated to home inputs early on through a variation at no additional cost. At completion, total inputs for international consultants were 68.09 person-months and 28.40 person-months for national consultants, higher than the estimated 57 international and 28 national person-months upon TA approval. In general, consultant performance is satisfactory. The contract period of the consulting firm was originally from 30 November 2016 to 31 May 2018. It was first extended to 30 November 2018 to conduct an additional study for the Jaya Container Terminal as requested by SLPA, and further to 31 March 2019 in order to give more time to incorporate government's comments on the submitted reports. Four contract variations were requested by the firm and approved by ADB.

Four individual consultants were hired. The performance ratings were *satisfactory*. One building relocation specialist was recruited in November 2016 to prepare a relocation plan in support of the PAEH project. The other three specialists prepared complementary studies in line with the draft final NPMP: (i) a human resources and organizational expert prepared a comprehensive strategic corporate plan for SLPA; (ii) a port management specialist studied the port community system and suggested a suitable IT system for the Colombo Port; and (iii) a marina development specialist supported the SLPA in preparation of the Yacht Marina project in the Port of Galle, which is expected to strengthen tourism-related functions.

The TA was completed without cost overruns and with 90.3% of funds disbursed at closing. Government in-kind contribution was secured and estimated at \$400,000 in the form of counterpart staff, office space, office supplies, and other in-kind contributions.

Conduct of Activities

The TA was implemented from August 2016 to November 2019. The scope of the consultancy services was to deliver the following outputs: (i) the NPMP, including the national port directions, the Colombo Port development plan, the Trincomalee Port development plan, and prioritized projects for logistics and hinterland connectivity; and (ii) technical review of the final design of the PAEH.

Output 1: National Port Master Plan finalized for approval. The output was achieved. The consultants conducted the first inception visit to Sri Lanka on 5–9 December 2016 and an inception report was submitted on 21 January 2017. The inception workshop held on 1 February 2017 focused on the (i) national port master plan, (ii) logistics corridor study of Japan International Cooperation Agency (JICA), (iii) megapolis plan, and (iv) Colombo–Trincomalee economic corridor study. Participants were from related ministries, private sector and development partners, including the Ministry of Western Development, Ministry of National Policies and Economic Affairs, Sri Lanka Customs, and Ceylon Electricity Board.

There were 12 milestone reports, namely: (i) Inception Report, (ii) Draft PAEH Multi-Agency Coordination Report, (iii) PAEH Multi-Agency Coordination Report, (iv) Draft National Policy Directions Report, (v) National Policy Directions Report, (vi) Passenger Terminal Concept Report, (vii) Draft Colombo Port Development Plan, (viii) Colombo Port Development Plan, (ix) Trincomalee Port Zoning Report, (x) Draft Trincomalee Port Development Plan, (xi) Trincomalee Port Development Plan, and (xii) Final Report. All 12 key deliverables were submitted on time. The consultant submitted the draft final report in 2018. Due to the recruitment of additional consulting services (details in the succeeding paras.) to facilitate the implementation of priority projects identified in the NPMP and the change in SLPA management following the political turmoil in Sri Lanka, it took more time to review and consolidate comments from the government's high officials and stakeholders, thus, caused the delay in the submission of the final NPMP.⁴ Due to this, a minor change in scope was approved on 15 November 2018 which included the extension of the TA completion date from 30 November 2018 to 30 November 2019.⁵ The final NPMP and all additional reports were submitted in March 2019.

In the National Port Directions Report, priority projects were identified for the port of Colombo including the Jaya Container Terminal (JCT), North Port development, and Port Community System (PCS). An additional study for the Jaya Container Terminal was requested by the SLPA. The prefeasibility study was to conduct an additional assessment of the technical feasibility of deepening the existing container terminal as a capacity strengthening option of the port. Under NPMP, North Port development is proposed in the Southwest of the estuary of Kelani River. A feasibility study,

⁴ Sri Lanka's president dissolved Parliament and called for elections in 2018.

⁵ The third minor change in scope on 15 November 2018 covered recruitment of consultants to provide additional consulting services to facilitate implementation of priority projects such as preparation of action plans for IT application. The first minor change in scope was in October 2016 wherein \$6,000 from TA uncommitted balance was reallocated to fund the contract negotiations in which government representatives were invited to attend as observers. The second one was approved in June 2018, and the fourth one in October 2019 wherein a study tour was added and a resource person was recruited to organize and implement the capacity enhancement program.

including the determination of shape and alignment, coastal hydro study, impacts on the Kelani river outlet, and detailed design is being conducted under the TA loan for Transport Project Preparatory Facility.

