



Completion Report

PUBLIC

Project Number: 47364-001
Technical Assistance Number: 8750
August 2022

Timor-Leste: Urban Services Improvement Sector Project

This document is being disclosed to the public in accordance with ADB's Access to Information Policy.

Asian Development Bank

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.

TECHNICAL ASSISTANCE COMPLETION REPORT

TA Number, Country, and Name: TA 8750-TIM: Urban Services Improvement Sector Project		Amount Approved: \$980,000.00	
		Revised Amount: \$1,480,000.00	
Executing Agency: Ministry of Public Works	Source of Funding: TASF-V, UEIF-UFPPF	Amount Undisbursed: \$30,647.31	Amount Used: \$1,449,352.69
TA Approval Date: 7 November 2014	TA Signing Date: 2 December 2014	TA Completion Date	
		Original Date: 30 June 2016	Latest Revised Date: 30 June 2018
		Financial Closing Date: 27 August 2018	Number of Extensions: 4
TA Type: Project preparatory TA			

Description

The government, through the Timor-Leste Strategic Development Plan (SDP) 2011–2030, committed to providing its entire urban population, including in the capital city of Dili, with a safe 24-hour water supply and other urban services by 2030.¹ The Dili Urban Water Supply Sector Project, which was funded by Asian Development Bank (ADB) and completed in September 2015, provided access to safe and reliable water supply services to about 12,000 residents of Dili by introducing improved hydraulic management practices through the establishment of five model district metered areas (DMA).² The project, however, only benefited 4.9% of the city's population and resulted in about 30% of Dili's residents to be legally connected to a water supply network. Outside of the project's established DMAs, majority of the residents connected to piped water system could access water for an average of only six hours daily.

To expand its water and other urban services development in Dili, the government requested ADB for a project preparatory technical assistance (TA) to prepare the Urban Services Improvement Sector Project (USISP), a project that was aimed at improving the health of Dili's urban population by improving access to safe, reliable piped water supplies, and thereby improving quality of life (footnote 1).

The project preparatory TA of \$1,480,000, funded by ADB's TASF-V of \$1,300,000³ and by Urban Environment Infrastructure Fund under the Urban Financing Partnership Facility (UEIF-UFPPF) with \$180,000 in grant, was approved on 7 November 2014.

Expected Impact, Outcome, and Outputs

The purpose of the project preparatory TA was to develop investment strategies to meet the water supply and solid waste management needs of Dili population over the period of 2015–2030, in line with the SDP targets. The investment strategies were to identify a range of appropriate options that are affordable, sustainable, and based on a comprehensive and participatory assessment of the urban water supply and solid waste management condition in Dili.

Specifically, the TA intended to (i) assist the National Directorate for Water Services (DNSA) to plan and prioritize investments to improve water supply services in Dili; (ii) assist the National Directorate for Basic Sanitation (DNSB) and Dili District Administration (DDA) to identify and prioritize investments to improve solid waste management in Dili; (iii) assess technical suitability, economic, financial and social viability, capacity and institutional issues, and environmental and social soundness of the project; and (iv) identify measures to strengthen project implementation capacity of DNSA, DNSB, and DDA.

The TA's outputs were: (i) an inception report covering the preparatory activities; (ii) an interim report on the water supply sector analysis; (iii) an interim report on solid waste sector analysis; (iv) a final report on feasibility and due diligence assessment; and (v) a final report on project implementation arrangements. These outputs were relevant to the preparation of the proposed loan and grant for USISP. Following the government's request, the TA had one additional output which is the development of a full water supply investment plan for Dili and the surrounding peri-urban

¹ Government of Timor-Leste. 2011. [Timor-Leste Strategic Development Plan, 2011–2030](#). Dili. Safe and reliable water refers to water that is safe for drinking.

² ADB. 2018. [Dili Urban Water Supply Sector Project: Completion Report](#). Manila.

