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INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 37.1 MILLION
(US\$50 MILLION EQUIVALENT)

TO THE

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

FOR A

HEALTHCARE ACTION THROUGH RAPID INFRASTRUCTURE IMPROVEMENTS
("HARI'I") PROJECT

March 13, 2023

Health, Nutrition & Population Global Practice
East Asia and Pacific Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2023)

Currency Unit = US Dollar

US\$ 1.348480 = SDR 1

FISCAL YEAR

January 1 - December 31

Regional Vice President: **Manuela V. Ferro**

Country Director: **Satu Kristiina Jyrintytar Kahkonen**

Regional Director: **Daniel Dulitzky**

Practice Manager: **Aparnaa Somanathan**

Task Team Leaders: **Eko Setyo Pambudi, Naoko Ohno**

ABBREVIATIONS AND ACRONYMS

ADN	<i>Agência de Desenvolvimento Nacional</i> (National Development Agency)
AM	Accountability Mechanism
ANAPMA	<i>Ajénsia Nasionál ba Planeamentu, Monitorizasaun no Avaliasaun</i> (National Agency for Planning Monitoring and Evaluation)
AUD	Australian Dollar
AWP	Annual Work Plan
BEmONC	Basic Emergency Obstetric and Neonatal Care
BoQ	Bill of Quantities
CAFI	<i>Konsellu Administrasaun husi Fundu Infraestrutura</i> (Council of Administration for the Infrastructure Fund)
CAR	<i>Centro de Atendimento das Reclamacoes</i> (Complaints Service Center)
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CERC	Contingent Emergency Response Component
CHC	Community Health Center
COVID-19	Coronavirus Disease
CPF	Country Partnership Framework
CRI	Corporate Results Indicator
DA	Designated Account
DALY	Disability-Adjusted Life Year
DED	Detailed Engineering Design
DFAT	Australian Department of Foreign Affairs and Trade
DG	Director General
DHIS	District Health Information System
E&S	Environmental and Social
ELL	Environmental Licensing Law
EIA	Environmental Impact Assessment
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESP	Essential Service Package
ESHS	Environmental, Social, Health and Safety
ESMF	Environment and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRC	Environmental and Social Risk Classification
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standard
FA	Financing Agreement
FCV	Fragility, Conflict and Violence
FM	Financial Management
GCRF	Global Crisis Response Framework
GDP	Gross Domestic Product
GoTL	Government of Timor-Leste
GRM	Grievance Redress Mechanism

GRS	Grievance Redress Service
HARI'I	Healthcare Action through Rapid Infrastructure Improvements
HCW	Health Care Worker
HEIS	Hands-on Enhanced Implementation Support
HEPR-TF	Health Emergency Preparedness and Response Trust Fund
HMIS	Health Management Information System
HNGV	<i>Hospital Nacional Guido Valadares</i> (National Hospital Guido Valadares)
HP	Health Post
IAU	Inspection and Audit Unit
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion and Results Report
IDA	International Development Association
IEC	International Electrotechnical Commission
IEE	Initial Environmental Examination
IFR	Interim Financial Report
INS	National Health Institute
IPF	Investment Project Financing
ISR	Implementation Status and Results Report
IT	Information Technology
M&E	Monitoring and Evaluation
MoH	Ministry of Health
MoF	Ministry of Finance
MoPT	Ministry of Planning and Territory
MoPW	Ministry of Public Works
MPS	Major Projects Secretariat
MSA	Ministry of State Administration
MTR	Mid-term Review
NCD	Non-communicable disease
NHSSP	National Health Sector Strategic Plan
NPC	National Procurement Commission
OHS	Occupational Health and Safety
PDO	Project Development Objective
PFM	Public Financial Management
PHC	Primary Health Care
PHD	Australian Partnership for Human Development
PIU	Project Implementation Unit
PMCU	Project Management Consultant Unit
PMU	Project Management Unit
POM	Project Operations Manual
PPSD	Project Procurement Strategy for Development
PSA	Public Service Announcements
PSC	Project Steering Committee
RESTL	Timor-Leste Electronic Health Record
SAMES	<i>Servico Autonomo de Medicamentos e Equipamentos de Saude</i> (Autonomous Service for Medical Drugs and Equipment)
SDR	Special Drawing Rights

SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SISCa	<i>Sistema Integrado Saude Comunitaria</i> (Integrated Community Health Service)
SOE	Statement of Expenditure
SOP	Standard Operating Procedure
SORT	Systematic Operations Risk-Rating Tool
SPMU	Special Project Management Unit
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
TLHIS	Timor-Leste Health Information System
TL-SLS	Timor-Leste Standard Living Survey
UN	United Nations
WHO	World Health Organization
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene



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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name		
Timor-Leste	Healthcare Action Through Rapid Infrastructure Improvements (“HARI”) Project		
Project ID	Financing Instrument	Environmental and Social Risk Classification	Process
P179592	Investment Project Financing	Substantial	Urgent Need or Capacity Constraints (FCC)

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input checked="" type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
24-Mar-2023	30-Jun-2028

Bank/IFC Collaboration
No

Proposed Development Objective(s)

The Project Development Objective (PDO) is to (a) strengthen the health infrastructure and referral system in Project target areas in Timor-Leste, and (b) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.



Components

Component Name	Cost (US\$, millions)
Component 1: Strengthening health infrastructure for a well-performing health referral system	45.50
Component 2: Ensuring the availability of management costs at the primary health care level	4.00
Component 3: Project Management and Monitoring & Evaluation	4.00
Component 4: Contingent Emergency Response Component	0.00

Organizations

Borrower:	Democratic Republic of Timor-Leste
Implementing Agency:	Ministry of Health

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	53.50
Total Financing	53.50
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	50.00
IDA Credit	50.00

Non-World Bank Group Financing

Counterpart Funding	3.50
Borrower/Recipient	3.50



IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Timor-Leste	50.00	0.00	0.00	0.00	50.00
National Performance-Based Allocations (PBA)	50.00	0.00	0.00	0.00	50.00
Total	50.00	0.00	0.00	0.00	50.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2023	2024	2025	2026	2027	2028	2029
Annual	0.00	5.80	7.50	9.50	10.00	11.00	6.20
Cumulative	0.00	5.80	13.30	22.80	32.80	43.80	50.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● Substantial



8. Stakeholders	● Moderate
9. Other	
10. Overall	● Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any waivers of Bank policies?

Yes No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant



NOTE: For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

The Recipient shall, through the MoH, carry out the Project in accordance with the provisions of Article V of the General Conditions and Schedule 2. (Section 3.01 of the Financing Agreement)

Sections and Description

The Recipient shall maintain, throughout the implementation period of the Project, a Special Project Management Unit (SPMU) within the MoH, which shall be responsible for day-to-day management, implementation, and supervision of the Project performance. (Section I.A.3 of Schedule 2 to the Financing Agreement)

Sections and Description

The Recipient shall establish and maintain, throughout the implementation period of the Project, a Project Implementation Unit (PIU) within SPMU, the MoH, which shall be responsible for supporting the implementation of the Project at the municipality level. (Section I.A.4 of Schedule 2 to the Financing Agreement)

Sections and Description

The Recipient, through the MOH, shall cause SPMU to engage, no later than six (6) months after the Effective Date, a Project Management Consultant Unit (PMCU) responsible for supporting SPMU in the implementation of the Project, with responsibilities and staffing. (Section I.A.5 of Schedule 2 to the Financing Agreement)

Sections and Description

The Recipient, through the MoH, shall establish an Inter-Ministerial Project Steering Committee (PSC), not later than three months after the Effective Date, and thereafter maintain until the completion of the Project. (Section I.A.6 of Schedule 2 to the Financing Agreement)

Sections and Description

(i) The Recipient shall ensure that the National Procurement Commission (NPC) provides procurement support throughout the implementation of the Project. (ii) the Recipient shall ensure that the MoH and the MoF shall enter into an agreement regarding the delegation of the procurement functions for activities referred to in Parts 1.1(b) and 1.2 of the Project by the NPC to the MoH under which the NPC shall provide best practice procurement guidelines, and the MoH shall be responsible for conducting the procurement process and collaborating with the NPC, the SPMU, the MOPW, and other line ministries that are involved in the preparation of bidding documents for activities under Parts 1.1(b) and 1.2 of the Project. (Section I.A.7 of Schedule 2 to the Financing Agreement)

Sections and Description

The Recipient shall ensure that a manual (“CERC Manual”) is prepared not later than six (6) months after the Effective Date and adopted, in each case, in form and substance acceptable to the Association. (Section I.F.1. (a) of Schedule 2 to the Financing Agreement)



Sections and Description

The Recipient shall, throughout Project implementation, maintain the Conselho de Administração do Fundo das Infraestruturas (“CAFI”) which is responsible for overall Project oversight. (Section I.A.1 of Schedule 2 to the Financing Agreement)

Conditions

Type	Financing source	Description
Effectiveness	IBRD/IDA	The Recipient has prepared and adopted the Project Operations Manual in form and substance acceptable to the Association. (Section 4.01 of the Financing Agreement)
Effectiveness	IBRD/IDA	The Recipient has adopted and disclosed the ESMF, in form and substance acceptable to the Association. (Section 4.01 of the Financing Agreement)
Disbursement	IBRD/IDA	For Category (1), unless and until the Association is satisfied that the Recipient has met the conditions set forth in Section I.D.1 of Schedule 2 to the Financing Agreement
Disbursement	IBRD/IDA	For Category (2), unless and until the Association is satisfied that the Recipient has met the conditions set forth in Section I.D.2 of Schedule 2 to the Financing Agreement
Disbursement	IBRD/IDA	For Category (3), unless and until the Association is satisfied that the Recipient has met the conditions set forth in Section I.D.3 of Schedule 2 to the Financing Agreement
Disbursement	IBRD/IDA	For Category (4), unless and until the Association is satisfied that the Recipient has met the conditions set forth in Section I.D.4 of Schedule 2 to the Financing Agreement
Disbursement	IBRD/IDA	For Category (5), unless and until the Association is satisfied that the Recipient has met the conditions set forth in Section I.D.5 of Schedule 2 to the Financing Agreement
Disbursement	IBRD/IDA	For Category (7), unless and until the Association is satisfied that the Recipient has met the conditions set forth in Section I.D.6 of Schedule 2 to the Financing Agreement



Type	Financing source	Description
Disbursement	IBRD/IDA	For Category (9), unless and until the Association is satisfied that all of the conditions set forth in B.1.h.i of Section III to the Financing Agreement have been met in respect of said expenditures



I. STRATEGIC CONTEXT

A. Country Context

1. **Since achieving independence in May 2002, Timor-Leste has made great strides toward lasting peace and stability.**¹ Whereas 20 years ago public infrastructure was inadequate, largely destroyed or simply nonexistent, security and living standards have now improved and the long process of strengthening institutions and reducing poverty in the country is underway. This has resulted in a more peaceful, democratic Timor-Leste, further to eight democratic transfers of power since 2002. Nonetheless, the long-term impacts of weak institutional frameworks, poor health indicators, human capital shortages, extreme poverty, hunger, and violence leave their legacy today. This warrants particular attention in a context where an inclusive compact between state and citizens is only just emerging, and risks, such as pandemics, the steep rise in food and energy costs, and climate change, may slow down or undo development progress. Most sectors, including the health sector, still suffer from significant capacity gaps, resulting in limited and inadequate physical and digital infrastructure, weak management structures and limited skilled human resources, and a limited ability to improve service quality and outreach, with vast disparities within the country, as demonstrated for the health sector in the sectoral context below.

2. **Timor-Leste is a lower-middle income country with a per-capita GDP of US\$1,626.40,² and a total GDP of US\$2.19 billion³ (2021 data, constant 2015 US\$).** The oil and gas sector accounted for around 90 percent of this GDP and 70 percent of Government spending in 2019.⁴ After an 8.6 percent decline in 2020, the country’s non-oil economy grew by 1.5 percent in 2021.⁵ This growth was limited due to the effects of the ongoing COVID-19 pandemic and heavy flooding caused by Tropical Cyclone Seroja. A record-high 2021 budget with public expenditure of nearly 90 percent of GDP bolstered Government consumption, as a series of fiscal and quasi-fiscal stimulus measures supporting employment and incomes allowed households to maintain consumption.⁶ The oil economy grew by 8.3 percent, bringing total economic growth to 4.4 percent for 2021, a significant deceleration from the 11 percent growth seen a decade ago.⁷

3. **The Government depends on its Petroleum Fund to close domestic financing gaps. Excess withdrawals have been made, justified by the need to frontload spending on infrastructure, yet this has not entailed a lasting impact on economic activity and has had poor development outcomes, as underscored by the high poverty headcount of nearly 42 percent.**⁸ By the end of 2021, the Government had withdrawn more than US\$9 billion from the Petroleum Fund since 2013, of which 41.9 percent was by way of excess withdrawals.⁹ Estimated

¹ GoTL (Government of Timor-Leste). 2017. *Timor-Leste’s Roadmap for the Implementation of the 2030 Agenda and the SDGs*. http://timor-leste.gov.tl/wp-content/uploads/2017/08/UNDP-Timor-Leste_SDP-Roadmap_doc_v2_English_220717.pdf

² World Bank. 2022a. *GDP per capita (constant 2015 US\$) - Timor-Leste*. <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD?locations=TL&view=chart>

³ World Bank. 2022b. *GDP (constant 2015 US\$) - Timor-Leste*. <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD?locations=TL>

⁴ DFAT (Department of Foreign Affairs and Trade, Australia). 2019. *Insights: Timor-Leste*. https://www.dfat.gov.au/sites/default/files/timor-leste-market-insight_0.pdf

⁵ World Bank. 2022c. *June 2022 Timor-Leste Economic Report: Investing in the Next Generation*. <https://www.worldbank.org/en/country/timor-leste/publication/june-2022-timor-leste-economic-report-investing-in-the-next-generation>

⁶ Ibid.

⁷ Ibid.

⁸ World Bank. 2022d. *Poverty headcount ratio at national poverty lines (% of population) - Timor-Leste*. <https://data.worldbank.org/indicator/SI.POV.NAHC?locations=TL>

⁹ World Bank. 2022c



projections are that the Petroleum Fund will be exhausted by the end of the decade, unless there are new oil and gas flows or a considerable change in fiscal policy.

4. **Two in five people in Timor-Leste lack the minimum resources needed to satisfy basic needs.** Major disparities in welfare, development outcomes, and service accessibility are observed across the 13 municipalities in the country: 80 percent of the country’s poor live in rural areas, home to 68 percent of the population in 2021.¹⁰ Moreover, since 2007, income growth for the bottom 40 percent of the population has not kept pace with the rest, indicating a lack of shared prosperity.¹¹ Poverty remains highest in the Western region, and particularly its rural areas. Rural populations record lower levels of access to, and use of, health services, education (especially for those with a mother tongue different from Tetum or Portuguese), water and sanitation, and transport infrastructure. 57 percent of poor rural households live more than 4 kilometers away from the nearest secondary school and 51 percent live more than 2 kilometers away from a health clinic.¹² This leads to poor health, education, and socioeconomic indicators, as well as civil unrest, notably over land tenure and access.

5. **The population of 1.34 million¹³ (49.4 percent female, 37 percent under the age of 15, growing annually at 1.9 percent¹⁴) faces a human capital crisis.** Despite some progress over the last decade, a child born in Timor-Leste today will only be 45 percent as productive as an adult as they could be if they enjoyed complete education and full health.¹⁵ This is significantly lower than the average for the East Asia and Pacific region (at 59 percent), and for its peer income countries in the region (at 50 percent), measured by the Human Capital Index.¹⁶ The multiple compounding challenges include high rates of early life morbidity and mortality (4.2 percent of children will not survive to age five¹⁷), poor childhood nutrition, and poor learning outcomes due to high rates of chronic malnutrition and low levels of education service delivery and quality. Moreover, the population is expected to age quickly from 2050 onwards, as the fertility rate continues its ongoing drop from 6.2 in 2002 to 3.9 in 2020.¹⁸ With this demographic transition underway, Timor-Leste may ultimately face a higher dependency ratio that will pose social and economic challenges.

6. **Timor-Leste is highly vulnerable to natural disasters, including cyclones, earthquakes, tsunamis, heavy rainfall, droughts, floods, landslides, and soil erosion.** This causes frequent and severe damage to critical built assets including health facilities, with the annual urban damage alone estimated at US\$1.4 million¹⁹ and poses considerable challenges to last-mile service delivery. Moreover, these extreme events also disrupt access to essential services by damaging or destroying roads during extreme events and emergencies and have major impacts on population health. Each year, an estimated 259 people are affected by floods, whereas droughts worsen the already dire state of malnutrition in the country.²⁰ Moreover, this situation is set to worsen in the decades ahead in light of climate change, which will further increase the frequency and intensity of these

¹⁰ World Bank. 2022e. *Rural population (% of total population) - Timor-Leste*. <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=TL>

¹¹ World Bank. 2018. *Timor-Leste - Systematic Country Diagnostic*. <https://www.worldbank.org/en/country/timor-leste/publication/pathways-for-a-new-economy-and-sustainable-livelihoods>

¹² World Bank. 2018

¹³ Statistics Timor-Leste. 2022. *Census Preliminary Results 2022*. <https://timor-leste.unfpa.org/en/publications/timor-leste-population-and-housing-census-2022-preliminary-results>

¹⁴ World Bank. 2022g. *Population growth (annual %) - Timor-Leste*. <https://data.worldbank.org/indicator/SP.POP.GROW?locations=TL>

¹⁵ World Bank. 2022c

¹⁶ World Bank. 2022c

¹⁷ World Bank. 2022h. *Mortality rate, under-5 (per 1,000 live births) - Timor-Leste*. <https://data.worldbank.org/indicator/SH.DYN.MORT?locations=TL>

¹⁸ World Bank. 2022i. *Fertility rate, total (births per woman) - Timor-Leste*. <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=TL>

¹⁹ World Bank and ADB (Asian Development Bank). 2021. *Climate Risk Country Profile: Timor-Leste*. <https://www.adb.org/publications/climate-risk-country-profile-timor-leste>

²⁰ World Bank and ADB 2021.



extreme events relative to this already concerning baseline. Annual mean surface air temperatures in Timor-Leste are projected to increase by approximately 2.9°C by the 2090s under a high greenhouse gas emissions pathway, causing extreme high temperatures and rainfall.²¹ This represents a major threat to human health and demands significant attention from all stakeholders to mitigate and adapt to the severe forecasted impacts of climate change. For example, heat-related deaths for the population over 65 in the country are projected to increase considerably, from a baseline of zero per 100,000 in 1961–1990 to 39 per 100,000 by 2080.²²

7. **Government expenditure has been very high during the past decade, however the allocative efficiency of public spending should be improved to better reflect stated priorities and existing challenges, as many development outcomes continue to be poor in comparison to regional and socioeconomic peers.** Public spending has grown substantially since the mid-2000s, averaging 86 percent of GDP between 2008 and 2019.²³ Public expenditure has been skewed toward economic infrastructure—mainly electricity and roads. This in part reflects the need for significant investment in infrastructure in Timor-Leste’s post-conflict context where a highly limited functional infrastructural base was in place following the country’s independence. However, considerable concerns remain with regard to the quality of this infrastructure and poor maintenance and repair, resulting in short-lived impacts on economic activity. The Government’s focus on infrastructure for the country’s development is also reflected in its policy on the strategic use of foreign loans (including IDA credit) from international development partners, managed under the Public Debt Law.²⁴ However, the country continues to face large human development challenges, compounded by weak institutional capacity, implying there is scope for improved allocation of resources beyond physical strategic infrastructure, particularly due to very limited spending on social infrastructure relating to health, education, and water and sanitation. This makes the country extremely vulnerable to the impacts of shocks. In this light, considerable added value is brought by World Bank investment in Timor-Leste, as guided by Paragraph 12, Section III of the Investment Project Financing (IPF) Policy for Projects in Situations of Urgent Need of Assistance or Capacity Constraints.

