



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

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BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Timor-Leste	EAST ASIA AND PACIFIC	P176687	
Project Name	Dili Water Supply Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Water	Investment Project Financing	4/4/2022	5/11/2022
Borrower(s)	Implementing Agency(ies)		
Ministry of Public Works, Ministry of Finance	BTL Empresa Publica		

Proposed Development Objective

To increase the usage of cleaner and more reliable piped water supported and to improve the operational performance of the water utility in the project area.

Financing (in USD Million)	Amount
Total Project Cost	95.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The project will support the implementation of the Government’s Sector Investment Plan (SIP), comprising major infrastructure development and institutional strengthening. The project aims at building the infrastructure and strengthening institutions to increase access to and quality of drinking water services in the Eastern zone of the Dili Metropolitan Area (DMA), and increase resilience of the services to climate change. More specifically, the project will finance the development, upgrading and expansion of the existing water supply system in the Eastern part of the Dili Metropolitan Area to provide 24/7 services including at times of peak demand, ensure that water quality meets the GoTL standard for human consumption, increase the pressure between 10-60m depending on the geographic locations and increase the revenues of BTL. The expected number of customers in Dili Metropolitan area will increase



from estimated 18,000 in 2021 to 45,000 in 2030 in which one third are located in the Eastern part of DMA. The project will also strengthen the capacity of the newly established national public water utility BTL to improve service delivery and long-term sustainability and resilience of the infrastructures in collaboration with other technical and financing partners. More specifically, The project will support institutional development and strengthening activities to ensure the sustainability and resilience of water supply infrastructure, including inter alia the supervision of construction and the provision of technical assistance, capacity building, training, and goods.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The project is in East Dili of Timor-Leste. Dili lies between the sea and foot of mountains on northern coast of Timor island north of Australia. The main water resources in Dili are the Comoro River and its tributaries, and the Dili aquifer, mainly recharged by the Comoro River. Discharge of the Comoro River is considered to be less reliable and, therefore, in-stream storage on Comoro River may not be sufficient to secure Dili's long-term water supply. Dili Aquifer is the source of groundwater for Dili and extends approximately 9 km east to west and 3 km north to south on the northern coast.

Timor-Leste's climate is affected by West Pacific Monsoon bringing a switch from very dry to very wet conditions. Year to year variations in Timor-Leste's climate are due to El Niño events bringing drier conditions to Dili, and La Niña events, where dry season rainfall tends to be above normal. Three key impacts of climate change to Dili water resources include, among others, impact of rising sea water level leading to potential saltwater intrusion. Based on data from four groundwater monitoring wells, there is indication of saltwater intrusion from two wells. Detailed data analysis on groundwater quality on other potential pollution sources is limited, although records dating from year 2000 in general indicate the quality are within the National Standard.

The population background ethnicity mostly Timorese and Atonese with minorities of Portuguese, Eurasians, and Arab Muslims. Timor-Leste (East Timor) has many spoken languages reflecting past migration, colonialism and other occupation. Tetun and Portuguese languages have been given official status, with Indonesian and English considered working languages. Another fifteen or more indigenous languages also are spoken. The Tetun people and language is the largest group accounting for approximately 25% of the population living around Dili, Suai and Viqueque. Mambae is the second largest group 10% of population and are found in the central mountains. Other groups include the Kemak, Bunak and Fataluku amongst others, each accounting for 5% or less.

Unsafe water and inadequate hygiene are two of the main causes of poor health in Timor-Leste and the primary causes of diarrhea and child malnutrition. In addition, poor hygiene is exacerbating the negative health impacts caused by the lack of access to safe and reliable water supply. In 2017, although 93 percent (WHO-UNICEF, 2017) of the urban population had access to improved water supply, only 47 percent among the urban dwellers had individual connections with piped water in their premises. There is a significant portion of the Dili population that either does not have access to the piped water supply or receives an intermittent supply of less than 6 hours per day. The distribution network is in poor condition with 70% leakage and 50% of illegal connections. Water tariffs for urban areas have been established by the Minister of Finance at around US\$7.54/household/month in Dili but only around 27% of Dili Urban Water Supply connections are registered and billed.