SLPA also requested ADB's support for a preliminary study on the PCS for the port of Colombo, and Marina in Galle port. In view of this, a minor change in scope was approved in June 2018 engaging two individual consultants to work on the studies. SLPA held a workshop on 6 November 2019 to disseminate the study findings with possible stakeholders on the development of the PCS and Marina. One of the objectives of the workshop was to reach a consensus among stakeholders on establishing a committee which will continue discussion toward PCS development beyond TA closing. For better understanding of PCS by participants, ADB recruited a resource person who was involved in the actual development of the PCS in Singapore and People's Republic of China. The workshop was attended by the Secretary of the Ministry of Ports and Shipping and Southern Development, stakeholders from private companies, government organizations, non-profit organization and representatives from the Japanese embassy. Two individual consultants and the resource person presented the study findings, which was followed by an active discussion from the participants. All presentations were successfully conveyed and understood by the workshop participants.

Two additional studies requested by the SLPA were also prepared as part of the minor change in scope in June 2018, i.e., (i) preparation of corporate plan, covering organization governance, human resource management, and administration improvement, and (ii) preliminary studies on traffic improvement measures prior to the PAEH project requiring additional consulting services. SLPA was assigned to implement the improvement of port traffic in parallel with PAEH construction.

The final NPMP was presented and discussed in the final stakeholders' workshop held on 7 March 2019. Over 160 high-ranking government officials and other stakeholders participated. The Minister of Ports & Shipping and Southern Development delivered the opening remarks. The honorable Prime Minister of Sri Lanka expressed appreciation to ADB's support and progress of the TA. Overall, the study was appreciated and discussed by the attendees of the workshop and incorporated in the final report which was approved by SLPA management in July 2019.

In October 2019, a minor change in TA implementation was approved to facilitate better understanding of maritime logistics and PCS for future port development by SLPA (footnote 5). A capacity enhancement program in Japan for SLPA officers in charge of logistics and operations was conducted from 25 to 29 November 2019. A resource person from the Overseas Coastal Area Development Institute of Japan (OCDI) was recruited to organize and implement the entire program. The program focused on knowledge sharing and experiences in port logistics and PCS in Japan. Lectures were conducted by the OCDI, Ministry of Land Infrastructure, Transport and Tourism of Japan, and other private logistics corporations. Visits to ports and logistics facilities were conducted in Yokohama, Hamamatsu and Shimizu to learn good practices. In Yokohama port, the sharing session focused on planning and development of logistic infrastructure. The SLPA officers also visited the Hamamatsu Inland Container Terminal and facilities of Shimizu Container Terminal Co. Ltd. The program was well appreciated by the participants, who effectively deepened and advanced their knowledge on logistics and PCS.

Output 2: Technical review of PAEH submitted. The output was achieved. The consulting firm supported SLPA in the conduct of the technical verification of the final design of the PAEH and other engineering issues to secure efficient port operation. The final PAEH report, including the design and alignment, was submitted on 20 April 2017. Based on this, on 27 September 2018, ADB approved the SASEC Port Access Elevated Highway Project in the amount of \$300 million.

Technical Assistance Assessment Rating

Criterion	Assessment	Rating
Relevance	The TA was aligned with the country's development needs and priorities to improve the port sector by preparing the NPMP, and supported the port access road project which is a key priority project of the government. ⁶ It was consistent with the government's Vision 25 development policy framework that positions Sri Lanka as a global logistics hub that will expand port infrastructure and related services, and fast track the long-term structural transport master plan in line with the Megapolis Development Plan. ⁷ The TA outcome was also in line with ADB's country partnership strategy 2015–2016, which emphasized the	<i>Relevant</i>

⁶ Government of Sri Lanka, Department of National Planning. Ministry of National Policies and Economic Affairs. 2015. *Economic Policy Statement By The Prime Minister on 05th of November 2015* (Ministry-wise Programme).

⁷ Government of Sri Lanka, Prime Minister's Office. 2015. *Vision 25*. Colombo.