B. Sectoral and Institutional Context

8. **Timor-Leste’s health system (Figure 1) ranges from local community health services—including mobile clinics and home visits under the ‘Saude na Familia’ (‘Health in the Family’) program to bridge last-mile and remote access limitations—to primary (gatekeeper Health Posts and Community Health Centers) and secondary municipal-level health facilities, to specialized tertiary health facilities in the capital, Dili, supplemented by referrals abroad for services that cannot be provided in-country.** The country’s 2011-2030²⁵-National Health Sector Strategic Plan (NHSSP) identified a gap in essential municipal-level care, with general hospital services, including emergency obstetric and neonatal care, currently unavailable for rural populations and municipalities that lack Referral Hospitals. The NHSSP therefore laid out the strategy to add a new layer of secondary care at the municipal level by planning the construction of municipal hospitals in each of the 13 municipalities together with a strengthened referral system. The function description of these hospitals is

²¹ Ibid.

²² Ibid.

²³ World Bank. 2021a. *Timor-Leste - Public Expenditure Review: Changing Course - Towards Better and More Sustainable Spending*. <https://www.worldbank.org/en/country/timor-lesste/publication/timor-lesste-public-expenditure-review-changing-course-towards-better-and-more-sustainable-spending>

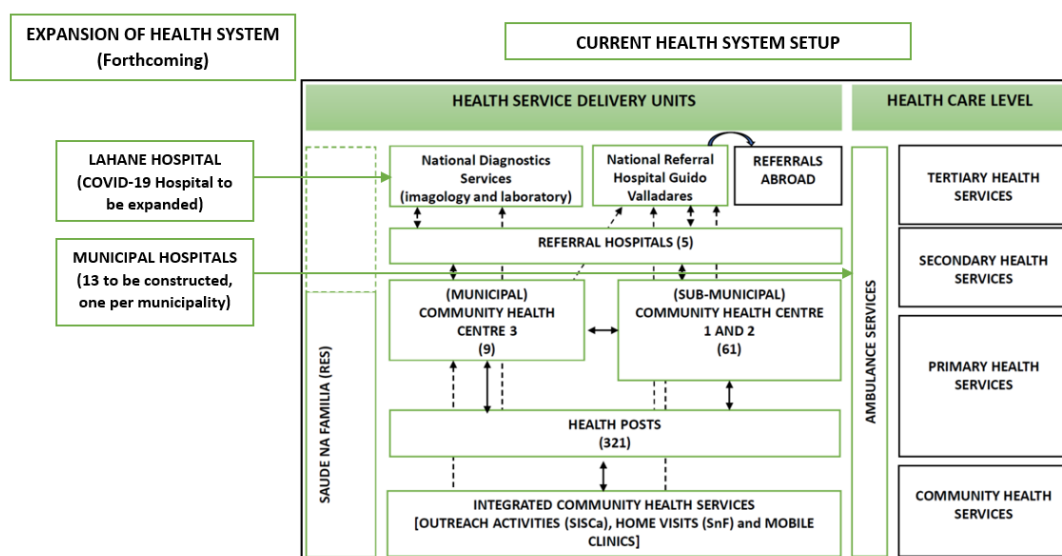
²⁴ Democratic Republic of Timor-Leste. 2011. *Law 13/2011, Public Debt Regime*. English version available at: <https://mj.gov.tl/jornal/lawsTL/RDTL-Law/RDTL-Laws/Law%2013-2011.pdf>. This law states that “resorting to public indebtedness must be motivated by financing needs generated by the need to execute State’s priority tasks relating to the building of strategic infrastructures”

²⁵ MoH (Ministry of Health, Timor-Leste). 2010. *Timor-Leste National Health Sector Strategic Plan 2011-2030*.



captured in the 2022 Essential Service Package (ESP) for Secondary and Tertiary Care for Timor-Leste.²⁶ Moreover, in the wake of the COVID-19 pandemic, which led to surging demand for tertiary care and limited overseas referrals, the Ministry of Health (MoH) decided to expand the former maternity hospital Dr Antonio Carvalho,²⁷ in ²⁸ Dili Municipality, henceforth referred to as “Lahane Hospital” (upgraded in 2021 to serve as a COVID-19 care facility²⁹), to become a fully functional, multi-profile tertiary hospital. The Hospital Nacional Guido Valladares (HNGV) is currently also undergoing expansion. The HNGV Master Plan allocates US\$72 million for the completion of all four HNGV expansion phases, with the contract for constructing Phase 1, financed entirely by the Government, approved by the Government. Completion of Phase 1 construction is expected to last 30 months from groundbreaking, which took place on January 16, 2023, factoring in a 6-month buffer period for any delays.

Figure 1: Timor-Leste’s health care current and expanded system set-up (Modified from 2022 MoH ESP for Primary Health Care)



9. Since its independence, through the existing health system, Timor-Leste has made significant efforts to advance its health service delivery, resulting in the partial improvement of key population health outcomes. Life expectancy has increased by 8.7 years since 2002,³⁰ under-five mortality rate has declined from 97 to 42 per 1,000 live births between 2002 and 2020,³¹ and maternal mortality has reduced from 668 to 142 per 100,000 live births between 2002 and 2017.³² The 2016 Timor-Leste Demographic Health Survey shows that, between 2009 and 2016, the share of deliveries in a health facility has risen by 23 percent.³³ Progress has also been made

²⁶ MoH. 2022. *Pacote de Serviços Essenciais para Cuidados Secundários e Terciários para Timor-Leste.*

²⁷ GoTL. 2021. *Prime Minister visits rehabilitation works of Lahane’s former Maternity Hospital.* <http://timor-lesle.gov.tl/?p=26627&n=1&lang=en>

²⁸ GoTL. 2021. *Prime Minister visits rehabilitation works of Lahane’s former Maternity Hospital.* <http://timor-lesle.gov.tl/?p=26627&n=1&lang=en>

²⁹ GoTL. 2021. *Prime Minister visits rehabilitation works of Lahane’s former Maternity Hospital.* <http://timor-lesle.gov.tl/?p=26627&n=1&lang=en>

³⁰ World Bank. 2022j. *Life expectancy at birth, total (years) - Timor-Leste.* <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=TL>

³¹ World Bank. 2022h

³² World Bank. 2022k. *Maternal mortality ratio (modeled estimate, per 100,000 live births) - Timor-Leste.*

<https://data.worldbank.org/indicator/SH.STA.MMRT?locations=TL>

³³ GDS (General Directorate of Statistics, Timor-Leste) and ICF (International Coaching Federation). 2018. *Timor-Leste Demographic and Health Survey (DHS) 2016.* <https://www.dhsprogram.com/publications/publication-fr329-dhs-final-reports.cfm>



in infectious disease incidence: the country had completed nearly three years of malaria-free status before experiencing a small outbreak in 2020.³⁴

10. **These improvements are in part due to an increase in health spending which has enabled important investments in the health sector.** Government health expenditure has increased substantially, from approximately US\$28 million in 2008 to US\$65 million in 2015, yet dipped and plateaued during the 2016–2019 period, with expenditures between US\$50 and US\$60 million.³⁵ A large share of this additional spending has gone toward a higher wage bill for the increased number of medics. The ratio of nurses and midwives to population rose from 0.1 per 1,000 population in 2004 to 1.8 in 2019,³⁶ while the number of physicians increased from 0.1 to 0.8 per 1,000 population during the same timeframe.³⁷ The wage share increased from about 20 percent in 2008 to 49 percent in 2019, with the share of goods and services dropping to 23 percent from 60 percent over that same period.³⁸ While this expanded and better-remunerated workforce is critical to improve health service delivery and health outcomes, spending on wages should not go at the expense of essential health system components, including goods (such as essential medication), services, digital transformation, and development capital, alongside the continued capacity building of this workforce.

11. **Despite these efforts, some health outcomes and service indicators continue to lag behind regional and income peers, and significant challenges remain.** 42 percent of all deaths of women aged 15–49 is related to pregnancy.³⁹ Nearly half of children in the lowest four income quintiles are stunted⁴⁰ and maternal and child health indicators are still much higher than the rest of the East Asia and Pacific region. The incidence of tuberculosis is still high, at 508 per 100,000 people, and is one of the highest causes of hospital deaths in the country.⁴¹ In addition, the absolute and relative share of non-communicable diseases (NCDs) is on the rise, accounting for 53 percent of deaths in 2019, up from 30 percent in 2000, with age-adjusted NCD mortality rates rising from 264 to 310 per 100,000 over this period.⁴² Demand for cardiac services is rising exponentially, with the number of new patient reports of rheumatic or congenital heart disease tripling between 2009 and 2018,⁴³ likely due in part to improved and expanded diagnostic capacity. With an outpatient utilization rate hovering around 2.5 visits per year, Timor-Leste misses the target of three visits per year on average established in the NHSSP, scoring lower than most of its geographic and economic peer countries.⁴⁴ The factors affecting utilization of health care include lack of medicine, a shortage of health care workers, distance to health facilities, as well as

³⁴ WHO (World Health Organization). 2021a. *World malaria report 2021*. <https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021>

³⁵ World Bank 2021a

³⁶ World Bank. 2022l. *Nurses and midwives (per 1,000 people) - Timor-Leste*. <https://data.worldbank.org/indicator/SH.MED.NUMW.P3?locations=TL>

³⁷ World Bank. 2022m. *Physicians (per 1,000 people) - Timor-Leste*. <https://data.worldbank.org/indicator/SH.MED.PHYS.ZS?locations=TL>

³⁸ World Bank. 2019. *BOOST data*. World Bank, Washington DC

³⁹ USAID (United States Agency for International Development). 2018. *Timor-Leste: Nutrition Profile*.

<https://www.usaid.gov/sites/default/files/documents/1864/Timor-Leste-Nutrition-Profile-Mar2018-508.pdf>

⁴⁰ USAID 2018.

⁴¹ WHO. 2021b. *Global tuberculosis report 2021*. <https://www.who.int/publications/i/item/9789240037021>

⁴² World Bank. 2022n. Cause of death, by non-communicable diseases (% of total) - Timor-Leste.

<https://data.worldbank.org/indicator/SH.DTH.NCOM.ZS?locations=TL>

⁴³ Paratz, Elizabeth D., Mock, Nicki, Gutman, Sarah J., et al. 2020. “Taking the pulse of Timor-Leste’s cardiac needs: a 10-year descriptive time-trend analysis”. *Intern Med J.*, 50(7), pp. 838-845. <https://onlinelibrary.wiley.com/doi/10.1111/imj.14411>

⁴⁴ World Bank 2022. *June 2022 Timor-Leste Economic Report: Investing in the Next Generation*. <https://www.worldbank.org/en/country/timor-leste/publication/june-2022-timor-leste-economic-report-investing-in-the-next-generation>



transportation costs—especially for referral cases.⁴⁵ Poor conditions of health facilities and equipment have affected the uptake of reproductive and maternal health services by women.⁴⁶

12. **Large disparities in health service availability, delivery, quality, accessibility, utilization, and outcomes are also observed along the urban–rural and socioeconomic spectrum.** Under-five mortality per 1,000 live births ranges from 25 in the highest income quintile to 55 in the lowest.⁴⁷ There is significant variation across municipalities in the share of the population that has ever sought care (either outpatient or inpatient, Figures 2 and 3). Compared to urban residents, rural residents are more likely to seek care in a Primary Health Care (PHC) facility than in a hospital. On average, wealthier households access health facilities (especially inpatient care) more frequently, and those with a hospital within their municipality are more likely to use hospital services than those without.⁴⁸ There is also evidence that the utilization of maternal and child health services at hospitals and secondary care facilities is skewed toward the rich. For example, skilled assistance during delivery is 243 percent higher among those in the wealthiest quintile than their peers in the poorest group.⁴⁹

13. **It is well established that proximity to health care drives health-seeking behaviour and yet, in Timor-Leste, the distribution of health facilities is uneven, with significant variations across municipalities, and with considerable concern about the quality of this infrastructure, as well as its maintenance and repair status.** There is thus a strong impetus to ensure the provision of high-quality hospital-level care at the municipal level across the country. The NHSSP proposes to do this through the introduction of municipal hospitals, considered to be strategic infrastructure, in line with the Law on Timor-Leste’s Public Debt Regime. The majority of health facilities are currently clustered in the central-northern municipalities, and recent infrastructure investments have not narrowed this spatial gap. This leads to patients elsewhere not seeking care, exploring alternative medicine options, or traveling directly to Dili for tertiary care rather than visiting gatekeeper primary care in Health Posts (HPs) and Community Health Centers (CHCs). In turn, this swamps the already precarious tertiary-level facilities—causing a breakdown of the current referral system.

⁴⁵ Guinness, Lorna, Paul, Repon C., Martins, Joao S., et al. 2018. “Determinants of health care utilisation: the case of Timor-Leste”. *International Health*, 10(6), pp. 412-420. <https://academic.oup.com/inthealth/article/10/6/412/5051851>.

⁴⁶ MoH 2015.

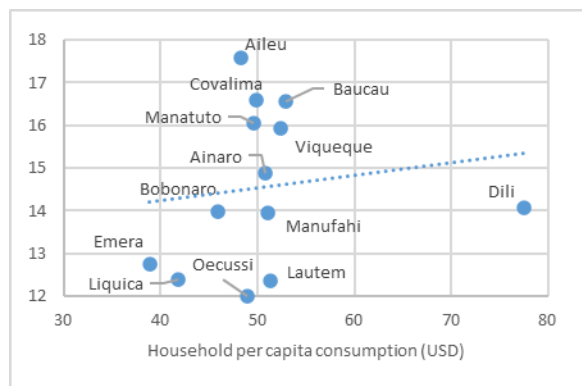
⁴⁷ GDS and ICF 2018

⁴⁸ Guinness et al. 2018

⁴⁹ World Bank 2014.

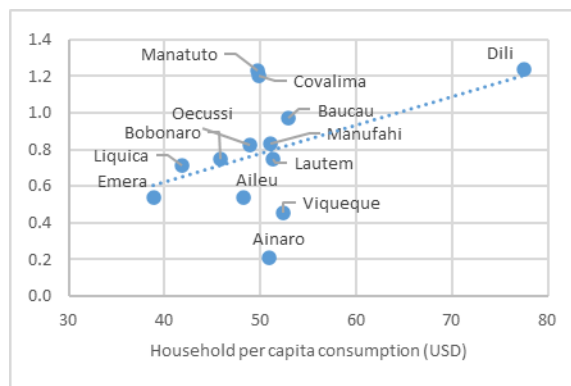


Figure 2: Access to Outpatient Care



Note: Population ever outpatient in past 12 months (%). Source: Timor-Leste Standard Living Survey (TL-SLS) 2014.

Figure 3: Access to Inpatient Care



Note: Population ever inpatient in past 12 months (%). Source: TL-SLS 2014.

14. **Beyond physical infrastructure, these disparities are also seen in the availability and management of fully trained staff, medical products, vaccines, and technology to operate, maintain, and ensure quality health service delivery in these facilities.** Figure 4 below captures spatial disparities in the municipal distribution of essential health care workers which consist of nurses, midwives, and doctors, at the CHC level relative to the municipal population size.⁵⁰ Due to its large population, the relative presence of health care workers is lowest in the capital, Dili, but several remote municipalities are confronted with a low absolute and relative number of essential health care workers for their smaller, largely rural populations. In the National Strategic Plan for Human Resources for Health,⁵¹ the Government has set out its vision to have “a qualified and motivated health workforce, with equitable distribution that guarantees the sustainable delivery of quality health care” by 2024. The ESP is a key guiding document detailing the need for human resources to meet Government norms, and projects that about 6,056 health care professionals are required to strengthen the workforce in the short term. Moreover, based on the human resources forecast, the Government will by 2025 surpass its health care workforce production relative to need, which it estimates will reach roughly 14,185 by then.

15. **Supply chain management of and expenditure on medication, including distribution and stock management, also differs greatly across the country.** While hospitals have basic equipment for primary care, this is less so in CHCs and even less in HPs. Only two in every three CHCs and HPs have access to 24-hour electricity, and constant water supply is available only in 32 percent of CHCs without beds (71 percent in those with beds) and 42 percent of HPs.⁵² Only 11 out of 70 CHCs (15.7 percent) have a waste management system.⁵³ Rural and poorer households thus have reduced access to care (of poorer quality), which drives major disparities in health outcomes. The MoH PHC Guidelines include standards for readiness of primary, secondary, and tertiary health facilities, but only 17 percent of CHCs and four percent of HPs meet these standards.⁵⁴ This leads patients to only seek services when there is an emergency and to go directly to higher-level facilities within their reach.

⁵⁰ GoTL and WHO. 2020. *Rapid Health Facility Readiness Mapping*

⁵¹ MoH. 2020. *National Strategic Plan for Human Resources for Health (NSPHRH) 2020 – 2024*

⁵² GoTL. 2020. *Supportive Supervision Results January-September 2020*. GoTL, Dili

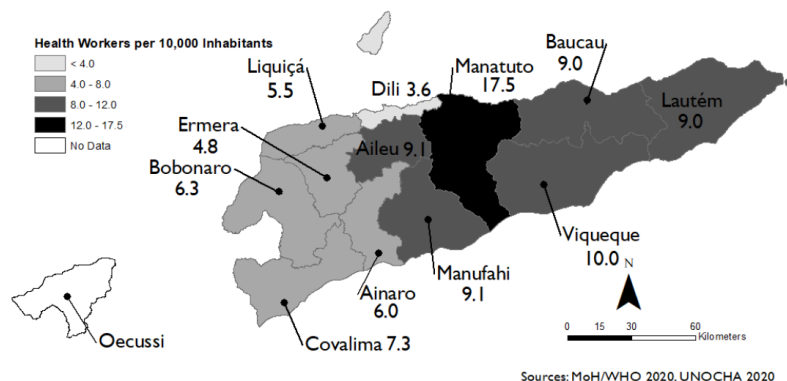
⁵³ GoTL and WHO. 2020. *Rapid Health Facility Readiness Mapping*

⁵⁴ GoTL. 2020. *Supportive Supervision Results January-September 2020*. GoTL, Dili



Patients thereby seek treatment when their health problem is severe and costly, while the preventive and early curative services available locally are underutilized.

Figure 4: Number of health care workers per 10,000 Inhabitants for CHCs at the municipal level in Timor-Leste



16. **Several development partners are working toward strengthening the quality, scope, and efficiency of Timor-Leste’s health service delivery, with 28 percent of total health expenditure coming from external sources.**⁵⁵ This includes Australia’s Department of Foreign Affairs and Trade (DFAT) and its Partnership for Human Development (PHD) program. These partners focus on strengthening the leadership, management systems and capacity of the Municipal Health Service to help health facilities deliver the ESP effectively. This is done through in-service clinical training, financial management capacity building, health facility readiness assessments and minor infrastructure works, and strengthen referral system through support to the National Ambulance Service in target municipalities. The United States Agency for International Development (USAID) targets quality data systems to inform decision-making and works to strengthen the health financing and human resources capacity at the national and subnational levels, alongside civic engagement. The United Nations Population Fund (UNFPA) focuses its efforts on delivering equipment and training around emergency obstetric and neonatal care. The World Health Organization (WHO) supports health sector policies and strategy development at the national level. In addition, the Government of Cuba has provided long-standing support to the medical workforce through health service delivery and training, with currently some 160 Cuban doctors active in 12 municipalities.⁵⁶

17. **Following the establishment of autonomous agencies and the decentralization of selected health functions to municipalities, planning and budgeting have become fragmented, and there is now even greater budget uncertainty than under the previous centralized model.** In 2019, MoH accounted for about two-thirds of public health spending (down from 100 percent up until 2010), while the autonomous agencies, the Autonomous Service for Medical Drugs and Equipment (SAMDES), and HNGV accounted for 12 percent each, with municipalities responsible for only 6 percent.⁵⁷ Autonomous agencies have limited budget control and municipalities struggle to spend effectively while confronted with complex flow of funds, reporting requirements, and substantial funding delays at the health facility level. At CHC and HP levels, this results in

⁵⁵ World Bank. 2021a.