Component 1 will finance construction of three procurement packages: rehabilitation of existing water infrastructure with new water reservoirs and distribution networks. Component 2 will support institutional development and strengthening activities to ensure the sustainability of water supply infrastructures financed under Component 1, including supervision of construction, technical assistance, capacity building for the implementing agency (BTL), preparation of a rolling five-year Sustainability Improvement Plan on appropriate institutional, regulatory, and financial arrangements for fecal sludge management. The project will also support groundwater monitoring, options analysis for water supply that go beyond 2030 and demands management.

D. 2. Borrower's Institutional Capacity

The Ministry of Public Works (MOP) will be the Executing Agency while "Bee Timor-Leste Empresa Publico" (BTL) will be the Project Implementing Entity in charge of planning, procurement, contract administration, financial management, supervision of environmental and social (E&S) risk management and monitoring. BTL was established through Decree Law (DL) 41 which was enacted on 25 September 2020 as a public company endowed with legal personality, judicial capacity, administrative autonomy, financial autonomy and its own assets. BTL mandates include to ensure public water supply; guarantee public sanitation; promote continuous improvement in water quality; establish control measures to eliminate illegal connections and dumping to water supply and sanitation systems; promote the efficient use of water; promote research and other activities regarding the water cycle; and support the Government of Timor-Leste in defining water and sanitation policy, attracting financial resources for the sector, and designing legislative proposals for the sector.

BTL is replacing the Department General of Water and Sanitation (DGAS) of MPW which was dissolved on December 31, 2020. The first employees of BTL were previously the staff and officials of DGAS, and have been appointed to key management positions in BTL. DGAS was the implementing agency of Timor-Leste Water Supply and Sanitation Project (P167901) which was approved by the Board in April 2020 as the first project in Timor-Leste applying ESF. The preparation of the first ESF project has exposed DGAS and BTL to ESF requirements, however, limited capacity on preparing, implementing and monitoring the application of the ESF is expected. BTL assigned two focal points to manage environmental and social risks issues with support from environmental and social consultants who are part of the consultancy firm that prepared Detailed Engineering Design.

The BTL business plan, currently under development with support from the World Bank, listed seven strategic goals to tackle priority challenges and opportunity areas in water supply and sanitation sector include establishing the BTL organization with newly recruited, talented, capable and well-trained staff by the end of 2021. Since its establishment in September 2020, BTL's staff count has increased to 71 as of June 2021. BTL's organization is functionally structured into two levels: national and municipal staff. National staff, based in BTL's headquarters in Dili, are responsible for the corporate, strategic and programmatic functions of BTL. Municipal staff, based in branch offices located in various municipalities, are responsible for local and day-to-day operations of sub-systems.

BTL has assigned two focal points to manage the environmental and social risks under the project. The assigned focal points have attended 5 days virtual ESF training organized by ESF ISU Unit at end of June 2021. These focal points are supported by environmental and social consultants under the DED consultancy firm. Institutional capacity assessment will be undertaken as part of the project preparation to identify the gaps and agree on the capacity enhancement measures on Environmental and Social Risk management. The capacity building program will be developed throughout the project cycle and implemented as part of Component 3 on Project Management. Component 2 of the project will strengthen BTL's capacity, systems, and procedures to manage, operate, and maintain the new water



supply system in a technically and financially sustainable way, including aspect of customer service and satisfaction. Detailed information will be presented in the appraisal ESRS.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Substantial