³ Includes supplementary funding from TASF-V of \$500,000 to cover the change in scope approved on 10 December 2015.

areas of Tibar and Hera, since the last master plan was prepared in 2003 during the country's post-conflict reconstruction period when investments were largely focused on emergency works.⁴

Implementation Arrangements

The TA was administered by ADB through the Urban, Social Development, and Public Management Division of the Pacific Department (PARD),⁵ in close coordination with the Ministry of Public Works Transport and Communications (MPWTC), the executing agency, and the Ministry of State Administration, the implementing agency.

The TA planned to engage 25 person-months of international consultants and 18 person-months of national consultants, including (i) an international water supply specialist and a national water supply specialist to work solely on water supply component of the TA; (ii) one international project implementation specialist; and (iii) a consulting firm consisting of 13 international and national experts to cover social analysis, economic and financial feasibility, environmental and social safeguards due diligence, and procurement strategy for solid waste and water supply components. These consultants worked closely with MPWTC for overall TA implementation and deliver the project design.

At completion, a total of three international (8.7 person-months) and two national consultants (7.8 person-months) were mobilized individually, while 17 international experts (32.44 person-months) and four national experts (17 person-months) were mobilized under three separate consulting firms. The TA recruited the planned international water supply engineer (5.1 person-months) and national water supply engineer (5.9 person-months) to help design the water supply components of the future investment project. The TA also recruited, through quality- and cost-based selection (QCBS), a consulting firm with a team of eight international (18 person-months) and two national experts (13 person-months) that prepared the consolidated investment program and due diligence assessments and feasibility studies for priority investments. Another consulting firm with seven international consultants (11.94 person-months) and one national consultant (2 person-months) was recruited through QCBS with a lumpsum contract to prepare the water supply master plan for the Dili metropolitan area for the period of 2016–2030. The TA also engaged, through fixed budget selection with a lumpsum contract, a firm of two international experts (2.9 person-months) and one national expert (2 person-months) to conduct the contingent valuation study on households' and business' willingness-to-pay for improved water supply and solid waste services, which was used to support the preparation of the economic and financial analyses. Towards the closing of the TA, two international consultants (3.6 person-months) and one national consultant (1.9 person-months) were directly contracted to complement the water supply sector analysis and further develop the economic viability of the investment project and the detailed investment project implementation.

The TA was planned to be implemented from January 2015 to June 2016 but was completed only on 30 June 2018. The TA was extended four times, with a cumulative extension of 24 months. The TA closing date was first extended for seven months, from 30 June 2016 to 31 January 2017 as there were delays in engaging the consulting firm. It was again extended for five months until 30 June 2017 to give adequate time for completion of administrative and financial matters after the submission of the final draft Dili Metropolitan Area Water Supply Master Plan 2016–2030 (DMAWSMP). The third extension was approved on 31 December 2017 to incorporate the additional government's comments on (i) the final draft DMAWSMP, and (ii) complete the terms of reference of the feasibility study of the long-term water resource options and the water tariff review for the government. The last extension was for six months, from 31 December 2017 to 30 June 2018, to allow for the completion of the final outputs under the TA, which are the presentation of the DMAWSMP (in both English and Portuguese language), and the government's approval of the final consultant report.

Conduct of Activities

All activities under the original scope of the TA were successfully completed, including: (i) water supply and solid waste sector analyses for Dili; (ii) design of priority water supply and solid waste improvements in Dili, and completion of associated feasibility and due diligence assessments; (iii) household willingness to pay study for water supply and solid waste management services; and (iv) design of project management arrangements and implementation schedule for the proposed USISP. The original TA scope was to support project preparation to improve water supply in a few zones in the city, which was the approach under the Dili Urban Water Supply Sector Project (DUWSSP). However, the DUWSSP was not successful as there were illegal connections to zones not covered by the project. On 21 August 2015, the government requested to postpone the USISP and sought a more comprehensive approach to the water supply investments in Dili as a more desirable way to improve inclusion in water services (footnote 2). This new approach led to an additional request from the MPWTC to provide support for the development of the DMAWSMP. A

⁴ Government of Timor-Leste. 2017. *Dili Metropolitan Area Urban Water Supply Master Plan 2016-2030*. Dili.