⁵⁶ Tatoli. 2021. Over 1000 Cuban doctors have served public health in Timor-Leste. <https://en.tatoli.tl/2021/07/16/over-1000-cuban-doctors-have-served-public-health-in-timor-leste/19/>

⁵⁷ World Bank. 2019. *BOOST data*. World Bank, Washington DC



severe shortage and irregular supply of drugs as well as lack of funds to ensure regular electricity, water, and internet connections to submit timely and accurate data, supply of fuel to undertake outreach activities and basic building and equipment maintenance. This has led to demotivated staff with limited means to deliver essential services—and patients seeking care late.

18. **Timor-Leste’s health management information system (HMIS) is comprehensive and collects a lot of data, but it is not used to its full capacity.** Timor-Leste Health Information System (TLHIS) captures data at the individual and household level, complementing the District Health Information System 2 (DHIS2) collection of data by facility. This wealth of information is, however, rarely used to its full capacity for evidence-based policy making and planning. *Saude na Familia’s* eHealth platform ‘*Registo Saude Eletronico Timor-Leste*’ (RESTL) and the ‘mSupply’ platform for pharmaceutical management and health facility restocking are currently not integrated into DHIS2. While DHIS2 has been rolled out to all hospitals and CHCs and some HPs, health workers are overburdened by lack of access to Wi-Fi or cable internet and adequate IT equipment, resulting in continued paper-based data and reporting demands from two uncoordinated data platforms.

19. **The COVID-19 pandemic demonstrated the vulnerability of the current health system, underlining the need for upgrading of health facilities, innovations in health service delivery and introduction of affordable but game-changing technologies that can support access to quality care.** While Timor-Leste did not see many COVID-19 cases in 2020, there was a surge in cases in the first half of 2021 due to cases spreading from West Timor, Indonesia, toward the end of 2020. This was further worsened by flash floods in March–April 2021. Only 31 percent of CHCs were found to be prepared for isolation thus leading to significant disruptions in the delivery of essential health and nutrition services, internal displacement, and deaths. Subsequently, serious disruptions were reported in critical maternal and child health services recording a 10 to 25 percent decline in already low utilization rates.⁵⁸ Over 50 percent of women missed reproductive health services, and there was a surge in cases of Dengue Fever, with nearly 5,000 cases recorded between January and June 2022, with 56 recorded deaths despite the considerable measures taken by the Government to fight the pandemic including the drawing of US\$219.5 million from the petroleum reserves to establish a COVID-19 emergency response fund.⁵⁹ 869,618 individuals received at least a first dose of COVID-19 vaccine (66 percent of the population), with 773,922 people in Timor-Leste being fully vaccinated (58.7 percent), and 277,043 (21 percent) had received a booster dose as of November 22, 2022.

20. **The COVID-19 pandemic thereby underscored the need for upgrading, equipping, and adequately financing HPs and CHCs** with timely available operating budgets, with the geography of Timor-Leste requiring solutions to bridge the last-mile for service delivery, as well as the necessity of establishing municipal hospitals to ensure the continued availability of essential services within reach of the rural population, even in times of health crises or natural disasters. Underscoring this service delivery with a reliable HMIS will provide the opportunity for local level planning based on near-real-time data.

⁵⁸ World Bank. 2022c.

⁵⁹ ADB (Asian Development Bank). 2021. *Managing the COVID-19 Outbreak in Timor-Leste*. <https://development.asia/policy-brief/managing-covid-19-outbreak-timor-leste>



C. Relevance to Higher Level Objectives

21. **The Project is closely aligned with the World Bank Group’s Country Partnership Framework (CPF) for Timor-Leste (Fiscal Year 20–24; Report No. P134792-TP)⁶⁰ and its Focus Area 2: invest in human capital and service delivery; and its associated Objective 4: strengthen human capital and promote gender equity.** The low levels of access to and use of health services of rural populations stand out as a key challenge to be addressed, in light of natural hazards and climate change, affecting health, lives, and livelihoods. The Project is also consistent with the World Bank Group’s framework for Green, Resilient, Inclusive Development and aligned with the Pillars 2, 3 and 4 of the Global Crisis Response Framework (GCRF),⁶¹ which the Project will focus on by building strong institutions, supporting a well-functioning health sector, and using digital tools where feasible to enhance development solutions. Further, the Project is designed to address critical gender gaps observed in the area of maternal health, namely poor conditions of reproductive and maternal health services and limited accessibility to life-saving emergency obstetric care, especially in rural areas. This is in line with the priority focus areas identified in the Timor-Leste Country Gender Action Plan⁶² and the East Asia and Pacific Regional Gender Action Plan.⁶³ The Project will directly address these areas through its focus on improving health service readiness and strengthening Government’s leadership and management capacity to enhance health service delivery, with a focus on the most vulnerable, namely the poor and those living in remote areas. As such, it directly feeds into the World Bank Group’s Twin Goals to end extreme poverty and promote shared prosperity.

22. **The 2011–2030 Timor-Leste Strategic Development Plan sets out clear objectives in terms of social capital, including health, with two relevant objectives: (i) 100 percent of health facilities to be fully equipped and staffed for management of chronic diseases, and (ii) 100 percent of health services to be delivered from infrastructure that is functional, safe, environmentally friendly, and sustainable.** The plan thus strives to make comprehensive, high-quality health services accessible to all in Timor-Leste. This is underpinned and strengthened by the 2011–2030 NHSSP, with a second version published for the 2020–2030 period. The NHSSP stresses the importance of integrated health service delivery, with clear roles and responsibilities for the central and decentralized health services alongside the private sector, within the right health financing context (public, private, and donor) based on evidence from an integrated HMIS and founded on proper health asset and transport management.

23. **Acknowledging the severe risks to lives and livelihoods posed by climate change, the Project is also aligned with Timor-Leste’s National Adaptation Plan and Nationally Determined Contribution, aiming to address climate risks and build climate resilience, with a strong focus on adaptation.** The plan recognizes that increasing temperatures will increase heat-related illness and mortality and could lead to the spread of vector-borne diseases, and that increased disaster frequency and intensity has a range of implications for health. Therefore, human health and wellbeing is identified as a key vulnerability, with the development of a health database and data management system which can include climate sensitive health risk and vulnerability information to facilitate the effective, targeted, and efficient delivery of health services included as a key objective. This will allow for contribution to the establishment of surveillance for health early warning systems

⁶⁰ World Bank. 2019. *Country Partnership Framework 2020-2024*. <https://www.worldbank.org/en/country/timor-leste/brief/country-partnership-framework-2020-2024>

⁶¹ World Bank. 2022n. World Bank Group Outlines Global Crisis Response Package to Help Developing Countries Navigate Multiple, Compounding Crises. <https://www.worldbank.org/en/news/press-release/2022/08/03/world-bank-group-outlines-global-crisis-response-package-to-help-developing-countries-navigate-multiple-compounding-crisis>

⁶² World Bank. 2021c.

⁶³ World Bank. 2017.



and response mechanisms for climate-related health risks, entailing improved public health services to deal with climate-related public health issues.

24. **As referred to above, recognizing Timor-Leste’s unique development challenges and multi-dimensional risks stemming from the combination of being a small state with a post-conflict legacy, Paragraph 12, Section III of the IPF Policy for Projects in Situations of Urgent Need of Assistance or Capacity Constraints is applied for this Project.** This provision allows for key exceptions to the policy requirements where the borrower is deemed by the World Bank to experience capacity constraints because of fragility or specific vulnerabilities typical of many small states, as is the case in Timor-Leste. The institutional weakness, including in MoH, and political fragility combined with the human capital crisis, narrow economic base, inadequate health outcomes, COVID-19 and dengue incidence, and climate change impacts collectively amount to a crisis situation that urgently requires addressing. The Project design and implementation arrangements contain risk mitigation measures and help to strengthen the country’s response and resilience to these compounding challenges, which would not be possible to tackle without significant external capacity substitution. The World Bank is uniquely placed to provide critical capacity substitution through the Project. Recognizing the small population and economic base, the World Bank Group Support to Small States⁶⁴ points out the vulnerability of small countries like Timor-Leste to exogenous shocks such as economic shocks, natural disasters and climate change, and capacity constraints. The Project factors in these unique challenges, particularly the susceptibility to negative climate change impacts and limited Government capacity.

25. **Despite significant progress made in key areas, the country remains classified as having high levels of institutional and social fragility by the World Bank.**⁶⁵ As outlined in the World Bank Group Strategy for Fragility, Conflict, and Violence (FCV) 2020–2025,⁶⁶ the Project applies the framework for engagement in FCV situations, helping countries transition out of fragility by (i) strengthening the capacity of core institutions, and (ii) mitigating the spillovers of FCV such as pandemics, and climate and environmental challenges. In addition, the project design is fully aligned with the World Bank’s special emphasis on high priority areas in FCV settings, including through the investment in human capital, and the building of community resilience and preparedness, especially regarding the impacts of climate change and environmental degradation. The Project applies some of the key modalities through which the FCV strategy will be operationalized: (i) enhancing Monitoring and Evaluation (M&E) frameworks; (ii) using operational flexibilities as needed (for example, the application of Paragraph 12 of the IPF Policy that addresses situations of urgent need of assistance or capacity constraints), and (iii) systematizing the use of digital solutions.

⁶⁴ World Bank. 2022o. *World Bank Group Support to Small States*. <https://thedocs.worldbank.org/en/doc/9e35e06a72b7421b40b22ea8533e4037-0290032022/related/SmallStates-10-03-Final.pdf>. At the World Bank, <https://thedocs.worldbank.org/en/doc/9e35e06a72b7421b40b22ea8533e4037-0290032022/related/SmallStates-10-03-Final.pdf>. a “small state” is defined as one with a population below 1.5 million.

⁶⁵ World Bank. 2022p. World Bank Group FY23 List of Fragile and Conflict-affected Situations.:

<https://thedocs.worldbank.org/en/doc/69b1d088e3c48ebe2cdf451e30284f04-0090082022/original/FCList-FY23.pdf>

⁶⁶ World Bank. 2020. *World Bank Group Strategy for Fragility, Conflict, and Violence 2020–2025*.

<https://documents1.worldbank.org/curated/en/844591582815510521/pdf/World-Bank-Group-Strategy-for-Fragility-Conflict-and-Violence-2020-2025.pdf>



II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

The Project Development Objective (PDO) is to (a) strengthen the health infrastructure and referral system in Project target areas in Timor-Leste, and (b) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

PDO Level Indicators

The achievement of the PDO will be measured through monitoring of the following PDO-level indicators:

- Municipal Hospitals in Project target municipalities constructed/expanded and equipped according to the Essential Service Package and gender-inclusive and climate-resilient building standards (Number)
- Community Health Centers and Health Posts in Project target municipalities upgraded according to the Essential Service Package standards (Percentage)
- Tertiary care facilities and Municipal Hospitals supported by the Project having sustainable equipment operations and maintenance mechanisms in place (Number)
- Community Health Centers supported by the Project having sustainable equipment operations and maintenance mechanisms in place that cover Health Posts in the catchment area (Percentage)
- Referrals following the referral protocols recorded in the Timor-Leste Health Information System, disaggregated by gender (Percentage)

B. Project Components

26. **The Timor-Leste Healthcare Action through Rapid Infrastructure Improvements (“HARI’I”⁶⁷) Project, in the amount of US\$50 million equivalent, will contribute to establishing a functioning health referral system in Timor-Leste through strengthening supply-side readiness from the PHC level to secondary care in three Project municipalities selected by MoH based on the NHSSP, and up to tertiary care level in the capital, Dili.** It will also support efforts to improve the overall performance and efficiency of health service delivery systems in Timor-Leste from the perspective of data management, financing, and human resources for health through: (i) strengthening the current health information systems setup by establishing connectivity between the DHIS2, *Sauda Na Familia*/RESTL, and mSupply into the integrated national TLHIS; (ii) providing Facility Management Costs to improve service readiness, including operation and maintenance of health facilities and equipment for basic health services; and (iii) ensuring the provision of basic clinical in-service and Public Financial Management (PFM) training needed to manage and operate health care infrastructure, data, and strengthen financial accountability at municipal level in collaboration with development partners. Moreover, MoH agreed to supply the required human resources for health and funding for tertiary hospital infrastructure, equipment maintenance. These joint and coordinated efforts will be critical in building the country’s health care referral system. While the financial and technical support under the HARI’I Project is dedicated to the three target municipalities — Ermera, Lautém, and Viqueque—notable positive spill-over effects are expected that will benefit the health sector

⁶⁷ “Hari’i” in Tetum, one of Timor-Leste’s official languages, means to ‘build up’.



nationwide. These include replicable capacity building for enhanced financial management and clinical capacity, a strongly improved integrated HMIS data infrastructure, and scalable guidelines for health service delivery and health facility management and operation, alongside the detailed engineering design for municipal hospitals to be constructed across Timor-Leste. Nonetheless, given the Project’s focused geographic scope, the implementation of these scalable activities will only be monitored in target municipalities. The multifunctional ambulances and operational vehicles procured under the World Bank’s Health Emergency Preparedness and Response Trust Fund (HEPR-TF) Project (P176767) will also enable appropriate transportation as part of creating this functional referral system. The World Bank will support the development of referral system guideline, underpinned by analytical and advisory work and other development partners’ contributions and achievements.

27. **The HARI’I Project has four components, described below and with an implementation timeline as per Table A1.1 in Annex 1:**

Component 1: Strengthening health infrastructure for a well-performing health referral system (IDA US\$45.5 million equivalent)

In line with Government priorities, this component will serve the climate shock-prone municipalities Ermera, Lautém, and Viqueque (Box 1), as well as the population nationwide referred to HNGV and Lahane Hospital for specialist services. Four sub-components will together result in the establishment of the physical and digital infrastructure for a functional referral health care system, which pays particular attention to women’s health needs. The World Bank will provide technical assistance (TA) to support establishment of the referral system through analytical and advisory work. Details on how these four sub-components will ensure energy-efficient and climate-shock-resilient infrastructure and energy in line with the Multilateral Development Banks’ Common Principles for Climate Mitigation Finance Tracking⁶⁸ is captured in Table 3 below, as part of the Project’s climate change assessment.

Table 1 below captures the services to be provided in line with the ESP and tertiary care Master Plan in each of the facilities that form part of the established referral system, for which capacity building will be provided in conjunction with development partners.

Table 1: Services provided by level of care

Level of care	Scope of services provided
Municipal primary health care facilities	Provide essential first-contact services by general practitioners, nurses and community health workers, mainly through ambulatory services, in alignment with the ESP. These facilities refer patients to municipal referral facilities when the patient needs specialized services, admission, tests or other technology not available in the PHC facilities. HPs focus on supporting <i>Sistema Integradu Saude Comunitaria</i> “Integrated Community Health Service” (SISCa) and <i>Saude na Familia</i> activities, alongside outpatient consultations, basic reproductive, maternal and child health services, small surgery, simple laboratory tests, and first aid. They also follow up on people living with chronic conditions and disabilities, nutrition, first support and referral for victims of gender-based violence and support CHC staff to deliver environmental health activities. CHCs add more advanced primary care services and can also offer inpatient services supported by laboratory services offering hematology, biochemistry, blood grouping, urinalysis, serology, bacteriology, parasitology, Tuberculosis microscopy, and x-ray services.
Municipal	These facilities provide differentiated services, in alignment with the ESP, with medium-level

⁶⁸ AfDB et al. 2021. *Common Principles for Climate Mitigation Finance Tracking*. <https://www.isdb.org/climate-change/publications/common-principles-for-climate-mitigation-finance-tracking>



secondary/ referral facilities	technology, including internal medicine, pediatrics, general surgery, obstetrics/gynecology and anesthesiology, among others.
National tertiary care facilities	These facilities provide specialized health services requiring high-level technology.



Box 1: Background of the selected Project municipalities

The Project focuses on three municipalities – Ermera, Lautém, and Viqueque. The three municipalities show concerning health outcomes and health service readiness indicators, however along different dimensions, as per the table below.

Indicator	Ermera	Lautém	Viqueque	National
Population	138,080	69,836	80,054	1,340,434
Poverty Rate (%)	56.7	32.0	36.0	41.8
Under-five mortality rate (per 1,000 live births)	34	19	49	41
Stunting Rate (%)	63.4	42.3	48.2	47.1
Institutionalised Delivery Rates	15	53	43	49
HCWs per 10,000 inh. at CHC level*	4.8	9.0	10.0	5.4
Doctors per 10,000 inh. At CHC level*	1.3	2.4	1.9	1.5
Nurses per 10,000 inh. at CHC level*	2.2	3.6	6.6	2.4
Midwives per 10,000 inh. at CHC level*	1.3	3.0	1.5	1.5
Number of CHCs	6	4	5	70
Number of HPs	37	30	43	321
Sucos without HP	15	10	2	154

Note : * excludes Oecussi

Ermera, located to the southwest of the capital Dili, and Lautém and Viqueque, situated to the very east and southeast of the country, have challenging geographies and socioeconomic conditions. The World Bank’s ThinkHazard⁶⁹ tool highlights the high urban flood, landslide, and wildfire risks in Ermera, high coastal flood risk in Lautém, and urban and coastal floods, cyclones, and wildfires representing high-risk hazards in Viqueque.

These conditions hamper both supply-side readiness and accessibility of health services – contributing to poorer health outcomes. In terms of health outcomes, Viqueque structurally performs below the national average in terms of under-five mortality, stunting, and institutionalised delivery. On this latter indicator, the situation in all three municipalities, and Ermera in particular, raises concern. Looking at supply-side readiness, Ermera is confronted with particularly significant health service delivery constraints. The large number of sucos (15) without HP in the municipality adds to the below-average availability of essential health care workers (HCWs) at the CHC level (as noted above, HP-level data were not available for the 2020 rapid facility assessment). Viqueque and Ermera are among the poorest-performing municipalities in terms of the relative availability of doctors and midwives at the CHC level, with Lautém showing intermediate essential health care worker presence at the CHC level. This implies many communities, and especially those remote communities who would rely in first instance on HPs, do not have easy access to even the most basic of essential health care services in Ermera, Lautém, and Viqueque, let alone secondary care to be provided by the municipal hospitals.

Source:

- Population (Census 2022)
- HCWs (Rapid Health Facility Assessment 2020)
- Number of CHCs and HPs (ESP for Primary and Secondary and Tertiary Hospital Guideline, 2022)
- Under-five mortality, institutional delivery rate (Timor-Leste Demographic Health Survey, 2016)
- Poverty rate (WB 2018)
- Stunting rate (Timor-Leste Food Nutrition Survey, 2020)
- Sucos without HPs (Supportive Supervision Data January-September 2020)

<https://thinkhazard.org/en/report/242-timor-leste/ahan>



Sub-component 1.1: Strengthening health referral systems at the municipality level (IDA US\$ 32.15 million equivalent). This sub-component, linking in with the routine health service component under the World Bank’s GCRF Pillar 2, as well as the climate resilience and crisis preparedness components under Pillar 3 and the health and resilient construction components under Pillar 4, will finance the construction of a new gender-sensitive and climate-shock-resilient and energy-efficient municipal hospital in Gleno (Ermera municipality) and Lospalos (Lautém municipality) and the expansion of an existing CHC Level 2 in Viqueque Vila (Viqueque municipality) to become a municipal hospital, offering services in line with the ESP. It is critical that the MoH complete the following set of required actions as soon as possible to initiate the Project activities financed under this sub-component, as defined in the Project’s Financing Agreement (FA): (i) a feasibility study as part of the Detailed Engineering Design (DED) development, which will confirm the suitability of the identified site as part of sub-component 1.3; (ii) the development of municipal hospital building standards, which will explicitly focus on energy-efficient infrastructure and their climate shock-resilience as well as gender considerations as part of sub-component 1.3; and (iii) MoH providing the operational and management plan as well as the human resources plan for these three municipal hospitals. The infrastructure development work to be financed under the Project will be in full compliance with the World Bank’s Environmental and Social Framework (ESF), and the ESF requirements need to be met prior to the commencement of civil work activities.