Environmental Risk Rating

Substantial

The environmental risk rating is substantial and will be revisited during project preparation. The substantial risk is primarily due to unconfirmed storage and recharge capacities of groundwater resources in East Dili and presence of associated facilities with regards to ADB investments in West Dili. Although the project will not invest in new groundwater resources and the design will ensure safe withdrawal of groundwater until 2030, there is the risk of potential adverse and irreversible impacts on the groundwater resources in the longer term. The Pre-Feasibility study for Dili Water Supply recommends to further study in detail the groundwater resources including obtaining additional data to develop a more accurate modelling on the groundwater characteristics. The project intends to support BTL for the longer-term sustainability of water supply and quality through an options assessment of water resources, monitoring of groundwater resources and water demand management. The proposed investments are expected to providing safe, reliable 24/7, and affordable water supply to people of east Dili up to year 2030. Improved water supply services will translate into better living standards, notably because of reduced health hazards. The physical investment of the water infrastructure is of medium scale. The preliminary design indicate the project will cover a total of three procurement packages. The project will include rehabilitation to groundwater pumping stations and transmission mains, new rising mains, increased reservoir capacities and new reservoirs, new pipe networks, new water treatment plants and relocation, and upgrades to existing surface water intakes. Expansion of reservoirs capacity will be prioritized inside the existing footprint of the existing tanks or close to them. Raw water will be supplied from existing boreholes located in urban areas and from existing surface waters located in the southern part of Dili at the foot of the mountains. The project will not involve development of new water sources. New transmission mains will mostly follow existing roads and/or other public right of way while expansion of new water distribution networks will be constructed within the housing grids. Construction works are expected to mainly affect human settlement areas and infrastructure footprint in an urban context. Environmental impacts during construction will include disposal of construction wastes and hazardous wastes; increased noise, fugitive dust and mobile emissions; soil erosion and runoff from excavations and disposal of spoils; traffic safety risks; and mobility disruptions. These construction related impacts are site specific and expected to be temporary and/or reversible, which can be mitigated onsite in a predictable manner through engineering designs, environmental management and mitigation plans which are currently being prepared as part of the DED, as well as applying standard operating procedures or codes of practices during construction. BTL is the implementing agency and it is committed to apply the ESF through assigning three of its staff to participate in the ESF training held by the World Bank ESF ISU end of June 2021 and appointed two of the three staff as environmental and social focal points to support project preparation. BTL staff also have some experience with preparing ESF documents for the Timor-Leste (Baucau) water supply project that was already approved by the Bank Board where effectiveness is being extended due to establishment of the new implementing agency (BTL). BTL does not yet have experience in applying the ESF requirements during project implementation, hence ESF capacity building for BTL personnel will be important as the project materializes.



Social Risk Rating

Substantial

The social risk rating is Substantial & will be revisited at appraisal following finalization of project design. Project is expected to bring positive outcomes to community through increased access to & quality of drinking water in East Dili. Improved access to potable water is expected to reduce likelihood of outbreaks of infectious water-related diseases, & will have positive repercussions on overall wellbeing of people living in congested urban locations. Project will contribute to multiple benefits on health, productivity & income, mortality rates, educational attainment, & time & opportunity costs—particularly for women, small children, vulnerable populations, & on reducing stunting. People will save time from not queuing at public water points or sanitation facilities, being ill, or having to take care of someone sick due to water & sanitation-related illnesses, thereby increasing time spent at school or on productive activities. Project will also contribute to increase economic outputs & job creation in sectors dependent on clean water supply. Social risk takes into account potential issues related to land acquisition, management of local expectations around employment opportunities especially in civil works during construction, perceived or actual risk of exclusion of vulnerable groups from project benefits, lack of meaningful engagement & consultation with communities, particularly vulnerable groups such as women, elderly, minorities, poor people living in low-income settlements. GoTL has completed institutional framework reform of water & sanitation sector. There is potential social risk related to discontentment about sector reforms including lack of willingness to pay & affordability concerns of local people which will be further assessed during project preparation. Project will support GoTL reform by strengthening sector institutions & supporting BTL to design & implement a citizen engagement plan to inform stakeholders about reform objectives, BTL’s business plan, & to get feedback from beneficiaries to improve BTL processes to deliver better services. Limited experience of BTL in stakeholders engagement to manage social risk may have significant effects on ability to mitigate project risks & impacts. Land taking impacts would generally be site-specific with land size of 2,200-3,500 m². Approximately 16 households are identified as potentially affected households to fulfill land requirements for investments funded by WB. This data will be further confirmed during preparation based on final detailed design. Project will utilize and/or optimize existing water resources, some of which were built in 1950’s & some others in 1990’s. As such, restriction to use of natural resources due to project activities is not anticipated. Key risks during construction of new and/or rehabilitation of existing transmission/distribution lines include disruption to businesses & social infrastructures, potential economic displacement & livelihood losses, disruption of water supply for business/residentials. Site specific & temporary impacts from construction activities such as increased fugitive dust & noise, obstruction to pedestrian, increased traffic congestion due to road obstructed by excavation works & materials, disturbance to physical or social infrastructures such as government buildings, schools, medical services, etc., will also need to be mitigated. Project may also involve moderate influx of workers to serve construction activities. Skilled workers such as engineers are likely to be hired from overseas while unskilled workers are expected to be sourced from Dili & other parts of country. At operation, community health & safety risks are associated with capacity of BTL to manage raw water withdrawals, which if not properly managed, may lead to unsustainable water supply for e community. Overall, majority of risks & impacts are expected to be temporary, predictable & could be managed through appropriate mitigation.