Criterion	Assessment	Rating
	<p>establishment of a modern transport system that would accelerate economic growth with reduced travel time and cost, and improved safety.</p> <p>The design of the TA was in line with SLPA's urgent needs to prepare a master plan for the port sector and identify priority projects for programming. The changes in scope were in line with the TA's objectives and responsive to government needs, meeting one of the priority crosscutting areas of the Sri Lanka Country Partnership Strategy 2018–2022.⁸ The scope changes were timely and adequately responded to the government's requests. The changes were justified in view of the need to enhance capacity building activities and facilitate the implementation of priority projects.</p>	
Effectiveness	<p>The TA achieved both outcome and outputs. The finalization and approval of the NPMP consisted of two indicators, namely: (i) national port master plan to be submitted; and (ii) at least five workshops conducted, both by 2018.</p> <p>The NPMP was finalized including five subreports required in the consulting firm's initial terms of reference and one additional subreport requested by the government.⁹ Due to the change in SLPA management following the political turmoil, the JCT study was additionally conducted to meet requests from new management. The reports were of good quality with a sound assessment of the current situation and provided realistic recommendations. SLPA initiated studies such as the North Port development and PCS based on some of the recommendations.</p> <p>There were 16 workshops conducted. In addition to the inception and final workshops, stakeholder workshops were also conducted by the consultants in the field. The workshops were helpful for government staff to understand the NPMP, facilitating knowledge sharing and experiences in master planning, corporation development, operation improvement, and new technology ideas, among others. The workshops helped to ensure that the master plan was comprehensive and considered the views and needs not only of the planning division but also on operation and safety. The workshops process was inclusive and helped to ensure SLPA's ownership of the master plan.</p>	<i>Effective</i>
Efficiency	<p>The consulting firm completed its tasks within budget in spite of the extension of 10 months. TA savings were used to support the government in preparing four studies following the NPMP and a study tour. For this purpose, the TA was extended by one year. The consulting firm and four individual consultants performed basically well in terms of preparation of required documentations. The consultants conducted the activities largely within timelines set. The extension of the TA was mainly due to SLPA's request for the additional studies. There were no major implementation issues. The TA introduced to SLPA new technologies and approaches applied in advanced ports in other countries, which are expected to bring about benefits with sustained focus from ADB. Government contribution was delivered on time.</p>	<i>Efficient</i>
Overall Assessment	<p>Overall, the TA was <i>successful</i>. It was fully aligned with the government's and ADB's development priorities. The reports are of good quality and helpful to the government. New technologies and approaches applied in advanced ports in other countries were introduced to SLPA. Some of the recommendations in the NPMP have been initialized such as the PCS and the North Port Development studies. The longer implementation period (1 year) was mainly due to longer time required for the review of SLPA and the government. But overall, the direction of port development, proposed projects, and other planning issues</p>	<i>Successful</i>

⁸ ADB. 2017. *Country Partnership Strategy: Sri Lanka, 2018–2022—Transition to Upper Middle-Income Country Status*. Manila.

⁹ The subreports were (i) National Port Direction; (ii) Colombo Port Development Plan; (iii) Trincomalee Port Development Plan; (iv) Port Access Elevated Highway Report; (v) Colombo Passenger Terminal Report, which were required in the initial TOR; and the (vi) Pre-feasibility Study on JCT deepening, which was added during implementation.

Criterion	Assessment	Rating
	identified in the outputs were valid, considering recent discussion by the government on port development. Also, the outputs and outcome were achieved as planned with no cost overruns.	
Sustainability	The master plan was approved by SLPA management in July 2019. Also, North Port development proposed under the NPMP is being studied under ADB's TA loan (footnote 1). Thus, the TA deliverables are <i>likely sustainable</i> .	<i>Likely sustainable</i>

Lessons Learned and Recommendations

Design and/or planning	Close collaboration between ADB and the government was essential to ensure timely changes in the scope and/or design of the TA. During implementation, close communication was kept between ADB and SLPA to adequately adjust the study scope based on SLPA's requirements and urgent needs.
Implementation and/or delivery	Coordination and regular discussions between ADB, consultants and counterpart government staff are important to allow refinements to the outputs to increase their relevance. Unexpected incidents, such as the change in management in SLPA following the political turmoil, could have adversely impacted TA implementation. However, close communication and timely changes in implementation arrangements effectively minimized the negative impacts and secured efficient TA completion.
Knowledge building	Effective knowledge transfer is critical to ensure learning is established. The consultants facilitated knowledge transfer to the SLPA on master planning, corporation development, operation improvement, and new technologies including PCS, and floating storage and regasification unit of liquefied natural gas. The TA made efforts to disseminate existing knowledge and there is evidence that the targeted audience is now more aware of the material presented through workshops, study tour and reports.
Stakeholder participation	Stakeholder's workshops are effective avenues to facilitate involvement and ownership of all stakeholders. This approach was effective in conducting a comprehensive diagnosis of the current port operation and in elaborating the NPMP by incorporating different views from all stakeholders.
Partnership	Partnerships are important to leverage in seeking effective knowledge sharing of port practices. The NPMP was developed to incorporate related studies and plans, including the Colombo-Trincomalee Economic Corridor, Logistic Study, and Megapolis Master Plan. Given that the TA's funding source was JFPR, Japanese visibility was ensured during implementation with the use of the JFPR logo in documents, communications, presentations, and workshops. The study tour to Japan organized by the resource person from OCDI, enhanced the capacity of participants on port-related IT systems and maritime logistics, which were identified as priority projects in the NPMP. It is recommended that for new knowledge transfer, partnership sharing on advanced practices on-field should be arranged when possible.
Other lessons	Port-related projects are closely affected by political direction. The country's political environment should be carefully analyzed during project design. Government election or any foreseen change in the cabinet should be assessed at the beginning.