In addition, this sub-component will provide funds for the upgrading and equipping of all CHCs and HPs in the same three municipalities in line with the ESP for PHC. Individual facility needs will be determined through a comprehensive gap assessment in each CHC and HP, using the template developed and tested by DFAT, complemented by a particular focus on the infrastructure’s climate resilience in the face of flooding, landslides, and extreme heat. Infrastructure and equipment gaps will be identified and costed during the first year of implementation and addressed in each facility on a priority basis. Hence, it is important that MoH swiftly completes the following requirements to initiate the upgrading and equipping of all CHCs and HPs: (i) a comprehensive gap assessment in each CHC and HP facility to determine needs, building on the template developed and tested by DFAT, and (ii) identification of needed infrastructure and equipment gaps for each facility with costs.

Under this sub-component, the Project will also provide funds for the development of maintenance guidelines, referral guidelines as well as the human resources capacity strengthening in collaboration with DFAT.

Sub-component 1.2: Tertiary care equipment (IDA US\$9.6 million equivalent). This sub-component includes the procurement of equipment and the associated maintenance capacity development for HNGV and Lahane Hospital, connected to the routine health service component under the World Bank’s GCRF Pillar 2.

Maternal, child, and perinatal health services and hemodialysis will be supported through the procurement of energy-efficient equipment (according to strict energy efficiency criteria to be introduced for tertiary health facilities in Timor-Leste, as detailed in Table 3) and the provision of in-service operational capacity building for HNGV. The procurement of essential energy-efficient equipment to equip the new Cardiac Center at Lahane Hospital is also foreseen under this sub-component. Larger equipment will be procured through a lease-purchase contract which also includes initial instruction in use of equipment as well as maintenance. MoH will complete at least 75 percent of the Government-funded HNGV Phase 1 expansion and Lahane Hospital cardiac center upgrade prior to the initiation of the Project activities under this sub-component and ensure certification by the National Development Agency (ADN).



Sub-component 1.3: Feasibility Studies and Detailed Engineering Design (DED) for HNGV Expansion Remaining Phases and municipal hospitals (IDA US\$2.25 million equivalent). This sub-component will deliver the feasibility studies and building standards and specifications for the three remaining phases of HNGV expansion, as well as for the municipal hospitals, ensuring these will meet the highest construction, safety, energy-efficiency, disaster resilience, and ESF standards. This includes the incorporation of building adaptation measures to withstand and provide shelter from flooding, landslides, extreme heat, and drought, closely intertwined with the climate resilience and crisis preparedness components under GCRF Pillar 3 and the health and resilient construction components under Pillar 4. They will also be aligned with the requirements in the ESP, including the infrastructure standards required to provide quality maternal and reproductive health services. Moreover, considerations of Occupational Health and Safety (OHS), healthcare waste management, grievance mechanisms, and ensuring continuous utility (electricity and water) access are pivotal in this DED, alongside maintenance guidelines ensuring sustainability of these infrastructure investments.

Sub-component 1.4: Digital Infrastructure Improvements (IDA US\$1.5 million equivalent). Connected to the digital development component under GCRF Pillar 4, the Project will support the strengthening of the TLHIS, focusing on its use in the three target municipalities to ensure full operational functionality, which has the potential for national upscaling. Such support will include IT equipment as well as a contract with a firm to provide ongoing technical support and skills development. Support will also be provided to link the RESTL and mSupply systems to DHIS2, which includes the recording of climate-sensitive infectious diseases and utility access.

Component 2: Ensuring the availability of management costs at the primary health care level (US\$4.0 million total: IDA US\$0.5 million equivalent, and Government Counterpart Financing US\$3.5 million)

To address the limitations leading to less-than-adequate service delivery at primary health care level in Timor-Leste, the Project will support the management cost of CHCs and HPs, and the associated PFM capacity building of staff in three Project municipalities to run health facilities and provide health services. This will ensure the continued maintenance of health facility infrastructure and equipment provided under Component 1.

The Project will support the following two sub-components:

Sub-component 2.1: Provision of Facility Management Cost (US\$3.0 million equivalent total: IDA US\$0.25 million equivalent, and Government Counterpart Financing US\$2.75 million). The Project will provide funds to cover the facility management cost to all CHCs and HPs in three municipalities, estimated to be approximately US\$3 million equivalent for the Project duration, with US\$2.75 million of this budget coming from Counterpart Financing. The size of funds provided to each CHC and HP will be determined by MoH based on facility catchment area, population, and geographic accessibility, among others. The Project Operations Manual (POM) will include the details of the methodology and amounts for this annual allocation by health facility. The facility management cost will cover the basic expenses at facility level, including communication, utilities, contractual staff, repair and maintenance of equipment, vehicles and repair/maintenance of minor infrastructure. The Facility Management Cost will not replace, but rather be in addition to, the existing annual operating budget provided by Ministry of State Administration (MSA). MoH will monitor the expected improvements in each facility’s service indicators achieved through this available management cost.

MoH will complete the following set of required actions to allow the funds to start flowing to CHC. Within six months from project effectiveness and prior to MoH releasing the facility management funds to the Municipal Health Services account in three municipalities for funds requests from CHCs: (i) each CHC will have one dedicated Finance Officer; Finance Officers who will manage the funds are currently being recruited by MoH, and the position has been filled for over half of all CHCs already; (ii) development of annual financial report



using the existing standard Ministry of Finance (MoF) Chart of Account for Municipal Health Service for the designated use of the Facility Management Costs of CHCs; (iii) MoH will develop a finance Standard Operating Procedure (SOP), followed by adoption and implementation at the CHC level; (iv) MoH will develop a standard reporting template that will have a set of required information to be filled out by each CHC annually prior to receiving the funds to cover facility management cost; and, (v) a Facility Management Cost Agreement will have been signed between MoH and individual CHCs, co-signed by the Municipal State Administrator and Municipal Director of Health. This agreement will provide the basis for facility management cost mechanism which commits CHCs and HPs to fulfill the required annual report which will be submitted to MoH, and includes: (i) the roles and responsibilities of all parties; (ii) the total value of the annual management cost available to each CHC and associated HPs; (iii) a clear definition of eligible expenditures; and, (iv) a list of indicators to be reported in the annual report, which will focus on medical commodities, infrastructure and equipment maintenance, and utility access.

In the first year, the Municipal Health Services in Ermera, Lautém, and Viqueque will receive the funds to cover Facility Management Cost in their bank account from MoH upon achievement of the four conditions set above, from which CHCs and HPs can claim funds for eligible expenses. From the second year onwards, the funds will be released upon annual report submission by CHC. These funds, targeted at improving service readiness and closely linked to the PFM component under GCRF Pillar 4, will then result in improved performance and increasing quality of health services and infrastructure. Upon receipt of the annual report from each CHC, MoH will review the information received, allowing for the annual monitoring of key service readiness indicators. Upon internal verification, MoH will release the next year’s funds to cover Facility Management Cost to the Municipal Health Services accounts for use by the CHCs and HPs.

Sub-component 2.2: Public Financial Management (PFM) capacity building (US\$1.0 million total: IDA US\$0.25 million equivalent, and Government Counterpart Financing US\$0.75 million). Strengthening the Government’s PFM capacity especially at municipality and CHC levels is a critical condition for funds to be utilized in accordance with the World Bank Financial Management guidelines, in particular in connection with GCRF Pillar 4. Selected CHC staff in three municipalities will undergo in-service PFM training, with an eye for its future upscaling nationwide. The Project will utilize the training modules and materials prepared with support from DFAT/PHD. Counterpart Financing will provide US\$0.75 million of the total US\$ 1 million envelope for this sub-component.

Component 3: Project Management and Monitoring & Evaluation (IDA US\$4.0 million equivalent)

To strengthen the Special Project Management Unit (SPMU) in MoH, the unit in charge of day-to-day Project management and oversight, additional consultants will be contracted to form a Project Management Consultant Unit (PMCU) based on identified needs. These additional consultants will be contracted using a framework contract with a national or international firm in compliance with the Government regulations for use of loans including this IDA credit. This PMCU support for the SPMU will provide significant institutional strengthening and capacity building in line with Pillar 4 of the GCRF.

Component 4: Contingent Emergency Response Component (CERC) (US\$0 equivalent)

A CERC is included in the Project in accordance with IPF Policy, paragraphs 12 and 13, for Situations of Urgent Need of Assistance and Capacity Constraints. This will allow for rapid reallocation of credit uncommitted funds in



the event of an eligible emergency as defined in OP 8.00.⁷⁰ An Annex to the Project Operations Manual (‘CERC Annex’) will be prepared and adopted as part of the Project Operations Manual within 6 months from Project effectiveness to guide the activation and implementation of the CERC, and a CERC Environment and Social Management Framework (ESMF) will be also prepared within 6 months from Project effectiveness. For the CERC to be activated, and financing to be provided, the Government will need (i) to submit a request letter for CERC activation, and the evidence required to determine eligibility of the emergency, as defined in the CERC Annex; and (ii) an Emergency Action Plan, including the emergency expenditures to be financed; and (iii) to meet the environmental and social requirements as agreed in the Emergency Action Plan and Environmental and Social Commitment Plan (ESCP).

Project Costs and Financing

<u>Project Components</u>	Project cost (US\$ million)	IDA Financing (in US\$ million equivalent)	Government Funding (US\$ million)
Component 1: Strengthening health infrastructure for a well-performing health referral system	45.5	45.5	0
Sub-component 1.1: Strengthening health referral systems at the municipality level	32.15	32.15	0
Sub-component 1.2: Tertiary care equipment	9.6	9.6	0
Sub-component 1.3: Feasibility Studies and DED for HNGV Expansion Remaining Phases and municipal hospitals	2.25	2.25	0
Sub-component 1.4: Digital infrastructure improvements	1.5	1.5	0
Component 2: Ensuring the availability of management costs at the primary health care level	4.0	0.5	3.5
Sub-component 2.1: Provision of Facility Management Cost	3.0	0.25	2.75
Sub-component 2.2: PFM capacity building	1.0	0.25	0.75
Component 3: Project Management and Monitoring & Evaluation	4.0	4.0	0
Component 4: CERC	0	0	0
Total	53.5	50.0	3.5

C. Project Beneficiaries

28. Through the strengthening and improvement of a referral health care system at primary and referral care levels in Ermera, Viqueque, and Lautém, the Project directly benefits a total of 287,970 inhabitants in these three municipalities, 49.7 percent of whom are women according to the latest, 2022 census.⁷¹ The average population growth rate lies at 1.7 percent, and there will thus be an increased need for health services

⁷⁰ An eligible emergency is defined as an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact associated with natural or man-made crises or disasters. Such events include a disease outbreak.

⁷¹ Statistics Timor-Leste. 2022.

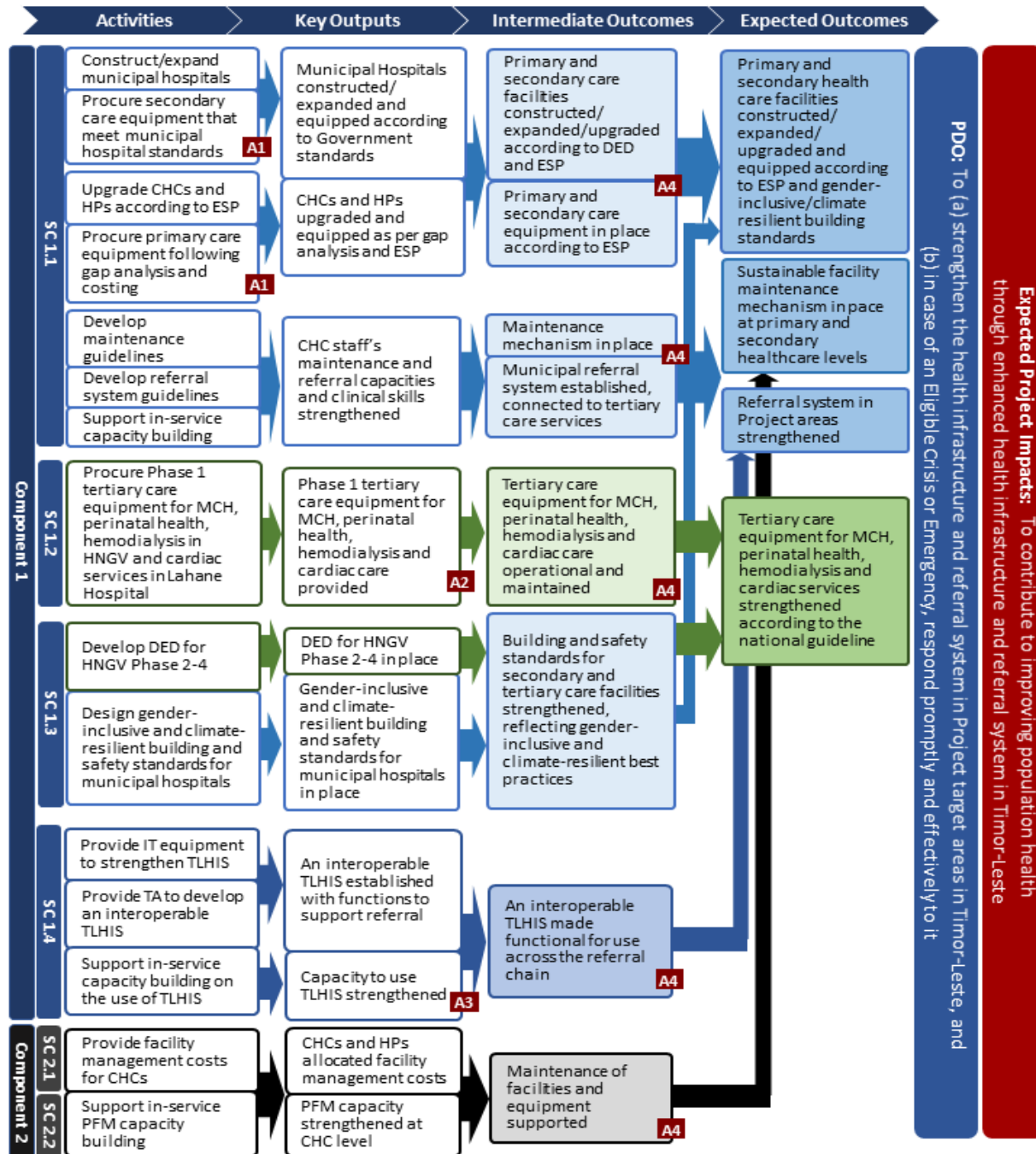


for this increasing, ageing population. This increased access to primary and referral-level health care particularly benefits the 90 percent rural, vulnerable population in these municipalities. The provision of equipment at the HNGV and Lahane Hospital at tertiary care level furthermore directly benefits the broader population of 1.34 million Timorese who rely on tertiary care in these hospitals. The focus on cardiac services at Lahane Hospital will primarily target patients with cardiovascular disease (the cause of 19.9 percent of deaths), diabetes, cancer, and chronic respiratory disease.⁷²

⁷² World Bank. 2022r. *Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70 (%) - Timor-Leste*. <https://data.worldbank.org/indicator/SH.DYN.NCOM.ZS?locations=TL>



D. Results Chain



ASSUMPTIONS:
 A1: Appropriate norms and standards are in place and complied
 A2: HNGV Phase 1 and Lahane Hospital Cardiac Center facilities are available according to the standards
 A3: TLHIS includes well-defined referral indicators
 A4: Adequate human resources and operational costs made available

PDO: To (a) strengthen the health infrastructure and referral system in Project target areas in Timor-Leste, and (b) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it

Expected Project Impacts: To contribute to improving population health through enhanced health infrastructure and referral system in Timor-Leste



E. Rationale for Bank Involvement and Role of Partners

29. **The World Bank’s reengagement with the health sector in Timor-Leste started through the HEPR-TF Project. This has provided strong justification for the Government as well as the World Bank to utilize the majority of the IDA20 country allocation for the HARI’I Project.** The HEPR-TF Project was approved by the World Bank management on October 14, 2022 and became effective on January 20, 2023. The Project is financed by a grant in the amount of US\$5 million from the HEPR Umbrella Program and its associated Trust Fund. Through the preparation process, MoH, the Project’s implementing agency, has gradually become familiar with World Bank operational requirements, especially on fiduciary and ESF aspects. The preparation process for the HEPR-TF Project has also given the World Bank an opportunity to work with the newly established SPMU within MoH aiming to consolidate the management of all externally funded projects. The HEPR-TF therefore secures funds to further strengthen the function of this new SPMU, which in turn helps the preparation and implementation of HARI’I.

30. **With global experience in supporting health systems strengthening and enhancing institutional capacity, the World Bank is well placed to support the Government’s efforts in building up a resilient health sector in Timor-Leste.** For instance, support for health sector governance through strengthening PFM capacity under the Project is anchored with the Government-wide PFM reform, which the World Bank is currently assisting, rooted in the Bank’s substantial experience supporting PFM in the health sector in other countries, demonstrating a clear comparative advantage for the World Bank PFM support.

31. **Development partners, including Australia’s DFAT, USAID, UNFPA, and the WHO, are working in various areas such as health sector governance, nutrition, Water, Sanitation and Hygiene (WASH), maternal and child health, surveillance, infrastructure and health transport, and gender mainstreaming.** The HARI’I Project will closely collaborate with key development partners in the health sector and apply their experience and achievements in the Project design where applicable.

32. **Close collaboration between the World Bank and DFAT is currently underway in DFAT’s health system strengthening program (AUD30 million, 2022–2026), which will focus on Dili, Oecussi, and, overlapping with HARI’I, Ermera.** At the municipal level, DFAT’s program will focus on the leadership, management systems and capacity of the Municipal Health Service to help health facilities deliver the ESP effectively, and to work across sectors to mobilize resources and actions for PHC. Health facilities in the target municipalities will be included in a range of organizational assessment, readiness and planning/problem solving activities to assist in identifying gaps/bottlenecks to facilities being able to effectively and equitably deliver the ESP—at a system, financing, organizational and community level. DFAT is also planning to support small-scale CHC infrastructure improvements in its target municipalities (AUD300,000) which will be complemented by the World Bank investment to bring facilities up to deliver the full ESP. The small DFAT funding envelope for infrastructure upgrades (AUD100,000 per municipality) and sole focus on CHCs avoids duplication between civil works financed by the World Bank and DFAT and provides valuable experience to inform the HARI’I Project. Based on experience of ongoing in-service training and following a needs assessment, selected CHC and HP staff in Lautém and Viqueque will undergo in-service training in clinical skills, while in-service training is currently provided in Ermera by DFAT. This ensures the critical skills and accountability for equipment maintenance are in place, essential for the success of this infrastructural development. HARI’I will also utilize the training modules and materials prepared with support from DFAT/PHD for in-service training in clinical skills. Development and use of digital self-learning tools will also be explored.



33. **Strong complementarity between the HARI’I Project and the UNFPA’s program on equipping the country to delivery needed obstetric care is being sought at municipality level.** UNFPA is supporting the implementation of the Emergency Obstetric and Newborn Care (EmONC) Improvement Plan of Action for Timor-Leste 2016–2019. So far UNFPA has procured BEmONC equipment for all eight Level-2 CHCs, CHCs with inpatients. Two of these sets of BEmONC equipment have already been delivered to CHCs in Liquica and Viqueque, including to the CHC to be expanded to a municipal hospital with HARI’I funding. These two facilities set the minimum standard for BEmONC for the Government. For the remaining six facilities, BEmONC equipment is yet to be installed, as the designated BEmONC ward has not yet been upgraded for lack of funding. Moreover, UNFPA has developed BEmONC and CEmONC national standards with detailed costing and has also trained 145 midwives and nursing staff for 26 days each on BEmONC in the two facilities where the equipment has been delivered.