Public Disclosure

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts



Overview of the relevance of the Standard for the Project:

ESS1 is relevant as project activities have potential to cause environmental and social impacts. Storage and recharge capacities of groundwater resources located in east Dili is unconfirmed at this stage which may lead to potential adverse and irreversible impacts on water resources in longer term. To address this issue, project will support groundwater monitoring, options analysis for water supply beyond 2030 and water demand management.

Component 1 will finance construction of three procurement packages: (1) Pressure Zone (PZ) Becusi - rehabilitation to groundwater pumping stations, new rising mains, increased capacity of Becusi Reservoir (5,300 m³) and new pipe network in Bidau and Cristo Rei areas; (2) PZs Culau and Benamauk – rehabilitation to ground water pumping station, new rising mains and increased capacity of Culau reservoir (1,500 m³), upgrades to Benemauk intake, transmission main, new Benamauk Water Treatment Plants (WTP) and increased capacity of Benamauk reservoir (1,400 m³), and new pipe network; and (3) PZs Cristal, Lahane and Nahaek – rehabilitation to ground water pumping stations, new rising mains, new Cristal reservoir (6,100 m³), new Lahane Reservoir (1,700 m³), increased capacity of Nahaek Reservoir (700m³), and new pipe network, Upgrades to existing surface water intakes at Mutudare, Lakoto and Nahaek, transmission main and WTP relocation from Bemos. Rehabilitation and upgrades intend to enhance operating conditions of infrastructure built in Portuguese colonial era. New water infrastructure will be invested mostly in urban and peri-urban areas.

During construction, potential environmental impacts may occur as result of disposal of construction wastes and hazardous wastes; increased noise, fugitive dust and mobile emissions; soil erosion and runoff from excavations and disposal of spoils; increased traffic and mobility disruptions; and impacts to groundwater quality due to potential salt water intrusion in dry season. There is also potential contamination to groundwater aquifer during operation from salt water intrusion and from increased wastewater volumes as result of project. Development of a rolling five-year Sustainability Improvement Plan for fecal sludge management under Component 2 will seek to address some aspects of increased wastewater volumes. Before Board approval, TOR for most critical TA activities under Component 2 will be prepared, reviewed and cleared by the Bank to ensure ESF requirements are appropriately addressed.

Anticipated social risks include site specific land taking impacts, inadequate/improper consultations with local people, perceived or actual risk of exclusion of vulnerable groups from project benefits, and potential lack of willingness to pay and affordability concerns of local people. In addition, temporary impacts resulted from construction activities are expected include disruption of water supply for business/residential, increased fugitive dust and noise, obstruction to pedestrian, increased traffic and disturbance to physical or social infrastructures. Moderate influx of workers are expected to serve construction activities. Initial findings of social screening by GoTL consultants indicated no presence of Indigenous Peoples as per ESS 7 in Dili. This will be further confirmed though environmental and social assessment. Project will utilize existing water resources, some of which have been operated since Portuguese era, back in 1950's. As such, restriction to use of natural resources due to project activities is not anticipated. This will need to be confirmed as part of environmental and social studies to be undertaken during preparation. Although new transmission mains will mostly follow existing roads and/or other public right of way and upgrading and/or expansion of water distribution networks will be constructed within housing grids, expansion of water infrastructure may require permanent or temporary physical or economic displacement that will be addressed specifically under ESS5.

The World Bank will finance east Dili Water Supply Project while ADB will support development of west Dili water project. Two existing boreholes in the west will be rehabilitated by ADB and together with six other boreholes



rehabilitated in east will supply water to new Cristal Reservoir located in east, and a water treatment plant in west will be dismantled by ADB and parts of the plant will be installed in east. These two activities satisfy three criteria for associated facilities: i) directly and significantly related to project; ii) carried out contemporaneously with project; and iii) necessary for project to be viable and would not have been constructed, expanded or conducted if project did not exist. Precise scope of associated facilities based on final DED will be further assessed during project preparation. ESS will apply to associated facilities and addressed in ES instruments currently being prepared by BTL. During project preparation, the Bank team continues to support BTL in harmonizing ES instruments to clearly define project boundaries and ESF scope of application for activities.