⁵ The TA completion report preparation was transferred to Urban Development and Water Division of Southeast Asia Department (SERD) following the transfer of Timor-Leste's operations from Pacific Department to SERD on 18 September 2019.

minor change in TA scope and increase in TA amount of \$500,000 financed through TASF for this additional output was approved on 10 December 2015. The preparation of the DMAWSMP was delayed due to the need to carry out more detailed production and demand surveys. A minor change in TA scope was also approved on 10 December 2014 to include a study to collect data on households' and business' willingness-to-pay for improved water supply and solid waste services. The surveys were completed, and an assessment of investment options to improve water supply in Dili over the next 20 years was completed and submitted to ADB. The Dili water supply investment master plan was completed in December 2017. USISP was dropped but the TA's output (i.e., DMAWSMP) was used to prepare the Dili West Water Supply Project (DWWSP), which is proposed for Board consideration in September 2022.

Technical Assistance Assessment Ratings

Criterion	Assessment	Rating
Relevance	The government requested ADB's assistance for a project preparatory TA to prepare the Urban Services Improvement Sector Project, a project to support implementation of Timor-Leste's SDP 2011–2030 and improving the health of Dili's urban population by improving access to safe and reliable piped water supplies, and thereby improving quality of life (footnote 1). The TA was aligned with ADB's country partnership strategy 2016–2020, which supports the country's inclusive and sustainable growth through the improvement of water services in urban centers as a priority. ⁶ The TA design addressed the preparation of the subsequent investment project; however, the frequent changes in government and subsequent government priorities delayed the project approval. Despite the delays, the TA was relevant to build an investment project pipeline considering the country's needs and government concerns. The TA supported the ADB's expansion into the water sector, following the first sector investment to be financed through a loan in 2021. It supported a more thorough project preparation by the government. The TA activities also allowed to build the capacity of DNSA, DNSB, and DDA in terms of project design and preparation.	Relevant
Effectiveness	Since all the outputs under the TA were completed, the TA is considered effective. At the time of TA completion, there were delays in materializing the TA outputs into projects. Nonetheless, the TA was able to successfully support (i) the completion of the Dili solid waste investment strategy currently being implemented by DDA with TA support from ADB's Office of Public–Private Partnership (OPPP) and (ii) DWWSP processing through the DMAWSMP. Thus, two investment projects have been supported by the TA outputs.	Effective
Efficiency	Despite several extensions, the TA is rated efficient, with 98% utilization of funds allocated within budget and with four extensions to compensate for the government extended review time and additional TA output requests. The four extensions allowed the TA to complete all its activities and provided more time for thorough surveys and government detailed review. The government is currently implementing the Dili Solid Waste Management Project (DSWMP) as a result from the TA outputs and processing the DWWSP.	Efficient
Overall Assessment	This TA was instrumental in diversifying ADB's support in Timor-Leste by preparing a pipeline of investment projects in the water sector and facilitate the first engagement from OPPP with the government. The government appreciated and endorsed the studies, master plans, and recommendations prepared by the TA. It further incorporated elements of the TA activities and recommendations into the sector planning for the necessary water and urban services investments in Dili. Though all the TA outputs were completed, the complex country context including low capacity in government considerably delayed the implementation of the subsequent investment projects.	Successful
Sustainability	The impact of the TA will continue to benefit the sector throughout the implementation of the ongoing DSWMP and processing of DWWSP. Based on the TA recommendations, spending in the water sector in	Likely sustainable

⁶ ADB. 2016. *Timor-Leste Country Partnership Strategy, 2016–2020*. Manila

Criterion	Assessment	Rating
	Timor-Leste has increased substantially, from previously very low levels. Strong progress has been made in terms of project design and preparation and creating a future project pipeline in the water and urban services sector. The government budget for planning, design, and implementation of projects has increased. The implementation of the investment pipeline will require additional support over the coming years to be financed through the government infrastructure fund as well as similar TA support by ADB and other development partners.	