34. **The United Nations Children’s Fund (UNICEF) has been providing support on improving WASH services under the WASH in Healthcare Facilities Project.** Since 2020, UNICEF has been working in six municipalities, namely Baucau, Covalima, Dili, Ermera, Manatuto and Viqueque by providing US\$515,000 to improving existing WASH services for a total of 38 CHCs. In addition, US\$69,500 has been spent on providing new disabled-friendly sanitation facilities in seven of these 38 CHCs. In 2022, UNICEF is upgrading WASH in the remaining CHCs in Ermera as well as all CHCs in two additional municipalities (Ainaro and Aileu). Water Aid is similarly improving WASH in CHCs in Lautém.

35. **USAID have recently launched the Health System Sustainability Activity in Timor-Leste with a total budget of US\$15.6 million.** This four-year project will work toward four main areas, including, (a) HMIS to produce and use quality data to inform decision-making, and strengthen health financing at the national and subnational levels; (b) human resources management and development, (c) capacity building for civil society, and (d) civic engagement and advocacy.

36. **WHO supports health sector policies and strategy development at the national level, under the health system pillars.** Key focus areas are integrated disease surveillance, health planning and financing, communicable diseases, laboratories and blood safety, non-communicable diseases and emergency preparedness and response. Further, WHO recently supported MoH in the development of the ESP for (a) PHC, and (b) secondary/tertiary care. The HARI’I Project design is anchored in these ESP standards to roll out and benchmark high-quality and standardized health service delivery in the country.

37. **The International Finance Corporation is supporting the setting up of a Public-Private Partnership Project for diagnostic health care equipment in Timor-Leste.** This project aims to provide laboratory and imaging equipment to facilities across the country. Harmonization will be sought with this Project once effective to ensure complementarities are capitalized upon in terms of municipal-level health service delivery.

F. Lessons Learned and Reflected in the Project Design

38. **The Project design incorporates lessons learned from previous and current World Bank and donor funded projects in Timor-Leste (Table 2), as well as the World Bank’s experience in health systems strengthening and service delivery in other countries.** Selected key lessons are described below:

- **Hospital investments, especially at secondary and tertiary levels, are undermined if primary care facilities do not function as a gatekeeper of a referral network system.** The Project therefore supports



strengthening of the service readiness and capacity of primary care facilities, as well as the referral system.

- **Ongoing World Bank-financed projects in Timor-Leste unveil constraints related to project management, including contracting of individual consultants, and coordination.** A high-level Project Steering Committee will be set up to ensure frequent communications with advisors appointed in each of the concerned Ministries and National Agencies. Similarly, focal persons will be appointed to follow through Project activities and day-to-day management requirements, with the SPMU also containing one dedicated focal person per municipality.
- **Lessons from the previous health project supported by the World Bank ‘National Health Sector Strategic Plan Support Project’ are recorded in its Implementation Completion and Results Report (ICR; Report No. ICR00003600, December 2015).** On Project design, these include: (i) the level of ambition given political and institutional realities in the country; and (ii) fundamental institutional capacity building is needed before Project outputs and outcomes can be achieved. On implementation, lessons include (i) realistic capacity assessment during Project preparation is critical; (ii) the importance of having experienced, consistent, in-country resources to support counterparts, and (iii) establish a dedicated Project Management Unit (PMU).

Table 2: Lessons Learned from Ongoing World Bank-financed Operations in Timor-Leste

	Institutional Capacity Challenges	Lessons Learned/Possible Mitigation
1	Management capacity: Most projects in Timor-Leste have experienced considerable delays in preparing and submitting required documents at every stage of a project.	Appoint a focal person from within each concerned ministry/agency, engage them throughout the process, and build ownership.
2	Disbursement process: Disbursement delays are common due to the required approval process by Director General on any single transaction regardless of amounts.	Explore the possibility of setting a threshold below which DG-level approval can be waived.
3	Staffing: Ensuring the quality of PMU consultants is a common challenge due to limited consultant pool in the country and lack of quality control in the Government selection process.	Conduct prior reviews carefully at the time of shortlisting and consolidating evaluation results before the final recommendation of the candidate is made.
		Include a probational period of 3–6 months in consultant Terms of Reference.
4	Staffing: GoTL has set out a regulation where loan proceeds cannot be used to hire individual consultants for PMU (a firm contract is allowed).	Define an appropriate structure as well as managerial and technical expertise required for PMU as early as possible to develop a packaged contract.
5	Coordination capacity: There is a general lack of cross-ministry engagement, in the absence of a structure that can promote frequent meetings and discussions.	Appoint an advisor from each of the concerned ministries/agencies and form a PSC to provide a forum for cross-ministry engagement from an early stage of the Project.
		Appoint a focal person from each of the concerned ministries/agencies to discuss administrative and technical matters in frequent regular meetings organized by PMU.
	Technical Design Challenges	Lessons Learned/Possible Mitigation



6	Lack of costing information: Obtaining proper cost estimates for construction components in a timely manner can be a challenge due to limited availability of relevant information from the Government and a short timeframe given for the project preparation.	For municipal hospitals, request the Government to urgently provide the specifications and rapidly estimate the costs based on other available costing information.
		For lower-level facilities, i.e., CHCs and HPs, conduct rapid assessments to estimate the costs of one facility per category.
		Conduct a proper cost estimation exercise with appropriate experts during the first year of operation.
7	Large financing and complex project design: While disbursement delays are a commonly observed challenge, the size and complexity of a project can further affect the project performance due to the limited experience and capacity in Government implementing agencies.	Make the Project design as simple as possible.
		Explore the possibility of third-party implementation arrangements while also considering feasible options to build the Government capacity and ownership.
Fiduciary Challenges		Lessons Learned/Possible Mitigation
8	Consultant selection: Several Bank-financed projects faced difficulties in ensuring the quality of selection process for PMU consultants. There were also cases where recommended candidates were found to have background issues at a late stage of selection process, leading to re-selection.	Consider introducing Hands-on Enhanced Implementation Support (HEIS) which allows external partner representatives to participate in the selection committee as observers.
		Ensure that a background/criminal record check is conducted at an early stage of the process.
Environmental and Social Safeguard Challenges		Lessons Learned/Possible Mitigation
9	Limited E&S capacity: Limited experience in managing World Bank-financed projects and lack of human resources in E&S is a major hindrance to both project preparation and implementation.	Recruit an environmental safeguard consultant and a social safeguard consultant to support the SPMU from an early stage. Start working on the ESF documents as early as possible during the preparation process.
10	E&S Requirements for construction: An environmental license has to be issued by the National Agency of Environmental Licensing before any construction work starts, which requires time.	Start the environmental licensing process as soon as the construction sites are determined.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

39. **MoH will be the implementing agency which has overall responsibility to effectively deliver the Project.** In this capacity, MoH will (i) coordinate Project activities implemented at the national and sub-national levels to make sure they are aligned to achieve the PDO, (ii) liaise with and maintain a strategic link between MoF and other key Government agencies including the Ministry of Public Works (MoPW), Ministry of Planning and Territory (MoPT), and MSA, as well as the National Procurement Commission (NPC) and ADN, to enable smooth Project execution (for further detail on these Ministries and relevant agencies see Annex 1), (iii) ensure



close collaboration with the Council of Administration for the Infrastructure Fund (*Konsellu Administrasauñ husi Fundu Infraestruturata*, or CAFI) and the National Agency for Planning Monitoring and Evaluation (*Ajéñsia Nasionál ba Planeamentu, Monitorizasaun no Avaliasaun*, or ANAPMA) for monitoring and reporting under the Project, sending regular reports to the World Bank on progress achieved on the indicators of the results framework; (iv) monitor Project expenditures and costs; (v) ensure that the POM is followed and updated as may be necessary during implementation; and (vi) prepare and distribute consolidated progress reports and the final report to the World Bank and relevant Government agencies.

40. **To assist MoH in fulfilling these responsibilities, the Project will be implemented by MoH's SPMU at the national level, supported by a Project Implementation Unit (PIU) at the municipal level in MoH.** The Government-funded SPMU is headed by an administrator, who is a Director or other senior-level official, with qualifications, and experience acceptable to the Association, as set forth in the POM, and supported by an SPMU Secretariat. The SPMU will have core functions including developing an Annual Work Plan (AWP), Project Monitoring and Management Services, Administration and Financial Services, Procurement Services, and Environmental and Social Safeguards, and also has a dedicated Engineer position (details in Annex 1). Under the MoH management oversight, the SPMU will provide day-to-day management and implementation of the Project, including discharging overall fiduciary responsibilities, and monitoring of implementation progress to ensure compliance with World Bank requirements. The Government-funded PIU will oversee the management and use of the Facility Management Cost flowing to the Municipal Health Services account at the municipal level in Ermera, Lautém, and Viqueque, and oversee and provide support to Project activities in these three municipalities.

41. **The SPMU will be supported in its efforts to implement the Project by the PMCU to further strengthen Project implementation under the overall leadership and monitoring by SPMU.** Consultants, including a Project Manager, a Financial Management Specialist, a Procurement Specialist, an Engineering Specialist, and a Monitoring & Evaluation (M&E) Specialist, will be contracted to form this PMCU. The PMCU will be hired within six months from Project effectiveness and responsible for (i) providing technical guidance and advice, ensuring adequate skill-sharing; (ii) ensuring timely production of annual implementation plans and budgets; (iii) tracking the progress of Project indicators to monitor the implementation of Project components, and (iv) ensuring that Project implementation complies with the POM. Component 3 of the Project covers the cost of hiring a PMCU.

42. **An Inter-Ministerial Project Steering Committee (PSC) will be established at the Director General (DG) or Minister level to provide overall guidance, discuss progress and solve challenges the Project faces in any key area during implementation, at least every three months during the first year of the Project, then at least every six months.** The composition of the PSC will include representatives from key Government Ministries and Agencies, including MoH, MoF (acting as chair), MoPW, MoPT and MSA. The roles and responsibilities of the PSC will be included in the POM as a set of terms of reference.

43. **At the subnational level, the municipal administrations will have primary responsibility for supporting implementation of the Project at the subnational level.** The SPMU will work closely with the Director of Health, Director of Public Works and Director of Planning at each Municipality in the coordination of the activities implemented at the subnational level. The Municipal Director of Health will involve different agencies, as needed, to ensure effective management of the activities.

44. **Given that the HARI'I Project is a credit to the Government, its Public Debt Law will be applied.** NPC will be in principle responsible for all procurement under the Project. However, given the high procurement load and the specialized equipment procurement under the Project, the procurement authority for medical equipment for Lahane Hospital, HNGV, and the Municipality Hospitals, as well as the minor works for the



upgrades to CHCs and HPs, will be transferred to MoH, and outsourced to a dedicated third party, preferably a United Nations (UN) partner, with whom a framework agreement with MoH is in place. This arrangement will be detailed in the POM. NPC would retain oversight of procurement processes for the DED and Municipal Hospital infrastructure components, as well as the hiring of the PMCU and a consultancy firm and IT goods for TLHIS strengthening. The roles and responsibilities of all relevant agencies throughout the procurement process are detailed in Annex 1 for each sub-component.

45. **The POM will detail all relevant implementation procedures and terms of reference for respective entities.** The POM will be prepared by SPMU/MoH, and its completion and adoption satisfactory to the World Bank are a condition of Project effectiveness. The POM will be revised and resubmitted to the World Bank for No Objection during the course of implementation to reflect any changes the Project may have.

B. Results Monitoring and Evaluation Arrangements

46. **MoH, through the SPMU, will be responsible for overall monitoring of Project implementation, including reporting on the Project.** Existing systems will be used to monitor the results framework as closely as possible, however, these existing systems will need to be complemented with additional collection and independent verification, as needed. The improved and integrated TLHIS, and its constituent DHIS2, will be a critical platform used by MoH in this monitoring and evaluation process, comprising of disaggregated and aggregated input and output health indicators.

47. **The Project will work closely with MoH's data center who manages the DHIS2 database to develop desk and field-based protocols to check and enhance data quality.** These processes will model methods that the Government can adopt for routine data verification and validation using the DHIS2 database. Overall, this situation will necessitate additional supervision attention from the World Bank. As elaborated on above, one of the core aspects of the Project is to improve the coverage, quality, and use of health information. The Project will carefully avoid further proliferation of data systems by establishing a separate system for the purpose of Project monitoring, aiming to use the existing systems to the greatest extent possible.

48. **At least for the first year of Project implementation, the M&E plan will be developed by a senior M&E Officer in SPMU** to measure progress against the PDO, PDO indicators, and intermediate indicators. One of several possible methods to monitor progress, especially indicators related to supply-side readiness, is the Service Availability and Readiness Assessment Framework, which was developed by WHO in 2012 to measure minimum primary and secondary care service readiness indicators.

49. **After approximately 24 months of Project implementation, MoH and the World Bank will jointly conduct a Mid-term Review (MTR).** It will include in-depth interviews and/or focus group discussions with key informants from Project beneficiaries. The MTR will provide an opportunity to (i) identify challenges and/or problems in design, implementation, and management, for adjustment if needed, and (ii) reinforce initiatives that demonstrate the potential for success. The MTR report will be shared with the MoH and the World Bank for review and recommendations for the remaining Project implementation period. The progress on infrastructure work and procurement of equipment can be measured from the fourth year as per the sequenced timelines (see Table A1.1). Similarly, the PDO indicator on referral can only show progress from the fourth year as the development of the information system to record referral cases will be completed in the third year.

50. **MoH, in collaboration with the World Bank, will conduct implementation support missions at least twice a year** to monitor progress and hold discussions on any issues raised during Project implementation.



C. Sustainability

51. **Sustainability of the Project lies with Timor-Leste’s commitment to having a comprehensive primary, secondary and tertiary health care service accessible to all Timorese as a goal of the NHSSP 2020–2030, which is also highlighted as a strategy to reduce poverty and improve national productivity in the National Strategic Development Plan 2020–2030.** Further, the capacity building on maintenance and PFM will create long-term management capacities and financial accountability at the local level, in particular aiming to ensure continued maintenance and functionality of infrastructure and equipment. The Project will also facilitate the development of a facility maintenance strategy so that Government will continue to allocate budgets for facility management, including the maintenance of the Project-supported infrastructure and equipment after the Project closure. Developing a functional HMIS will also help improve health sector performance. Moreover, the Project will enhance the country’s ability to prepare for and respond to health emergencies and increase its resilience in the face of climate-related disasters, which will help mitigate negative impacts on sustainability in times of crises. Finally, a consultative process and broad stakeholder engagement will deepen understanding and strengthen ownership of the Project processes and outcomes across the sector. This will help develop an enabling environment for long-term commitments and investments to sustain the Project results beyond the Project duration.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

52. **The Project is found to be economically viable from the perspective of i) prioritization in light of Timor-Leste’s burden of disease, ii) equity, iii) efficiency and iv) sustainability considerations.** Public spending on the health sector is an investment that has implications both for the productivity of the current workforce as well as for future growth and productivity. The focus of the Project in ensuring service readiness of primary and secondary healthcare facilities (US\$32.15 million equivalent out of US\$50 million equivalent) is economically viable as these levels of the health system are critical for effective management of the risk of NCDs which is paramount to manage the otherwise rising costs of treating NCDs at higher levels of care. Given stroke and heart disease are among the top four causes of morbidity and premature mortality and that kidney dysfunction is one of the top 10 risk factors, the provision for equipping the Cardiac Center at the Lahane Hospital and the hemodialysis center in the national hospital (US\$9.6 million equivalent out of US\$50 million equivalent) is aligned with Timor-Leste’s existing burden.

53. **The Project’s contribution to improved equity is evident in that it primarily focuses on three municipalities with relatively poor access to care where investment in the infrastructure and equipment needs is expected to drive up demand for care and improve quality.** The Project also contributes to a more pro-poor benefit incidence of public health spending by investing a lion share of the Project envelope in PHC strengthening and the referral network, where the poor are most likely to seek care. The Project activities contribute to the improvement of the efficiency of the health system by filling gaps in the current configuration of inputs in the delivery of service provision and tackling an important source of inefficiency—poor service readiness. This is expected to reduce bypassing of the most cost-effective level of care and improve the overall efficiency of health spending. It also helps improve allocative efficiency of total health spending since trends in



the composition of spending in Timor-Leste are unfavorable to capital development and maintenance. Another major contribution to improvement in efficiency of spending comes from equipping the hemodialysis center in HNGV and the cardiac center in Lahane Hospital. The Project is expected to significantly reduce the cost to the Government of financing treatment abroad for cardiology and chronic kidney disease, which together accounted for 27 percent of the referral abroad in 2019.⁷³ The estimated annual cost of treatment abroad for the Government alone is US\$12 million, which is roughly one-fifth of the total MoH budget in 2021.

54. **The longer-term operational cost implications of the new health infrastructure can be absorbed by committing a fraction of the year-to-year budget increase of the MoH and repurposing savings from reduced referral abroad for cardiac care and hemodialysis.** One critical concern in new infrastructure investments in a health system relates to whether or not the additional human resource and operational costs can be absorbed by the health sectors budget in the medium to longer term. In 2021, the average operational budget of four hospitals under MoH (Maliana, Maubisse, Suai and Baucau) was about US\$740,000 excluding salary and wages, and US\$1.7 million including salary and wages. Given the services and staff requirements envisaged, the new municipal hospital to be constructed in Ermera under this Project is expected to cost half of this. Hence, MoH has to be able to allocate about US\$370,000 in non-salary/wage operational cost and an additional US\$470,000 in salary and wages.⁷⁴ This estimated total operational budget need (US\$842,000) can easily be absorbed in the year-to-year budget increase of the MoH. For, example, the MoH budget increased by US\$14 million from 2020 to 2021 and by US\$2.6 million from 2018 to 2019.⁷⁵ Given the country’s non-oil economy is projected to expand by 3 percent in 2022 (up from 1.5 percent in 2021), this assumption of increased MoH budget is likely to hold. Moreover, the Project is expected to significantly reduce the Government’s cost of financing treatment abroad for cardiology and chronic kidney disease (as noted above, these together accounted for 27 percent of total referrals abroad in 2019).⁷⁶ Assuming a proportionate share of the estimated US\$12 million is spent on these two specialties alone and conservatively assuming only half of these referral cases will be averted by the Project’s investment, the Government is expected to save about US\$1.6 million annually, which is a significant resource that can be redirected to cover this additional operational cost, to further strengthen the domestic healthcare system and to improve overall efficiency.

B. Fiduciary

(i) Financial Management

55. The World Bank carried out the Financial Management (FM) assessment during project preparation of the Project implementing agencies and updated by February 28, 2023 to determine whether their FM systems have the capacity to produce timely, relevant and reliable financial information on Project activities. The assessment also aimed to determine if the accounting systems for Project expenditures and underlying internal controls are adequate to meet fiduciary objectives, allow the Bank to monitor compliance with agreed implementation procedures, and appraise progress towards Project objectives.

⁷³ WHO. 2020. *Essential Service Package for Secondary and Tertiary care for Timor-Leste*.

⁷⁴ We assume the additional operational cost implications of the two other expansion CHCs will be modest and hence are excluded from this estimation.

⁷⁵ The decline from 2019 to 2020 (~US\$2.6 million) has been excluded as it is a result of COVID-induced economic contraction.

⁷⁶ MoH. 2020. *Essential Service Package for Secondary and Tertiary care for Timor-Leste*. National Directorate of Support For Hospital Services.