The Bank joined the operation after GoTL had already approached ADB. With support from ADB, Detail Engineering Design (DED) and E&S instruments are currently being prepared. GoTL has awarded a foreign consultancy firm to undertake DED, which includes preparation of Environmental and Social Assessment (ESA) and Environmental and Social Management Plan (ESMP) for each of the three procurement packages under project. Terms of reference (ToR) for ESA and ESMP had already been developed based on requirement of GoTL and ADB's safeguards and include: screening, scoping and risk categorization, environmental baseline (ambient air, noise, water, soil, natural and critical habitats, physical cultural resources, sensitive receptors), environmental assessment, indirect/induced and cumulative impacts, mitigation measures for all identified impacts including community environmental health and safety and traffic impacts, climate change, watershed/source management plan, environmental management and monitoring plan, responsible parties for implementing and supervising mitigation measures. ESA will also cover potential social impacts including reviewing and risk assessment on land acquisition options and likely involuntary resettlement in consultation with affected persons and other key stakeholders, determining any ongoing land disputes on sites to be acquired, existing sacred sites, outstanding land issues and feedback from relevant stakeholders including directly and indirectly affected persons and CSOs/NGOs; and estimating resources and actions required to implement mitigation measures.

While ADB safeguards requirements on environmental and social risk management share common principles of the World Bank ESF, ESF also calls for addressing risks to labor, risk to ecosystem services, occupational health and safety, sexual exploitation and abuse/sexual harassment (SEA/SH) and stakeholder engagement as well as incorporating risks of water sustainability and quality in assessment. Preparation of ESA and ESMP has not yet started due to Covid-19 restrictions on mobilizing foreign experts to project site and it cannot be confirmed at this stage expected date on completing ESA and ESMP. Expected date for completing ESA and ESMP will be further updated closer to appraisal. GoTL is anticipating to prepare one ESA-ESMP document and one environmental licensing for each of three procurement packages. The World Bank is supporting BTL and consultant to incorporate ESF into harmonized ESA-ESMP, which will include groundwater balance analysis, potential cumulative impacts in project's area of influence and associated facilities. In addition to harmonized ESA-ESMP, other E&S instruments will also be prepared such as labor management procedure, occupational health and safety, SEA/SH action plan and stakeholder engagement plan.

Areas where "Use of Borrower Framework" is being considered:

N/A

ESS10 Stakeholder Engagement and Information Disclosure

ESS10 is relevant. The project acknowledge the importance of meaningful stakeholder consultations and will support the water service provider to carry out extensive consultations with sector stakeholders throughout the project



preparation and implementation. It is noted that the GoTL has completed the institutional framework reform of the water and sanitation sector. The project will support the GoTL to implement the reform, mainly by strengthening sector institutions and provide support to BTL to design and implement a citizen engagement plan to inform the stakeholders about the reform objectives and in particular on the vision, mission, and the business plan of BTL and also get feedback from the beneficiaries to improve BTL processes to deliver better services. The social outreach, stakeholder engagement, and communication plans will help to manage the expectations and reduce potential misinformation and grievances.

Based on the initial analysis, the potential main stakeholders would include (i) central governmental agencies include Ministry of Public Works, BTL, National Directorate of Lands, Properties and Cadastral Services); (ii) international organizations such as ADB and NGOs operating in Dili; and (iii) local stakeholders in Dili including the potentially affected people either through land acquisition and/or construction , project beneficiaries, owners of water sources, municipality/local authority, and project workers. Stakeholder identification including the potentially vulnerable groups such as those living in informal settlements and the poorer social segments of the Dili municipality will be conducted in the early phase of the project preparation. The assessment will also inform the stakeholders' engagement needs and constraints and formulate a strategy for meaningful engagement and consultation to ensure that the project benefits the most disadvantaged. An appropriate targeting approach would be developed for the inclusion of the poorer, disadvantaged, and vulnerable households so they could benefit from the project, fully informed about the project opportunities and participate in planning and rehabilitation and/or upgrading of water infrastructure facilities and services. The project also plans to develop and implement a gender action plan to provide opportunities for women to get involved in the project. Stakeholder engagement will be a reiterative process throughout the project preparation to seek inputs from stakeholders to project design. Modality of the community consultations will consider prevention of spreading Covid-19 and the WB's guidance note on stakeholder engagement under Covid-19 will be adhered to.