Lessons Learned and Recommendations

Design and/or planning	The TA design should have clear activities, outputs, and milestones to confirm the government commitment to subsequent investment loan projects. Future TAs should continue to fund all planning activities, given the considerable difficulties to mobilize government counterpart funds.
Implementation and/or delivery	The TA design should build in strategic flexibility and measures to mitigate the risks linked to changes in government leadership priorities. ADB can help strengthen continued government commitment to implement subsequent investment loan projects by applying a programmatic approach to the water sector.
Management of staff and consultants	Satisfactory and timely completion of the TA activities require prompt fielding of qualified consultants with relevant skills. In future TA implementation, staff and consultants should involve government counterparts at each step of the way to ensure that minimal time is required for the government review and endorsement of consultants' work.
Knowledge building	The government used the findings from the TA (e.g., prepare detailed water supply investment master plans at city level) to develop investment strategies and master plans for other cities in Timor-Leste. Some of the TA outputs (e.g., tariff review) also supported the ongoing water sector reform. It is recommended that future reports are translated into the local language to reach wider audiences.
Stakeholder participation	Strengthening government counterpart agencies ownership is crucial for the success of future TAs and projects. A strong coordination mechanism needs to be established between the government and development partners to ensure the success and sustainability of the water sector reforms.
Partnership	The UEIF-UFPF was instrumental to achieving the TA objectives in terms of supporting (i) sector work linked to urban environmental infrastructure investments, and (ii) project preparation for improving urban environmental water services.
Replication and/or scaling up	The government is committed to develop the water sector and other urban services using similar development assistance funding for project design and preparation.
Post-TA financial resource	OPPP, through the Asia Pacific Project Preparation Facility, is supporting the ongoing implementation of the DSWMP. The DWWSP processing is being supported by the Southeast Asia Facility for Resilient Cities (SFRC) TA facility. ADB's upcoming investment project in Timor-Leste water sector will also be supported through the SFRC.
Other lessons	Not applicable.

Follow-up Actions

In future project preparatory TAs, ADB should (i) have a more realistic timeline for the subsequent implementation of the investment loan projects; (ii) include clear milestones for each stage considering the necessary time for the government review; (iii) promote clear high-level dialogue on the government priorities, investment proposals, and capacity development requirements for its implementation; and (iv) build on this TA's findings to design future TA support, both in terms of new investment loan projects and institutional strengthening.

Prepared by: Tiago Ribeiro

Designation and Division: Urban Development Specialist, Urban Development and Water Division, Southeast Asia Department

TECHNICAL ASSISTANCE COST

Table A1.1: Technical Assistance Cost by Activity
(\$'000)

Item	Amount		
	Original ^a	Revised ^b	Actual
1. Consultants	803.0	1,195.0	1,338.0
2. Equipment	-	5.0	4.2
3. Training, seminars and/or conferences	10.0	32.0	23.0
4. Surveys	45.0	107.0	83.0
5. Miscellaneous TA administration	30.0	30.0	0.8
6. Pilot testing	-	-	-
7. Contingency	92.0	111.0	-
Total	980.0	1,480.0	1,449.0

^a Includes ADB's Technical Assistance Fund (TASF) and cofinancing from Urban Environment Infrastructure Fund under the Urban Financing Partnership Facility.

^b Supplementary funding under ADB's TASF-V amounting to \$500,000 was approved on 10 December 2015.
Source: Asian Development Bank estimates.

Table A1.2: Technical Assistance Cost by Fund
(\$'000)

	TASF-V	UEIF-UFPF	Total Cost
1. Original	800.00	180.00	980.00
2. Revised ^a	1,300.00	180.00	1,480.00
3. Actual	1,269.00	180.00	1,449.00
4. Unused	31.00	0.00	31.00

TASF = Technical Assistance Special Fund, UEIF = Urban Environment Infrastructure Fund under the Urban Financing Partnership Facility.

^a An increase of \$500,000 under TASF-V was approved on 10 December 2015 to cover the development of a full water supply investment master plan for Dili.
Source: Asian Development Bank estimates.