56. MoH has established a SPMU as per Minister dispatch. The SPMU is led by a Director and has appointed all the key staff (deputy Project manager, finance officer and administration officer). The SPMU is responsible for implementing all the donor funded projects including the World Bank-funded Project and the SPMU will be strengthened as needed for project implementation. The MoH has prior experience of managing donors’ projects included World Bank-financed operations. The previous World Bank-funded projects were managed through a dedicated Project Implementation Management Unit arrangement and led by consultants. All those projects have since closed. There is the newly approved HEPR-TF grant Project totaling US\$ 5 million, and the FM consultant, who was involved in the past projects, is still working for the MoH and will be fully responsible for the Project’s FM related matters. Overall, the Project has three major risks: (i) risks to Project implementation may arise from fund flow arrangements to the CHC which may result in cash misappropriation, (ii) inadequacy of Government counterpart funds, and (iii) reliability of accounting and reporting system.

57. These risks will be mitigated by (i) ensuring counterpart funds are available during the Project life and stated in the FA; (ii) maintain subsidiary records in Microsoft Excel from the earliest stages of the Project. However, during the first supervision progress towards adapting the Government country system of Free-Balance will be reviewed, and if a need is identified a separate accounting software may be recommended. Mitigation measures related to improved CHC service delivery component include (i) placement of qualified finance officer at each CHC prior to disbursement, and (ii) MoH to prepare a financial report using the existing Chart of Account for Municipal Health Services for the designated use of the CHCs expenditures, and (iii) Finance SOP to be adopted and implemented at CHC level.

58. Overall, the Project FM risks are assessed as **Substantial** and the proposed FM arrangements will satisfy the World Bank’s minimum requirements.

(ii) Procurement

59. Procurement for the Project will be carried out in accordance with the World Bank Procurement Regulations for IPF Borrowers, dated November 2020. The Project will be subject to the World Bank’s Anti-Corruption Guidelines, dated October 15, 2006, and revised in January 2011 and as of July 1, 2016. The Project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions.

60. The major planned procurement under this Project is expected to include: (i) civil works for expanding an existing CHC in Viqueque to become a municipal hospital, and the construction of new municipal hospitals in Ermera and Lautém; (ii) purchase and lease-purchase of medical equipment and associated human resource capacity building for operation and management through a third-party (consultant firm or UN Agency) to provide technical procurement support and overseen by MoH, (iii) IT equipment to establish the centralized TLHIS; and (iv) recruitment of a PMCU (consultant firm) to support Project implementation. The procurement assessment was initiated on November 17, 2022. MoH, in coordination with NPC, prepared the Project procurement plan and a streamlined Project Procurement Strategy for Development (PPSD) based on the activity prioritization which was discussed and agreed at the negotiations. Both PPSD and procurement plan documents can be updated during Project implementation as necessary.

61. All procurement under the Project (credit financing) will be implemented with the procurement technical support by NPC. NPC has had experience implementing procurement activities under World Bank-financed projects since 2012. NPC currently has 12 Procurement Officers and three Senior Procurement



Specialists (International), who have experience of implementing procurement activities under donor-funded projects.

62. In relation to specialized and sophisticated medical equipment procurement, due to the expected large procurement and limited staff experiences within the NPC and MoH, to mitigate the risks associated with procurement delays and the inferior quality of medical equipment, the MoH and NPC will enhance their technical procurement capacity by hiring a technical consultant firm, which can also be a UN agency, to procure the medical equipment.

63. The proposed procurement approach prioritizes fast-track emergency procurement for the required emergency goods, works and services, particularly for the prevention phase and the relief phase. In this regard, key measures to fast-track procurement include the following: (i) Direct Contracting and Request for Quotations with identified contractors, suppliers and service providers for most of the procurement items; (ii) use of alternative procurement arrangements through contracting of a third-party entity, including possibly a UN agency for quick response; (iii) if requested by Government through the PSC, HEIS will be provided during implementation to help expedite all stages of procurement—from help with supplier identification, to support for bidding/selection; and (iv) contracts subject to the World Bank’s ex-post reviews.

64. The HEIS can be adopted for the Project pursuant to section III paragraph 3.10 of the Procurement Regulations. HEIS may include, among other activities: (i) drafting Procurement Documents; (ii) identifying strengths and weaknesses of bids/proposals; (iii) observing dialogues and negotiations with bidders/consultants; and (iv) drafting procurement reports and contract award documentation. HEIS does not substitute for the Government’s decision-making authority. In every situation, the procurement decisions at key stages always remain the responsibility of MoH. The World Bank’s provision of HEIS does not constitute decision-making on behalf of MoH.

65. The major risks to procurement identified are: (i) lack of familiarity with the World Bank Procurement Regulations; (ii) delays in procurement associated with processing and approval of planned procurement activities; and (iii) weak in-house capacity to manage high value and complex contracts, especially insufficient coordination during the procurement process between relevant parties concerned with the Project. The procurement risk will be mitigated by (a) technical support for procurement from NPC: SPMU is to be equipped with key technical experts including Procurement Officer, M&E Officer, Safeguards Officer, Engineer, and FM Officer; (b) POM to specify the roles of procurement oversight, involving regular procurement progress update by PMU; and (c) refresher training on the Procurement Regulations and contract management provided. Additionally, the World Bank will provide HEIS for the selected procurement activities (per MoH request). The World Bank’s oversight of procurement will be done through Project supervision, implementation support/HEIS, the World Bank’s prior review and ex-post review. MoH will ensure timely uploading of all the related procurement documents into the STEP. The details of the implementation support and post-review arrangements will be elaborated in the PPSD.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No



D. Environmental and Social

66. **The Project’s environmental and social risk classification (ESRC) is assessed as Substantial, with environmental risk being assessed as Substantial and social risk as Moderate.** This risk classification was concluded based on preliminary information and reassessed during finalization of the Environmental and Social Review Summary (ESRS), particularly concerning current health management practices in Timor-Leste. By design, the Project is envisaged to generate positive outcomes through health system strengthening and improved equity of health services, particularly at the primary and referral healthcare levels in underserved areas. Direct investments with potential environment, occupational and community health and safety risks and impacts include the provision of medical equipment in two select national hospitals, infrastructure upgrading in three municipal hospitals, and infrastructure upgrading for CHCs and HPs in three municipalities. No new land acquisition is anticipated since such upgrading will be either in-situ or use existing Government land. Loss of natural habitat or conversion of wetland are not anticipated. While the scale of upgrading is yet to be determined, hospital upgrading may involve medium-scale civil works based on the proposed financing envelope (US\$12 million distributed across three municipal hospitals, including equipment) and Government’s estimates. The capacity of typical municipal hospitals in peri-urban and rural areas in Timor-Leste is expected to range between 25-58 bed capacity, with an area footprint between 1,400 and 3,000 sq. m (ESP for Secondary and Tertiary Care for Timor-Leste, 2022). An increase in the volume of health services attributed to the Project is expected to increase the volume of medical waste generated by the health facilities, particularly municipal hospitals. The current medical waste management practices and enforcement of existing legislation are currently weak, and this reflects a systemic issue on the handling of medical waste management affecting the whole country. However, due to the small footprints and limited-service provisions anticipated to be provided by the planned municipal hospitals, additional generation of medical wastes due to improved services is expected to pose a low to moderate probability of serious adverse effects to human health and/or the environment. Similarly, potential risks associated with civil works activities for the hospital upgrade are currently assessed as moderate considering the potential scale and nature of activities. Risks associated with labor influx, including risks of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), are assessed as moderate based on a risk screening. Municipal hospital upgrading will be situated in and/or near the municipal capitals where there is a supply of local labor and availability of basic services. No labor influx is anticipated as a result of the operation.

67. **Environmental and social requirements for the civil works will address both applicable Environmental and Social Standard (ESS) provisions as well as the national law.** In line with the Government’s environmental licensing regulation as stipulated in the Government Law-Decree 05/2011 on Environmental Licensing Law (ELL), the Project will be required to develop an environmental assessment proportional to the scale of impacts, along with an environmental management plan for each municipal hospital. These include an environmental impact assessment (EIA) or initial environmental examination (IEE), depending on the level of likely impact of the Project, followed by a site-specific Environmental and Social Management Plan (ESMP). An environmental license shall be obtained prior to the start of construction. Further, relevant requirements of Environmental, Social, Health and Safety (ESHS) will be incorporated in bidding documents and contracts for civil works. Potential risks associated with procurement of medical equipment with radioactive materials, establishment of hospital waste treatment facilities for infectious and non-infectious waste, including their supporting equipment (i.e., autoclaves, incinerators, etc.) which may present potential health hazards will be addressed as part of the overall planning, design, and operations/maintenance of such equipment. Further considerations on climate-resilient design and universal access will be integrated as part of the feasibility and detailed designs of the



facility upgrading. Going forward, the Project will include institutional capacity strengthening for the adoption of these measures within MoH.

68. **Fit-for-purpose environmental and social risk mitigation measures will be prepared with time-bound actions to be agreed in an ESCP.** The ESCP includes relevant actions, including preparation of environmental and social assessment and instruments prior to specific Project milestones. A Stakeholder Engagement Plan (SEP) has been prepared and finalized to guide overall engagement during the Project preparation and implementation, focusing on inclusive engagement with vulnerable groups. The ESF instruments, namely the Environmental and Social Commitment Plan (ESCP) and SEP, were prepared and disclosed on March 1, 2023, by the Government on the MoH website and also on March 1, 2023, on the World Bank website. An ESMF is considered as an appropriate instrument since specific sites and size of physical investments (that is, civil works, equipment) will only be determined during Project implementation, following feasibility assessments. The ESMF has incorporated relevant guidelines and institutional arrangements for the management of risks and impacts across applicable ESSs at the sub-Project level, such as site-specific environmental and social assessment and impact management, construction safety, labor and working conditions, community health and safety, land due diligence, Indigenous Peoples, pollution prevention and resource efficiency, and cultural heritage. The ESMF, which also covers Labor Management Procedures, will be finalized as a Project effectiveness condition.

69. **Inclusive engagement with key stakeholders, including the target community, lays the foundation for equitable access and trust building.** While quality of services represents an essential component of access to health care, another equally important dimension is efforts to promote demand for such services on the part of citizens. There have been challenges attributed to the Government’s capacity to provide equitable and socio-culturally acceptable health services, particularly in communities where such services have been lagging. Beyond the provision of infrastructure and equipment, strengthening primary and referral healthcare facilities requires interface with local norms, practices, and beliefs as part of health demand generation, behavior change and trust building. This may involve engagement with various stakeholders with vested interests, such as traditional healers, community and religious leaders, civil society organizations and the broader public whose views and perceptions will need to be understood to enable inclusive and constructive engagement. Hence, the Project will need to address such complexities and dynamics on the ground to promote local ownership and sustainability of its investments.

Citizen Engagement

70. The project includes direct beneficiary engagement mechanisms, critical to ensuring citizens’ feedback is heard and addressed. These consist of: (i) a grievance redress mechanism (GRM) building on the existing Government GRM, allowing beneficiaries to communicate their feedback and/or grievances related to the Project, and (ii) a satisfaction survey to be agreed with MoH at the start of Project implementation, assessing the users’ experience of the quality, accessibility, and equitability of the Project’s deliverables. For this survey, a simple, low-tech system is preferred, e.g., a paper-based short survey questionnaire, that can be repeatedly completed and analyzed.

71. The HARI’I Project will designate a Grievance Redressal focal point to address grievances that are specifically related to the project. The Grievance Redressal focal point will also be responsible for maintaining records (e.g., a log) of all grievances that pertain to the project. General public, patients at health facilities, vendors, suppliers and other service providers related to the implementation of the HARI’I can utilize several existing avenues to submit grievances, including, (i) Suggestion Box: A patient or attendant having any grievance against MoH or health facility can register their grievances in writing through a suggestion box located in all health facilities, hospitals or selected health offices and get his/her grievance registered. A focal point in each



health facility has been selected to register the complaints; (ii) Through a call: Grievances can be registered by calling the Complaints Service Center (CAR - *Centro de Atendimento das Reclamacoes*) by the Hotline at 3310435- 3310494, between 8:30 to 5:30 from Monday to Friday; and (iii) Via text message: Grievances can be registered via text to 3310435-3310494.

72. A web portal has been developed at the national level where grievances are recorded in a database. A registration number will be issued for every single grievance and for tracking the status of complaints. Depending on the nature and seriousness of the grievances an appropriate option for resolution can be determined by categorizing into one of three levels of priority by urgent, high, and normal. All resolutions are determined at the national level by the relevant director or authority concerned. The Centre for Complaints unit/helpdesk under the Directorate of Cooperate Services and the Cabinet of Quality Assurance in MoH are responsible for managing country-wide grievances and determining the mechanisms for resolution. In situations where complaints cannot be resolved by the Centre for Complaints unit/helpdesk or director involved, the complaints are elevated to the Council of Directors and guidance on a resolution is sought from the Council of Directors with recommendations by the Minister and Vice Minister of Health. Depending on the nature of the complaint the Minister of Health can determine the urgency of the complaint and make a political intervention to resolve the complaint. Determined on the level of priority, there will be 14 days to resolve any low grievance and 24 hours to resolve any urgent grievance and update the status in the web portal. If not resolved within a specific timeframe, the grievance will automatically be escalated to the Council of Directors level for a resolution. The web portal has the functionality to aggregate the complaints based on locations, complaint type, pending, resolved, main complaints and whether complaints have been resolved within a specific timeframe. If grievances are unresolved the users are notified automatically by the system that the complaint has not been resolved. During project implementation, the GRM will be widely advertised in the project area through public service announcements (PSAs) on a several relevant means of communication, such as posters in health facilities, social media, etc.

73. Progress on effectiveness of the GRM will be monitored throughout Project implementation and reported regularly through the regular World Bank implementation support missions and Implementation Status and Results Report (ISR), using the intermediate results indicator in the results framework “share of grievances recorded through the GRM that are resolved within agreed timeframes (Percentage, end target: 80 percent)”. In addition, the project will also use the same PSA’s communication channels to publish, on an annual basis, the outcomes of the GRM, e.g., number of complaints received and rate of resolution, the main issues raised, how the project resolved or is working to resolve the issues, etc. The functioning of the GRM, the responsibility for its implementation, and the service standards will be described in detail in the POM.

Climate Change Assessment

74. **The Project has been screened for exposure to and impact of long- and short-term climate disasters and risks, and risks to Project outcomes are considered to be moderate, in particular given the Project focus on infrastructure, high exposure to natural hazards, and the country’s developmental, environmental and health sector-specific context.** Timor-Leste is particularly prone to cyclones, earthquakes, coastal and fluvial



flooding, heat, and heavy rainfall, with their impacts exacerbated by the limited and inadequate infrastructure and social welfare provision.⁷⁷ These climate-related disasters are likely to worsen with climate change.

75. **Climate change also threatens to exacerbate the vulnerabilities and inequities seen across Timor-Leste, particularly regarding food security, most strongly affecting the rural poor and other marginalized groups.** Without systemic action, climate change threatens to drive significant damage and loss. According to the ND-Gain Index, Timor-Leste is in great need of investment and innovations to improve readiness, and urgently needs climate action. It is the 53rd most vulnerable country to climate change, and only the 110th most ready country to tackle its impacts.⁷⁸ Increasing annual mean temperatures, extremely hot days, and extreme rainfall events present a major threat to population health. Moreover, 70 percent of families rely on some form of farming for their livelihoods and face great food insecurity due to these changing rainfall patterns.¹⁴ Climate change is thus projected to accentuate the significant problem of undernutrition in Timor-Leste through its impact on food security and diversity of diet. During tropical cyclone Seroja, over 2,000 Hectares of agricultural land and 33,835 households were affected by flooding—negatively impacting their food security during the following lean season.⁷⁹ The cyclone also damaged the national medical warehouse, destroying essential supplies jeopardizing continuous provision of essential medication in a crisis situation.⁸⁰ The higher variability and greater rainfall intensity will also lead to increased incidences of vector-borne diseases such as dengue fever and malaria, worsening the already severe impact of climate-related disasters on health outcomes and systems. A multi-year study in Timor-Leste showed, for instance, that dengue incidence increased by 0.7 percent for each degree Celsius increase in mean temperature and 47 percent for each millimeter increase in precipitation.⁸¹ This raises the alarm for an unprecedented increase in climate-related infectious diseases, warranting a strong health service delivery and surveillance system in Timor-Leste.

76. **The three Project target municipalities, namely, Ermera, Lautém, and Viqueque, are particularly vulnerable to natural hazards.** While subnational data on the impacts of climate and disaster risk on population health are lacking, the World Bank’s ThinkHazard! tool⁸² captures risk levels at the municipality level. In Ermera, urban flood, landslide, and wildfire risks are earmarked as high, with earthquakes and extreme heat posing a medium risk. In Lautém, coastal flood risk is high, with medium risks for earthquakes, landslides, tsunamis, and extreme heat. In Viqueque, the set of high- or medium-risk hazards is largest, with urban and coastal floods, cyclones, and wildfires representing high-risk hazards, and river floods, earthquakes, landslides, and extreme heat posing intermediate risk. The consequence of this long list of hazards of considerable magnitude in the Project municipalities is the significant exposure of the population and built environment (physical assets) to climate shocks and extreme events. The reality of this was showcased by the significant flooding of agricultural land and exposure of populations to flash floods and landslides during Cyclone Seroja in April 2021 and early 2022 in all three municipalities.^{83, 84} This demonstrates the need for an effective referral health care system at

⁷⁷ World Bank and ADB. 2021.

⁷⁸ University of Notre Dame. 2020. *Timor-Leste*. <https://gain-new.crc.nd.edu/country/timor-leste#:~:text=The%20high%20vulnerability%20score%20and,the%20110th%20most%20ready%20country>.

⁷⁹ UN RCO (United Nations Resident Coordinator’s Office, Timor-Leste). 2021. *Timor-Leste Floods - Situation Report No. 9*. <https://reliefweb.int/report/timor-leste/timor-leste-floods-situation-report-no-9-21-may-2021>

⁸⁰ World Bank. 2021b. *Learning from Tropical Cyclone Seroja : Building Disaster and Climate Resilience in Timor-Leste*. <https://openknowledge.worldbank.org/handle/10986/36806>

⁸¹ Wangdi, Kinley, Clements, Archie C. A., Du, Tai, and Nery, Susana Vaz. 2018. “Spatial and temporal patterns of dengue infections in Timor-Leste, 2005–2013”. *Parasit Vectors*, 11(9). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5755460/>

⁸² World Bank. 2022q.

⁸³ UNITAR (United Nations Institute for Training and Research) and UNOSAT (United Nations Satellite Centre). 2021. *Preliminary Satellite Derived Flood Assessment in Ermera, Bobonaro and Covalima Municipalities*. <https://reliefweb.int/map/timor-leste/preliminary-satellite-derived-flood-assessment-ermera-bobonaro-and-covalima>.



the municipal level to provide essential health services in case of emergencies, and suitably located health facilities built with resilience in mind.