BTL will prepare, consult, and disclose a Stakeholder Engagement Plan (SEP) to map out the various project stakeholders and develop a strategy on how to engage with them, share project information, potential social impacts, risks and benefits, and solicit feedback on the project. It will cover stakeholder engagement on Associated Facilities. The SEP will also summarize the stakeholder engagement conducted during preparation, inputs received and how they are incorporated in the project design, and guide the project's engagement with key stakeholders during project implementation. The SEP will outline (i) who the potential key stakeholders are; (ii) how they are to be engaged; (iii) how often the engagement will occur throughout the project, and how disclosure will take place throughout the project; (d) how grievances and feedback will be solicited, recorded and monitored over the project; (iv) responsible parties for this engagement; (v) timeline and cost.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

ESS2 is relevant. The Project will employ direct workers, contracted workers and primary supply workers while at this stage, community workers are not considered relevant. The contractors are likely to mobilize skilled workers from abroad and unskilled workers from local areas with the estimate number of workers yet to be confirmed. Considering



the scale of the project, moderate rate of labor influx is expected. On-site workers' camps may be established to accommodate foreign and other workers brought from other parts of the country. In October 2019, the government released an analytical report on the findings of its 2016 National Child Labor Survey citing that children in Timor-Leste engage in the worst forms of child labor, including dangerous tasks in agriculture and industry such as construction. Potential risks of forced/child labor associated with the project will be assessed during preparation and relevant mitigation measures will be developed in Labor Management Procedures (LMP).

Timor-Leste has in place a legal framework for labor and working conditions (the 2012 labor code). It has also ratified the following ILO fundamental conventions, including Forced Labor Convention (C029); Freedom of Association and Protection of the Right to Organize Convention (C087); Right to Organize and Collective Bargaining Convention (C098); Equal Remuneration Convention (C100); Discrimination Convention (C111); and Worst Form of Child Labor Convention (C182).

Occupational Health and Safety (OHS) risks may be significant due to nature of civil works, involving heavy equipment used for soil excavation and laying down the transmission mains and distribution pipelines. Potential spread of Covid-19 amongst the workers and to the local communities would need to be monitored throughout project construction. The project will develop LMP to guide the overall management of labor in compliance with the national laws and ESS2. In order to ensure that the project promotes safety of women, and to avoid that beneficiaries become targets of sexual harassment or assault, the LMP will include a code of conduct, and both labor GRM as well as the overall project GRM will include specific grievance channels, to be managed by trained personnel, for potential complaints related to gender based violence (GBV) or sexual exploitation and abuse (SEA). Civil Works Contractors will be required to have written contract incorporating a code of conduct with all Contracted Workers they hire, including through sub-contractors. Relevant OHS measures will be integrated in the project's ESMP as well as Contractor- ESMP (CESMP).

ESS3 Resource Efficiency and Pollution Prevention and Management

ESS3 is relevant. The project involves potentially significant use of water resources and should apply the resource efficiency requirements of ESS3. The main source used for water supply in Dili is surface water diverted from the Comoro River, even though mostly extracted as groundwater in its downstream reaches. Based on the Pre-Feasibility Study on groundwater assessment, safe yield is estimated by adding the volumes of water in the aquifer that can be safely extracted with the amount of water flowing in and out through the aquifer based on variations of static groundwater levels and the geological conditions and characteristics of the aquifer in the East area. The safe yield for the dry season is estimated at 1.92 MCM/month, and considering the worst-case scenario, 50% of the safe yield is recommended, hence 0.96 MCM/month which is higher than the present total discharged rate of wells in East area of about 0.7 MCM/month. Twenty-six public boreholes currently exist, 11 of which are located in East Dili. These 11 boreholes withdraw a total of 0.7 MCM per month from deep aquifers. Based on forecasts prepared by the groundwater assessment, the proposed investments will ensure adequate water supply for Dili until 2030. Sustainable water supply and quality for the longer-term will be supported by the project through an options assessment of water resources that covers cumulative impacts, monitoring of groundwater resources network and water demand management, which would also include preparing a regulatory framework on groundwater use and development for the country.