Follow-up Actions

The NPMP has identified priority projects. SLPA expressed their willingness to seek continuous ADB support, especially on PCS, beyond the completion of the TA. Consultants are currently funded under the TA Advancing Cooperation in the Maritime Sector in SASEC Program, which supports SLPA to materialize the system needs through interactions with stakeholders and to prepare for future studies.¹⁰

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¹⁰ ADB. 2019. *Technical Assistance for Advancing Cooperation in the Maritime Sector in SASEC Program*. Manila. (TA 9758-REG).

DESIGN AND MONITORING FRAMEWORK

Impact The most competitive and preferred ports and shipping destination in the region realized (Public investment Programme, 2016–2018) ^a		
Results Chain	Performance Indicators with Targets and Baselines	Achievements
Outcome Harmonized and balanced port development facilitated	By 2018: National Port Master Plan approved by the government (2015 baseline: 0)	Achieved. Master plan was approved by SLPA in July 2019.
Outputs 1. National port master plan finalized for approval 2. Technical review of the final design of PAEH submitted	By 2018: 1a. National port master plan submitted 1b. At least five workshops conducted By 2017: 2a. Review of final PAEH designs submitted	1a. Achieved. All reports were submitted by November 2018 for SLPA's endorsement. 1b. Achieved. Sixteen workshops were conducted, including the external ones: <ul style="list-style-type: none"> • Workshop for Inception Report on 1 February 2017 • Final stakeholders' workshop on 7 March 2019 • Workshop for Port Community System and Galle Yacht Marina studies on 6 November 2019 Achieved. Comprehensive reviews on PAEH designs were carried out on 14 March 2017, and Final report was submitted on 20 April 2017.
Actual Key Activities with Milestones		
1. National port master plan finalized for approval		
1.1 Recruited and mobilized consultants (November 2016). 1.2 Conducted first workshop on the draft national port master plan (February 2017). 1.3 Finalized the national port master plan (July 2019).		
2. Technical review of the final design of PAEH submitted		
2.1 Recruited and mobilized consultants (November 2016). 2.2 Reported technical advice on the final PAEH design to the committee (March 2017).		
Actual Inputs		
Asian Development Bank: \$1,500,000 (JFPR) Government: \$400,000 (estimated contribution from the government in the form of counterpart staff, office space, office supplies, and other in-kind contributions)		

JFPR = Japan Fund for Poverty Reduction, PAEH = port access elevated highway, SLPA = Sri Lanka Ports Authority.

^a Ministry of National Policies and Economic Affairs. 2016. *Public Investment Programme, 2016–2018*. Colombo.

Source: Asian Development Bank.

TECHNICAL ASSISTANCE COST

Table A2.1: Technical Assistance Cost by Activity
(\$'000)

Item	Amount ^a		
	Original ^b	Revised	Actual
1. Consultants	1,215.4	1,215.4	1,287.7
2. Equipment ^c	52.4	52.4	13.9
3. Training, seminars and/or conferences	24.0	24.0	48.7
4. Studies/Surveys	70.0	70.0	0.0
5. Contract Negotiations	0.0	6.0	3.9
6. Miscellaneous TA administration	10.0	10.0	0.0
7. Contingency	128.2	122.2	0.0
Total	1,500.0	1,500.0	1,354.2

TA = technical assistance.

^a Includes ADB-financed funds and/or ADB fully administered cofinanced funds.

^b Original estimated cost in the TA report.

^c Includes procurement of desktop computer, laptop computer, and printer, etc.

Source: Asian Development Bank.

Table A2.2: Technical Assistance Cost by Fund
(\$'000)

		JFPR
1.	Original ^a	1,500.0
2.	Revised	1,500.0
3.	Actual	1,354.2
4.	Unused	145.8

JFPR = Japan Fund for Poverty Reduction.

^a Original estimated cost in the TA report.

Source: Asian Development Bank.