77. **Despite the fact that the nation’s cumulative annual emissions equate to less than 0.003 percent of global emissions, the Government is committed to a low-carbon development trajectory.** This commitment is shown by their updated Nationally Determined Contribution for the 2022–2030 period in line with the UN Framework Convention on Climate Change and the adoption of the National Climate Change Policy in 2022, with which the HARI’I Project aligns.⁸⁵ While the Government maintains the intention to refrain from setting a quantified emissions reduction target, the Government conditionally committed to developing a climate change law that will create a legal framework for Timor-Leste’s climate change response in 2023–24.⁸⁶ Major points of emphasis include the development of green tourism, the protection of biodiversity, and sustainable agriculture practices. The CPF for Timor-Leste notes the importance of rapid action in these areas, as the already fragile ecological system in the country is undergoing further stress, with rapid deforestation and land degradation, mangrove destruction and reef depletion alongside the destruction of seascapes and important fishing grounds.⁸⁷

78. **The Project intends to implement the following activities to adapt to the impact of climate change and mitigate against greenhouse gas emissions:**

**Table 3: Climate Adaptation and Mitigation activities in the HARI’I Project
(Only relevant IDA contributions are shown, no Government counterpart financing)**

Project Component and Financing	Activity	Climate-Related Action and how it will adapt to or mitigate against climate change
Component 1: Strengthening health infrastructure for a well-performing health referral system		
Sub-Component 1.1: Strengthening health referral systems at the municipality level (IDA US\$32.15 million equivalent)	Construction of climate-shock-resilient Municipal Hospital infrastructure in Ermera, Lautém, and Viqueque	The Project will use climate-shock-resilient building design for the design and construction of municipal hospital infrastructure. The Project will finance technical assistance to develop climate-shock-resilient design to ensure the hospitals are able to serve patients in highly vulnerable geographies and built to withstand the impact of Timor-Leste’s extreme events including cyclones, flooding, and earthquakes. This design will go beyond current national standards of construction to ensure that specific adaptation measures are integrated in the design. The Project will also finance the construction of the hospitals integrating these measures (adaptation).
	Construction of energy-efficient Municipal Hospital infrastructure in Ermera, Lautém, and Viqueque	Aligned with Criteria 9.1 of the ‘Buildings, public installations and end-use energy efficiency’ section of the of the Multilateral Development Bank Mitigation Finance Methodology, ⁸⁸ the Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO _{2e} emissions of the municipal hospitals, guided by the building standards developed under Component 1.3 for the design and construction of energy-efficient municipal hospital infrastructure, and going beyond national standards for an estimated total of US\$12.75 million

⁸⁴ WFP (World Food Programme). 2022. *WFP Timor-Leste Country Brief, June 2022*. <https://reliefweb.int/report/timor-leste/wfp-timor-leste-country-brief-june-2022>

⁸⁵ GoTL. 2022. *Nationally Determined Contribution Timor-Leste 2022-2030*.

⁸⁶ World Bank. 2019.

⁸⁷ World Bank. 2019.

⁸⁸ AfDB et al. 2021.



		<p>equivalent (US\$5 million equivalent for the Ermera national hospital, US\$4 million equivalent for Lautém, and US\$3.75 million equivalent for Viqueque). The Project will finance technical assistance for development of energy-efficient design and construction of the energy-efficient hospitals, which will center around low embedded greenhouse gas emissions in the building materials used, thermal protection and low emissivity of the building envelope and glazing and passive energy design with active or passive façade shading elements as appropriate for newly constructed hospital infrastructure. Moreover, for the existing infrastructure to be upgraded to municipal hospital status, energy efficiency improvements will be made primarily through the heating, ventilation, and air-conditioning systems, as well as lighting. Existing cooling and distributed power generation sources will be removed with more efficient replacements installed, including solar power and the use of low Global Warming Potential refrigerants in cold chains. Currently, energy-efficient building standards are not being used in the context, and the Project therefore demonstrated greenhouse gas substantiality by going considerably beyond domestic standards and constructing the first municipal hospitals according to these high energy efficiency standards. The design and construction of energy-efficient hospitals will contribute to reductions in greenhouse gas emissions.</p> <p>(mitigation)</p>
	<p>Procuring energy-efficient medical equipment for Municipality Hospitals in Ermera, Lautém, and Viqueque</p>	<p>Aligned with Criteria 9.5 of the Multilateral Development Bank Mitigation Finance Methodology, medical equipment purchased through this component for the Municipality Hospitals will apply energy efficiency standards to ensure a substantial reduction of energy consumption, resource consumption, or CO_{2e} emissions vis-à-vis the current context in Timor-Leste, where such guidelines are absent. The cost of this equipment will be an estimated US\$3.9 million equivalent for Ermera municipal hospital, US\$3.9 million equivalent for Lautém, and US\$3.7 million equivalent for Viqueque. This demonstrates the greenhouse gas substantiality of this Project component in line with Box F.4 of the World Bank’s Interim guidance on demonstrating substantial net greenhouse gas emissions reduction (internal draft), as this introduces, and thereby surpasses, national standards. Neither the current NHSSP nor the ESP refer to climate considerations, let alone energy efficiency requirements or guidelines, and the Project thus goes above and beyond current technology performance benchmarks. It should be noted that the Project will support the procurement of the full equipment spectrum for these hospitals, from specialized equipment for surgeries and EmONC to general equipment such as hospital beds. Energy Star efficiency standards and the International Electrotechnical Commission (IEC) energy efficiency standards for medical equipment will be used, with particular reference to IEC 60601-1-9, ‘Medical Equipment – General requirements for basic safety and essential performance – Collateral Standard: Requirements for environmentally conscious design’.⁸⁹ Particular attention is also paid to the reduction of use of cooling agents for new equipment in cold chains, and replacement of cooling agents with those with lower global warming potential for existing equipment, while adopting technologies that minimize</p>

⁸⁹ IEC. 2020. IEC 60601-1-9:2007+AMD1:2013+AMD2:2020 CSV - Consolidated version. <https://webstore.iec.ch/publication/67382>



		hydrofluorocarbon (HFC) leakages. The cold chain equipment will use non-fluorinated gases with low global warming potential, with amounts limited by applicable international standards as these are flammable refrigerants (for example Haier S0003108 ultra-low temperature freezers which use hydrocarbon refrigerants R290—propane; and R170—ethane), and with a refrigerant charge that is sufficiently small so that flammability risks associated with the equipment are considered acceptable. This will help contribute to reduced greenhouse gas emissions. (mitigation) .
	Including climate and risk resilience focus in CHC and HP gap assessment for Ermera, Lautém, and Viqueque, and prioritization of adaptation measures in upgrading of health facilities	The gap assessment for CHCs and HPs developed by DFAT will be expanded to include an assessment of health facilities’ climate shock adaptation measures as part of the comprehensive facility assessment to be conducted in Ermera, Lautém, and Viqueque. Identified gaps and infrastructural upgrades for climate change adaptation will be key in the prioritization criteria for upgrading for a total of US\$7.3 million equivalent, including solar power and the use of low Global Warming Potential refrigerants in cold chains. This will help facilities adapt to the impacts of climate change. (adaptation) .
Sub-Component 1.2: Tertiary care equipment (IDA US\$9.6 million equivalent)	Procuring energy-efficient medical equipment for Lahane Hospital and HNGV in Dili	Medical equipment purchased through this component for the cardiac center in Lahane Hospital (including highly specialized equipment for cardiac procedures and pre- and post-operative care and diagnosis, for an estimated total of US\$5.8 million equivalent) and the pediatric ward in HNGV (including highly specialized equipment for antenatal and neonatal care, as well as for comprehensive emergency and obstetric care, for an estimated total of US\$3.8 million equivalent) will apply Energy Star efficiency and IEC guidelines for medical equipment, with particular reference to IEC 60601-1-9, ‘Medical Equipment – General requirements for basic safety and essential performance – Collateral Standard: Requirements for environmentally conscious design’. This guideline application, entailing a substantial reduction of energy consumption, resource consumption, and CO ₂ e emissions vis-à-vis the current standards in Timor-Leste, where such guidelines are absent, demonstrates the greenhouse gas substantiality of this Project component in line with Box F.4 of World Bank’s Interim guidance on demonstrating substantial net greenhouse gas emissions reduction (internal draft), aligned with Criteria 9.5 of the Multilateral Development Bank Mitigation Finance Methodology. This will help contribute to reduce greenhouse gas emissions (mitigation) .
Sub-Component 1.3: Feasibility studies and Detailed Engineering Design (DED) for HNGV expansion remaining phases and municipal hospitals (IDA US\$2.25 million equivalent)	Climate shock-resilient DED for HNGV expansion and Municipality Hospitals	The Project will finance the development of climate-shock resilient DED for the design of Dili’s National Hospital. The Project will finance technical assistance to develop climate shock resilient DED to ensure the hospital is built to withstand the impact of Timor-Leste’s extreme events including cyclones, flooding, and earthquakes. These guidelines will then be adopted nationwide and used for all other hospital designs. This design will go beyond standard construction practice to ensure that specific adaptation measures are integrated in the design. (adaptation)
	Climate energy-efficient DED for HNGV expansion	The Project will use energy-efficient DED for the design of Dili’s national Hospital. The project will finance technical assistance for development of energy-efficient DED to inform construction of the energy-efficient National



	and Municipality Hospitals	hospital. Currently, energy-efficient building standards are not being used in this context. These guidelines will then be adopted nationwide and used for all other hospital designs. The energy-efficient DED for hospitals will support contributions to reduce greenhouse gas emissions (mitigation).
Sub-Component 1.4: Digital Infrastructure Improvements (IDA US\$1.5 million equivalent)	Inclusion of climate and disaster-related infectious diseases and energy access of health facilities in HMIS	The impact of climate change and extreme natural events on population can only be monitored if associated population health data are adequately reported. Therefore, Timor-Leste’s Health Information System will be strengthened, and include the recording of climate- and disaster-related infectious diseases, including dengue and malaria, alongside infrastructure and maintenance indicators of the facilities delivering essential health services themselves, including continuous utility supply and access in emergency situations (adaptation).
Component 3: Project Management and Monitoring & Evaluation		
Component 3: Project Management and Monitoring & Evaluation (IDA US\$4 million equivalent)	Management and monitoring of climate aspects of the Project	This component will monitor the Project’s climate mitigation and adaptation aspects and as such should be assessed at the same rate as the Project’s other climate activities (adaptation and mitigation).

Gender

79. **Timor-Leste has made significant strides in improving gender equality outcomes over the past two decades, however persistent gaps and barriers remain, particularly around provision of critical services to support women’s health.** Timor-Leste ranked 56th among 146 countries in the Global Gender Gap Index 2022, up from 128th among 144 in 2017. Maternal mortality has declined from 668 in 2002 to 142 per 100,000 live births in 2017, owing to increases in the proportions of women receiving four or more antenatal care visits (61 percent in 2003 to 84 percent in 2016) and those giving birth in health facilities and/or with a skilled birth attendant (18 percent in 2003 to 57 percent in 2016).⁹⁰ The adolescent birth rate had also declined from 50 per 1,000 women aged 15–19 in 2010 to 41.9 per 1,000 in 2015.⁹¹ However, complexity is witnessed within the urban–rural variance, as skilled assistance during delivery is 92 percent higher among women in urban areas than those in rural areas and 243 percent higher among those in the wealthiest quintile than their peers in the poorest group.⁹² Disparities are smaller for the use of antenatal care services, having 13 percent higher utilization among urban women than those in rural areas. The 2014 World Bank report ‘Timor-Leste Health Equity and Financial Protection’ also revealed that the use of secondary care services in maternal and child health are skewed toward the rich even though those services are largely publicly subsidized. The report further suggested that limited accessibility and a general lack of functional referral systems were the hindrances to the utilization of the secondary care and hospital services by women in rural areas of Timor-Leste.⁹³ This is in line with a more recent analysis that identified dysfunctional ambulance services as an impeding factor to the accessibility of emergency obstetric and neonatal services.⁹⁴ Evidence also noted some challenges related to poor conditions of available services including shared hospital wards with a lack of capacity to isolate infectious

⁹⁰ World Bank. World Development Indicators.

⁹¹ GDS and ICF 2018.

⁹² WHO Regional Office for South-East Asia 2021.

⁹³ World Bank 2014.

⁹⁴ O’Dwyer and Kelly 2013.



patients,⁹⁵ lack of privacy, lack of adequate water and sanitation, lack of trained staff in emergency obstetric and newborn care,⁹⁶ and poor services from health workers (such as poor communication; low adherence to guidelines).⁹⁷ Furthermore, basic supplies used in obstetric and newborn emergencies were also reported to be scarce, for instance, only 13.7 percent of facilities assessed had a Doppler ultrasound machine, 8.2 percent had a pulse oximeter and 20.5 percent had blankets for cold weather.⁹⁸ The lack of quality services has been reported as a factor that discourages women and families’ uptake of health services even when they are available. Considering these findings, this Project will target the following identified gender gaps to bridge access to quality reproductive and maternal health services, including life-saving obstetric care, particularly in rural areas:

- Poor conditions of available reproductive and maternal health services, infrastructure, and medical equipment for women;
- Women’s limited access to obstetric care services, especially in rural areas, and;
- Dysfunctional referral systems for reproductive and maternal health services, including life-saving emergency obstetric care services, for women, especially in rural areas.

80. **The Project aims to address the identified gender gaps and strengthen the provision of critical reproductive and maternal health services as per the ESP at primary, secondary and tertiary care levels that are linked through a strengthened referral system.** In support of the Government’s initiative to improve the key services defined in the ESP, the following gender-inclusive actions will be built into the Project design and monitored through defined indicators.

Table 4: Gender Results Chain Entry Points

Gender Gap	Actions	Results Indicators
<p>Poor conditions of available reproductive and maternal health services, infrastructure, and medical equipment for women</p> <p>Women’s limited accessibility to obstetric care services, especially in rural areas</p>	<ul style="list-style-type: none"> ▪ Construct/upgrade and equip municipal hospitals that will allow for the provision of quality reproductive and maternal health services, including life-saving obstetric care, reflecting stakeholder consultations involving women representatives and including the following: <ul style="list-style-type: none"> - required infrastructure and equipment to provide quality reproductive and maternal health services, including obstetric care⁹⁹; - clearly designated areas providing reproductive and maternal health services; - outpatient consultation rooms that provide physical, visual, and auditory privacy to accommodate women’s healthcare needs safely and confidentially; and - separate and safe sanitation facilities (with adequate visual signage, privacy, internal locks, and lighting) for men and women to improve protection and safeguard health and wellbeing. 	<p>Municipal hospitals constructed/upgraded with adequate facilities and equipment to provide basic emergency obstetric care and other key maternal and reproductive health services according to the ESP</p>

⁹⁵ Zwi et al. 2009.

⁹⁶ MoH 2016.

⁹⁷ Khorshed, et al. 2022.

⁹⁸ King and Jones 2022.

⁹⁹ For example, the agreed list of equipment will include vital signs monitor, portable ultrasound imager, sterilization equipment, resuscitation trolley, among others.



	<ul style="list-style-type: none"> - water and hygiene protocols, including clean delivery practices (among others, hand hygiene, clean delivery surfaces, clean cord-cutting, and sterilization of delivery instruments) - guidelines for services delivered by health workers (covering effective communication with women and their families, care with respect and preservation of dignity, and protection of privacy) 	
Ineffective referral system for reproductive and maternal health services, including life-saving emergency obstetric care, especially in rural areas	<ul style="list-style-type: none"> ▪ Develop referral system guidelines that will strengthen upward and downward referral actions to optimize the delivery of reproductive and maternal health services, including obstetric care 	Referral guidelines developed and adopted (including for reproductive and maternal health services)

V. GRIEVANCE REDRESS SERVICES

81. **Grievance Redress.** Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank’s independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank’s Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank’s Accountability Mechanism, please visit <https://accountability.worldbank.org>.

VI. KEY RISKS

82. **The overall Project residual risk is rated as Substantial after taking into consideration mitigation measures incorporated as part of Project design and planned for during implementation.** The key substantial risks identified are: (i) Political and governance; (ii) Institutional capacity for implementation and sustainability; (iii) Technical design of Project; (d) Fiduciary, and (e) Environmental and Social. These risks and associated mitigation efforts are further described below.

83. **Political and governance risk is rated as Substantial.** Witnessing frequent changes in Government administrations for the past decade, Timor-Leste’s political stability is yet to be firmly established. The upcoming election in early 2023 may pose a risk of leadership changes during the Project implementation period. In addition, the World Bank’s Country Policy and Institutional Assessment on Timor-Leste consistently identified the country’s fragility in recent years, especially with relation to the quality of public administration and public sector management and institutions. To mitigate the risk, the Project has focused on the Government’s priorities in the health sector established in the NHSSP 2020–2030, the ESP and specific medium- to long-term strategies,



such as the HNGV master plan. Even with mitigation efforts, the political and governance risk is still substantial as they are exogenous to the Project activities.

84. **Institutional capacity for implementation and sustainability is rated as a Substantial risk.** The MoH has limited experience in directly managing lending projects at this scale, and the Government’s overall management capacity is further constrained by multiple layers of internal procedures, leading to a risk of low disbursement. There are several key factors which may affect disbursement rates: (i) limited administrative capacity to prepare required documentation and follow World Bank requirements; (ii) excessive transaction time and costs due to multi-layer, cross-agency approval procedures required for any amount of payments; and (iii) general staffing challenges due to a limited pool of qualified consultants. The mitigation measures identified are to: (i) appoint a focal person from within each concerned Ministry/Agency and frequently provide necessary guidance on the World Bank procedures and timelines, (ii) regularly engage the focal persons to coordinate cross-agency workflows throughout the preparation and implementation processes; (iii) options of the use of external implementation support available to the Project, including, HEIS and a third-party procurement TA, and (iv) engage a capable international or local firm to provide technical assistance and knowledge transfer to relevant Government staff. There is also a sustainability risk related to continued operation and maintenance of the Project-supported infrastructure and equipment beyond the Project life. To mitigate the risk, the Project will facilitate the development of a facility maintenance strategy/guideline so that Government will continue to allocate budgets to necessary maintenance activities identified in the strategy. Moreover, the allocation of this Facility Management Cost anticipates the decentralization of MoH, planned for 2024, when funds will flow directly to Municipal Health Services and will be managed at the local level. The combination of the provision of the funds to cover the Facility Management Cost, combined with the PFM capacity building provided, will thus ensure an efficient and seamless transition to a decentralized health sector in the Project target areas, with the small Facility Management Cost to be borne by Government after Project conclusion.

85. **Technical design of Project is rated as a Substantial risk.** The overall success of the Project depends on fulfillment of all necessary inputs that would collectively enable the health system to deliver services of good quality, including infrastructure, equipment, human resources for health, operational plans/budgets, and maintenance. While the Government’s commitment to financing the tertiary care infrastructure under Component 1 and providing the operating budgets and human resources demonstrates strong interests and ownership, it also poses a possible risk of slow progress on the Government-financed activities that may affect the Project achievements. To mitigate the risk, Project design incorporates careful sequencing of activities and setting disbursement conditions for the Project support to be initiated; for example, the Project financing for the municipal hospital construction/expansion will be conditioned on development and adoption of facility operation and management plans as well as human resources for health and staffing plans by the Government. The completion of the Government-financed tertiary care facility expansion work will trigger the provision of equipment by the Project. A lack of maintenance capacity poses another risk, which will be mitigated by (i) setting up a third-party procurement arrangement in the case of medical equipment which includes initial instructions and maintenance as well as continuous capacity building and transfer, (ii) developing the maintenance guidelines as part of the Project activities and (iii) providing funds to cover facility management costs that can support maintenance of facilities and equipment at CHCs and HPs in the Project target municipalities.

86. **Globally, improvements in tertiary and secondary health facilities are known to lead to potential overutilization at those levels and underutilization of primary care facilities due to possible bypassing by patients of lower-tier health care facilities.** Since the Project invests in tertiary and secondary care at the Government’s request, the risk mitigation measures incorporated in the Project are: (i) substantial support to



the PHC level facilities (CHC and HP) in the selected municipalities, and (ii) simultaneous strengthening of primary care facilities as the first point of contact as well as referral functions through the provision of the Facility Management Cost and capacity strengthening activities.

87. **Fiduciary risk is assessed as Substantial.** The overall fiduciary risk is rated based on the following risks and mitigation measures identified for financial management and procurement.

88. **The financial management risk is considered Substantial.** The following three major risks have been identified: (i) risks from fund flow arrangements to CHCs that may result in misappropriating cash, (ii) inadequacy of counterpart funds, and (iii) reliability of accounting and reporting system. The mitigation measures identified are (i) ensuring counterpart funds are available during the Project life and stated in the FA, (ii) maintaining subsidiary records in excel at the earlier stage, (iii) ensuring placement of qualified finance officer at each CHC prior to disbursement, (iv) MoH to prepare a financial report using the existing Chart of Account for Municipal Health Services for the designated use of the CHCs expenditures, and (v) adopting and implementing the Finance SOP at the CHC level.