The potential greenhouse gas (GHG) emissions from a non-heating water supply system such as under this project is not significant when compared to primary sources of GHG emissions such as energy production, transportation, and manufacturing (the water industry in the UK contributes to 0.8% of GHG emissions). The project design will improve energy efficiency by rehabilitating underperforming existing wells to operate as intended. The water distribution from reservoirs to house connections is designed as gravity-based which supports efficient and sustainable use of energy.

The finalization of the DED and subsequent studies on groundwater resources that are currently being prepared will inform the ESA and ESMP process for the project. In addition, under Component 2, the technical assistance on preparation of a five year roll out sustainability plan will contribute to water conservation by identifying opportunities for improvements in water use efficiency and improved community health by improving quality of supply. Potential pollution will come from disposal of construction wastes (scrap metal, used timber, rubble, debris), spoils, domestic waste (refuse, wastewater), and hazardous wastes (paints, solvents, used fuel, used chemicals). A government designated landfill site is located in Tibar, around 25 km west of Dili City that will be used to dispose construction waste. Currently, there is no designated hazardous waste disposal site in the country. The ESA will assess the potential impacts of construction wastes and inform the ESMP on the requirements for appropriate waste disposal practices for mitigating and preventing contamination from the mentioned sources. Waste management and pollution mitigation measures will be further addressed in the waste management procedures under the Contractor ESMP (CESMP).

ESS4 Community Health and Safety

ESS4 is relevant given that various project activities may expose communities to health and safety risks. The project will involve civil works, with potential need for labor may be sourced internationally and/or locally from the capital Dili and other districts. Potential risks and impacts to community health and safety will include temporary increased noise, fugitive dust, mobile emissions, traffic safety, mobility disruptions, and influx of labor during the construction phase. These impacts will be assessed under the preparation of the ESA and mitigated using the ESMP. The contractors will be required to develop Contractor- ESMP (CESMP) which will include a site specific Emergency Response Plan (ERP), OHS guidelines, mitigation plans for reducing noise and fugitive dust, and also traffic management plan to mitigate potential disruptions to mobility. The requirements for implementing the ESMP and preparing the CESMP will be specified in the contractor agreement and bidding documents. These include management of health and safety risks associated with interactions between the construction workers with the local communities on risks of SEA/SH and increased sexually transmitted diseases, and potential spread of Covid-19, including for Associated Facilities. The project will develop and implement SEA/SH action plan to mitigate these potential issue and relevant caveats and measures related to prevention of Covid-19 will be implemented. ESMP/CESMP may also include impacts to household hygiene and health that may be caused by temporary suspension of water services during construction, and include recommendations to address these issues, such as timing construction works to minimize water supply disruptions, monitoring of community health and safety.

The engagement of security personnel in the project area during construction and operation will be confirmed and assessed for risks during project preparation. The result of the risk assessment will inform appropriate mitigation measures which will be set out in the LMP and to be applied during project implementation.



At operation stage, if the project does not adequately manage the withdrawal of raw water as described in ESS3, potential risks on the provisioning services of the water resources system might materialize, which may lead to unsustainable water supply for the community. Community health and safety risks during operational phase will also be assessed in the ESA process and mitigation measures including capacity/ institutional development will be addressed in the ESMP and ESCP. Overall, the project will contribute to community health and safety improving access to water and quality of water and monitoring activities securing water supply for the people of Dili.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is relevant. The project is expected to require land for construction of the new water infrastructure, as well as improvement and expansion of the water reservoir capacities and extension of distribution pipelines. In addition, there are also potential impacts during construction/ civil works such as temporary access restriction, economic displacement of temporary disclosure of businesses, etc. The size of the affected land for the investment would range between 2.200 – 3.500 M2 depending on the technical parameters of the infrastructure. Initial data from the project consultant informed that 16 households are potentially affected by the project land acquisition which will need to be reconfirmed and verified upon confirmation of the Detailed Engineering Design (DED), currently expected to be finalized by October 2021. The GoTL has hired a consultancy firm to develop a Land Acquisition and Resettlement Action Plan (LARAP) for the investment in accordance with the ADB SPS. It is confirmed that land donation is not allowed under the Project. The WB team has initiated a discussion with the consultant and agreed that the LARAP for the investment funded by the WB will be developed in accordance with ESS5. The LARAP draft is expected to be ready by appraisal and will be finalized during project implementation. The document will be subject to WB review and clearance prior to implementation. Construction activities will be commenced only if the identified affected peoples have received the compensation and other measures stipulated in the LARAP document.

Restriction on land use and other natural resources is not anticipated since the project will utilize the existing water resources, some of which have been operated since 1950's. Based on the information available to date, no particular groups have claimed these water resources as their sacred sites or associated with their traditional/ cultural practices. This will be confirmed through the environmental and social assessment during project preparation. In case that the project will cause any restriction of access to the water resources, appropriate mitigation measures will be developed and agreed with the potentially affected people.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS6 is currently assessed as relevant given precise locations of the new reservoirs, water treatment plants and water distribution networks are not yet identified which will be further confirmed through the DED and ESA-ESMP studies. The Cristo Rei area located around 10-15 km to the east of Dili Municipality is designated as a protected coastal and marine area under national government and is identified as a key biodiversity area by the Integrated Biodiversity Management Tool (IBAT). It includes a limited coastal embayment including extensive shallow mudflats and sea-grass beds, limited mangrove, rock platforms and beaches. This area is part of a network of coastal wetlands that includes the Tibar, Tasitolu, Hera and Metinaro areas, which are characterized by extensive mudflat and mangrove habitats. The preliminary design does not indicate that new construction will take place in this protected coastal area. Civil works will be primarily located in urban and peri-urban areas of Dili Municipality, where new reservoirs will be



located to the south of Dili at the foot of the mountains that is most likely of modified habitats (agricultural pastures) and open areas already accessed by the community. Assessment of potential impacts to modified, natural and/or critical habitats, and species of concern will be undertaken through the ESA-ESMP process in accordance with ESS6 requirements. Mitigation plans and procedures will be appropriately outlined in the ESMP on land clearing procedures and rapid assessment on modified habitats.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Applicability of ESS7 is to be determined and confirmed in the appraisal ESRS. Although the population in the project area has diverse ethnic background, the presence of Indigenous Peoples as per ESS7. is not anticipated in the project footprints since it is located in an urban setting. No particular groups have claimed the water resources to be utilized by the Project as their sacred sites or associated with their traditional/ cultural practices. This will need to be further confirmed at appraisal based on environmental and social scoping studies and/or ESA for the project.

ESS8 Cultural Heritage

The presence and finding of cultural resources is considered unlikely in Dili City. However, considering that the project will involve soil excavation, a chance find procedure will be included in the ESMP. Disturbance to historic buildings along the pipeline distribution during construction may occur. However, the lay out of the pipeline has been designed to minimize the potential risks of damage to such facilities. Screening for cultural resources (tangible and intangible) will be carried out at preparation stage. Should any cultural resources be identified by chance at any stage of the project preparation or implementation, its handling will be managed as per requirements of ESS8.

ESS9 Financial Intermediaries

N/A

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways No

OP 7.60 Projects in Disputed Areas No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

N/A

Public Disclosure



B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

Preparation of ESCP, SEP, LMP, three documents of ESA-ESMP, and draft of LARAP.

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

- Appointment of qualified environmental and social experts assigned at the project management level.
- Finalization of Land Acquisition and Resettlement Action Plans (LARAP), subject to WB’s review and clearance.
- Implementation of LARAP prior to construction.
- SEA/SH action plan.
- Construction Environmental and Social management plan (CESMP).
- Setting up and maintaining an operational Feedback and Grievance Redress Mechanism (FGRM).
- Prepare and implementation of an IPPF and/or site-specific IPPs if, during preparation or implementation, ESS7’s relevance is determined.
- Capacity building/training plan on environmental and social risk management.
- Monitoring and reporting arrangements on environmental, social, health and safety performance.

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

02-Feb-2022

IV. CONTACT POINTS

World Bank

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Borrower/Client/Recipient

Borrower: Ministry of Public Works

Borrower: Ministry of Finance

Implementing Agency(ies)

Implementing Agency: BTL Empresa Publica

Public Disclosure



V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

Task Team Leader(s):	IJsbrand Harko de Jong, Christophe Prevost
Practice Manager (ENR/Social)	Ann Jeannette Glauber Recommended on 21-Sep-2021 at 08:35:33 GMT-04:00
Safeguards Advisor ESSA	Nina Chee (SAESSA) Cleared on 21-Sep-2021 at 16:36:55 GMT-04:00