89. **The procurement risk is also considered Substantial.** The major risks to procurement identified are: (i) the limited experience in and knowledge of the World Bank's Procurement Regulations; (ii) delays in procurement associated with processing and approval of planned procurement activities; and (iii) weak in-house capacity including insufficient coordination between Project's concerned parties during the procurement process. The procurement risk will be mitigated by ensuring the procurement technical support from the NPC, equipping PMU with key technical procurement experts, and providing refresher training on the Procurement Regulations and contract management. Additionally, provision of HEIS during implementation by the World Bank for the selected procurement activities (pending MoH request) will be considered. The World Bank's oversight of procurement will be provided through Project supervision, implementation support/potential use of HEIS, the World Bank's prior review and ex-post review.

90. **Environment and Social risk is rated Substantial.** Potential key environmental and social risks and impacts that can result from the Project activities include a limited level of labor influx for the civil works and health and environmental hazards caused by suboptimal handling of radioactive material and hospital waste. These risks are assessed moderate and predictable due to the limited scale and nature of the construction work and the provision of equipment. Further, the risks can be mitigated through optimal project designing, activity planning, as well as development and use of operation and maintenance plans for the relevant facilities and equipment. Limited capacity of the MoH and municipal governments in handling of environmental and social risks may hinder the Project's performance on achieving optimal environmental and social outcomes. To provide effective support, environmental and social safeguard experts will be hired for the SPMU of MoH at an early stage. Timor-Leste's vulnerability to extreme climate-related events and natural hazards, including flash floods, landslides, extreme heat, and drought, poses a considerable risk to the functionality of the supported health care infrastructure should such events occur. To mitigate disaster risk, set to increase in light of climate change, the Project actively considers disaster risk management in the building design standards to be developed for the municipal hospitals, as well as HNGV expansion Phases 2, 3, and 4. These standards will entail requirements for resilient infrastructure, able to withstand exposure to extreme events, while also being energy-efficient and mitigating greenhouse gas emission, for instance through solar-powered cold chains that are able to keep vaccines cool in the case of power cuts. Concrete adaptive measures, such as rainwater harvesting and shaded waiting areas for patients, will form part of the inclusive design fit for a challenging climate context. As the Project will support the overall institutional capacity strengthening, including for the adoption of the concrete environmental and social safeguard measures within the MoH, the risks are assessed as Substantial



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Timor-Leste

Healthcare Action Through Rapid Infrastructure Improvements (“HARI”) Project

Project Development Objectives(s)

The Project Development Objective (PDO) is to (a) strengthen the health infrastructure and referral system in Project target areas in Timor-Leste, and (b) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Primary,secondary and tertiary care facilities strengthened in Project target areas in line with ESP							
Municipal Hospitals in Project target municipalities constructed/expanded and equipped according to the ESP and gender-inclusive and climate-resilient building standards (Number)		0.00	0.00	0.00	0.00	1.00	3.00
Community Health Centers and Health Posts in Project target municipalities upgraded according to the ESP standards (Percentage)		0.00	0.00	15.00	30.00	50.00	75.00
Tertiary care facilities and Municipal Hospitals supported by the Project having		0.00	0.00	0.00	1.00	2.00	5.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
sustainable equipment operations and maintenance mechanisms in place (Number)							
Community Health Centers supported by the Project having sustainable equipment operations and maintenance mechanisms in place that cover Health Posts in the catchment area (Percentage)		0.00	0.00	15.00	30.00	50.00	75.00
Referrals following the referral protocols recorded in the Timor-Leste Health Information System, disaggregated by gender (Percentage)		0.00	0.00	0.00	0.00	15.00	30.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Strengthening health infrastructure for a well-performing health referral system							
Municipal Hospitals constructed/expanded according to Government building and safety standards and the ESP (Number)		0.00	0.00	0.00	0.00	1.00	3.00
Municipalities in which equipment for Municipal		0.00	0.00	0.00	0.00	1.00	3.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Hospitals is procured as per the ESP (Number)							
Municipal Hospitals constructed/expanded according to Government building and safety standards that are climate resilient (Number)		0.00	0.00	0.00	0.00	1.00	3.00
Municipal Hospitals constructed/expanded with adequate facilities and equipment to provide basic emergency obstetric care and other key maternal and reproductive health services according to the ESP (Number)		0.00	0.00	0.00	0.00	1.00	3.00
Community Health Centers and Health Posts in Project target municipalities for which facility gap assessment and associated costing is completed (Percentage)		0.00	25.00	95.00	95.00	95.00	95.00
Community Health Centers and Health Posts in Project target municipalities for which equipment is provided according to the ESP (Percentage)		0.00	0.00	15.00	30.00	50.00	75.00
Community Health Centers and Health Posts in Project target municipalities for which priority infrastructure upgrading works are		0.00	0.00	15.00	30.00	50.00	75.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
completed upon facility gap assessment and as per the ESP (Percentage)							
Medical equipment operations and maintenance guidelines in place (Yes/No)	No	No	No	Yes	Yes	Yes	Yes
Primary and secondary health facilities in Project target municipalities provided with necessary capacity building on maintenance (Percentage)	0.00	0.00	0.00	30.00	60.00	90.00	95.00
Referral guidelines developed and adopted (Yes/No)	No	No	No	Yes	Yes	Yes	Yes
Primary and secondary health facilities in Project target municipalities provided with necessary capacity building on clinical skills and referral (Percentage)	0.00	0.00	0.00	30.00	60.00	90.00	95.00
Detailed engineering design for Municipal Hospitals developed, rooted in gender-inclusive and climate resilience best practice (Yes/No)	No	No	No	Yes	Yes	Yes	Yes
Detailed engineering design for Municipal Hospitals developed, rooted in gender-inclusive best practice (Yes/No)	No	No	No	Yes	Yes	Yes	Yes
Detailed engineering design for Municipal Hospitals developed, rooted in	No	No	No	Yes	Yes	Yes	Yes



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
climate resilience best practice (Yes/No)							
Interoperable Timor-Leste Health Information System created for use across referral chain (Yes/No)	No	No	No	No	Yes	Yes	Yes
Share of grievances recorded through the GRM that are resolved within agreed timeframe (Percentage)	0.00	20.00	30.00	40.00	60.00	80.00	
People who have received essential health, nutrition, and population (HNP) services (CRI, Number)	0.00	7,509.00	7,875.00	8,278.00	8,693.00	9,127.00	
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)	0.00	4,950.00	5,197.00	5,457.00	5,731.00	6,017.00	
Number of children immunized (CRI, Number)	0.00	5,088.00	5,342.00	5,609.00	5,890.00	6,184.00	
Number of deliveries attended by skilled health personnel (CRI, Number)	0.00	2,421.00	2,542.00	2,669.00	2,803.00	2,943.00	
Ensuring the availability of management costs at the primary health care level							
Community Health Centers in Project target municipalities reporting on the use of the management cost provided by the project and progress on key tracer indicators (Percentage)	0.00	0.00	70.00	80.00	90.00	95.00	



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Community Health Centers in Project target municipalities with at least one selected staff receiving in-service Public Financial Management capacity building (Percentage)		0.00	0.00	30.00	60.00	90.00	95.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Municipal Hospitals in Project target municipalities constructed/expanded and equipped according to the ESP and gender-inclusive and climate-resilient building standards	Number of Municipal Hospitals in project target municipalities having completed construction/expansion of infrastructure and procured and placed priority equipment, according to the standards set in the ESP and the building and safety standards that are gender-inclusive and climate-resilient.	One-time by each municipal hospital	Biannual progress report	Municipal Hospitals reporting to MoH; MoH submitting biannual preprogress report to be reviewed by WB	MoH
Community Health Centers and Health Posts in Project target municipalities	Percent of the CHCs and HPs in the project target	One-time by each CHC/HP	Biannual progress	CHCs/HPs reporting to MoH; MoH submitting	MoH



upgraded according to the ESP standards	municipalities that completed renovation of the infrastructure and installment of procured equipment according to a gap analysis and the ESP standards		report	biannual pregress report to be reviewed by WB	
Tertiary care facilities and Municipal Hospitals supported by the Project having sustainable equipment operations and maintenance mechanisms in place	Number of tertiary care facilities and Municipal Hospitals supported by the project that have maintenance guidelines in place and staff trained on equipment operations and maintenance	Annual	Biannual progress report	Tertiary care facilities and Municipal Hospitals reporting to MoH; MoH submitting biannual pregress report to be reviewed by WB	MoH
Community Health Centers supported by the Project having sustainable equipment operations and maintenance mechanisms in place that cover Health Posts in the catchment area	Percent of CHCs supported by the project that have maintenance guidelines in place, staff trained on equipment operations and maintenance, and allocated management costs that cover maintenance costs for both the concerned CHC and the HPs in their catchment area.	Annual	Biannual progress report	CHCs reporting to MoH; MoH submitting biannual pregress report to be reviewed by WB	MoH
Referrals following the referral protocols recorded in the Timor-Leste Health Information System, disaggregated by gender	Percent of patients, male and female referred to a higher- or lower-level facility following the developed referral protocols and in the patient file in TLHIS	Annual	Timor-Leste Health Information System (TLHIS)	MoH extracts the data from TLHIS and includes in the biannual progress report to be reviewed by WB	MoH



	(Denominator: patients coming to a facility with a referral record in TLHIS; Numerator: referred patients whose referral complied with the protocol)				
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Municipal Hospitals constructed/expanded according to Government building and safety standards and the ESP	Number of Municipal Hospitals having completed construction/expansion of facilities according to the government building and safety standards and the ESP	One-time by each municipal hospital	Biannual progress report	Municipal Hospitals reporting to MoH; MoH submitting biannual preogress report to be reviewed by WB	MoH
Municipalities in which equipment for Municipal Hospitals is procured as per the ESP	Number of municipalities in which equipment for Municipal Hospitals is procured that meet the ESP standards	One-time by each municipality	Biannual progress report	Municipal Hospitals reporting to MoH; MoH submitting biannual preogress report to be reviewed by WB	MoH
Municipal Hospitals constructed/expanded according to Government building and safety standards that are climate resilient	Number of Municipal Hospitals having completed construction/upgading of facilities according to government building and safety standards that include agreed climate-	One-time by each municipal hospital	Biannual progress report	Municipal Hospitals reporting to MoH; MoH submitting biannual preogress report to be reviewed by WB	MoH



	resilient elements.				
Municipal Hospitals constructed/expanded with adequate facilities and equipment to provide basic emergency obstetric care and other key maternal and reproductive health services according to the ESP	Number of Municipal Hospitals having completed construction/expansion of facilities and procured equipment that would allow provision of basic emergency obstetric care as well as other priority maternal and reproductive health services (general ANC, PNC and invasive family planning methods) listed in the Essential Service Package.	One-time by each municipal hospital	Biannual progress report	Municipal Hospitals reporting to MoH; MoH submitting biannual preogress report to be reviewed by WB	MoH
Community Health Centers and Health Posts in Project target municipalities for which facility gap assessment and associated costing is completed	Percent of Community Health Centers and Health Posts in project target municipalities for which facility gap assessment and associated costing is completed	Annual	One-time by each CHC/HP	CHCs/HPs reporting to MoH; MoH submitting biannual preogress report to be reviewed by WB	MoH
Community Health Centers and Health Posts in Project target municipalities for which equipment is provided according to the ESP	Percent of Community Health Centers and Health Posts in project target municipalities for which equipment is provided according to the ESP	One-time by each CHC/HP	Biannual progress report	CHCs/HPs reporting to MoH; MoH submitting biannual preogress report to be reviewed by WB	MoH
Community Health Centers and Health Posts in Project target municipalities for which priority infrastructure upgrading	Percent of CHCs and HPs in project target municipalities for which priority	One-time by each CHC/HP	Biannual progress report	CHCs/HPs reporting to MoH; MoH submitting biannual preogress	MoH



works are completed upon facility gap assessment and as per the ESP	infrastructure upgrading works are completed upon facility gap assessment and as per the ESP standards			report to be reviewed by WB	
Medical equipment operations and maintenance guidelines in place	Guidelines on medical equipment operations and maintenance is developed and distributed to the health facilities in the project target areas	One-time	Biannual progress report	Report submitted by MoH and reviewed by WB	MoH
Primary and secondary health facilities in Project target municipalities provided with necessary capacity building on maintenance	Percent of Municipal Hospitals, CHCs and HPs in project target municipalities having at least one staff trained on equipment operations and maintenance	Annual	Biannual progress report	Municipal Hospitals and CHCs/HPs reporting to MoH; MoH submitting biannual preprogress report to be reviewed by WB	MoH
Referral guidelines developed and adopted	Referral guidelines developed and distributed to primary, secondary and tertiary healthcare facilities supported by the project	One-time	Biannual progress report	Report submitted by MoH and reviewed by WB	MoH
Primary and secondary health facilities in Project target municipalities provided with necessary capacity building on clinical skills and referral	Percent of Municipal Hospitals, CHCs and HPs in project target municipalities having their staff trained on clinical skills and referral	Annual	Biannual progress report	Municipal Hospitals and CHCs/HPs reporting to MoH; MoH submitting biannual preprogress report to be reviewed by WB	MoH
Detailed engineering design for Municipal Hospitals developed, rooted in gender-inclusive and climate resilience best	A detailed engineering design for Municipal Hospitals is developed that	One-time	Biannual progress report	Report submitted by MoH and reviewed by WB	MoH



practice	reflects best practices on gender-inclusive and climate-resilient health infrastructure				
Detailed engineering design for Municipal Hospitals developed, rooted in gender-inclusive best practice	A detailed engineering design for Municipal Hospitals is developed that reflects best practices on gender-inclusive health infrastructure	One-time	Biannual progress report	Report submitted by MoH and reviewed by WB	MoH
Detailed engineering design for Municipal Hospitals developed, rooted in climate resilience best practice	A detailed engineering design for Municipal Hospitals is developed that reflects best practices on climate-resilient health infrastructure	One-time	Biannual progress report	Report submitted by MoH and reviewed by WB	MoH
Interoperable Timor-Leste Health Information System created for use across referral chain	Interoperable Timor-Leste Definition: Interoperable Timor-Leste Health Information System is created that contains functions to support strengthening of referral	One-time	TLHIS and Biannual progress report	MoH submitting the biannual progress report, including the data extracted from HMIS, to be reviewed by WB	MoH
Share of grievances recorded through the GRM that are resolved within agreed timeframe	Percent share of grievances recorded through the GRM that are resolved within agreed timeframes	Annual	Biannual progress report	Report submitted by MoH and reviewed by WB	MoH
People who have received essential health, nutrition, and population (HNP) services		Annual	DHIS2 data aggregated at MoH for the project	Each CHC and Municipal Hospital in the project target municipalities will	MoH



			target municipalities	collect the data and report the results periodically using DHIS2. Given that the project does not focus on nutrition services, the indicator will focus on immunization and institutional delivery provided at health facilities supported through the project. Definition: The sum of the number of children under 1 year old fully immunized and the number of pregnant women who delivered in health facilities in project target municipalities.	
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement)		Annual	DHIS2 data aggregated at MoH for the project target municipalities	Each CHC and Municipal Hospital in the project target municipalities will collect the gender-disaggregated data and report the results periodically using DHIS2. Given that the project does not focus	MoH



				<p>on nutrition services, the indicator will focus on child immunization (female) and institutional delivery.</p> <p>Definition: The sum of the number of children under 1 year old fully immunized and the number of pregnant women who delivered in health facilities in project target municipalities.</p>	
Number of children immunized		Annual	Timor-Leste Health Information System data aggregated at MoH for the project target municipalities	<p>Each CHC and Municipal Hospital in the project target municipalities will collect the gender-disaggregated data and report the results periodically using DHIS2.</p> <p>Definition : Number of children under 1 year old fully immunized</p>	MoH
Number of deliveries attended by skilled health personnel		Annual	DHIS2 data verified and aggregated	Each CHC and Municipal Hospital in the project target	MoH



			at MoH	municipalities collect a number of deliveries which take place at the concerned health facilities and record them as part of their regular monitoring duty. The data will be reported using TL-HIS. Given the project focus on health infrastructure development, the indicator will monitor institutional delivery, not safe delivery, following the instruction from the OPCS CRI Guideline (April 2017). Definition : Number of pregnant women who delivered in health facilities in project target municipalities.	
Community Health Centers in Project target municipalities reporting on the use of the management cost provided by the project and progress on key tracer indicators	Percent of CHCs in the project target municipalities reporting annually on the use of the management cost provided by the project as well as progress on key	Annual	Biannual progress report	CHCs reporting to MoH; MoH submitting biannual progress report to be reviewed by WB	MoH



	tracer indicators				
Community Health Centers in Project target municipalities with at least one selected staff receiving in-service Public Financial Management capacity building	Percent of CHCs in the project target municipalities having at least one selected staff who have received in-service PFM capacity building training	Annual	Biannual progress report	CHCs reporting to MoH; MoH submitting the biannual progress report to be reviewed by WB	MoH

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Timor-Leste
Healthcare Action Through Rapid Infrastructure Improvements (“HARI”) Project

Implementation Arrangements

- 1. MoH will be the implementing agency which has overall responsibility to effectively deliver the Project.** In this capacity, MoH will (i) coordinate Project activities implemented at the national and subnational levels to make sure they are aligned to achieve the PDO, (ii) liaise with and maintain a strategic link between MoF and other key Government agencies including MoPW, MoPT, and MSA, as well as NPC and ADN, to enable smooth Project execution, (iii) ensure close collaboration with ANAPMA for monitoring and reporting under the Project, sending regular reports to the World Bank on progress achieved on the indicators of the Results Framework; (iv) monitor Project expenditures and costs; (v) ensure the POM is followed and updated as may be necessary during implementation; and (vi) prepare and distribute consolidated progress reports and the final report to the World Bank and relevant Government Ministries and agencies.
- 2. To assist MoH in fulfilling the responsibilities required for the successful execution of the Project, the Project will be implemented by MoH’s SPMU.** The SPMU is headed by a SPMU Administrator, who is a Director or other senior-level official, supported by an SPMU secretariat. The SPMU will have core functions including Project Monitoring and Management Services, Administration and Financial Services, Procurement Services, and Environmental and Social Safeguards, and a dedicated Engineer. Under the MoH management oversight, the SPMU will provide day-to-day management and implementation of the Project, including overall fiduciary responsibilities, and monitoring of the implementation progress to ensure compliance with World Bank requirements.
- 3. The SPMU will be supported by a PMCU to further strengthen Project implementation under the overall leadership and monitoring by SPMU.** Consultants, including a Project Manager, FM Specialist, Procurement Specialist, Engineering Specialist, and M&E Specialist, will be contracted to form a PMCU. These additional consultants will be contracted through a framework contract with a firm—in compliance with the Government regulations for the use of loans. The PMCU will support the SPMU and be responsible for (i) providing technical guidance and advice; (ii) ensuring timely production of annual implementation plans and budgets; (iii) tracking the progress of Project indicators to monitor the implementation of Project components, and (iv) ensuring that Project implementation is in line with the POM.
- 4. The Project is implemented as a major infrastructure project under the Infrastructure Fund, introduced in 2011 by the Government to ensure effective implementation of major projects from a technical, fiscal and procurement perspective.** The Government established CAFI, chaired by the Minister of Planning and Territory and including the Ministers of Finance and Public Works as members. Simultaneously, the Government established three new entities: ADN, NPC, and MPS, working as a secretariat for CAFI and supporting the Government in project evaluations, establishment of priorities and ensuring the availability of budget allocations. ADN, also under MoPT, was created with a quality control function to ensure that the technical quality standards of contracts are properly fulfilled. Through NPC, seated within MoF, a mechanism for transparency, economy, and efficiency in public expenditure was established, particularly for major projects under the Infrastructure Fund. The establishment of the NPC has addressed the ineffectiveness in decentralized procurement to the line ministries.
- 5. MoF is responsible for the annual planning and monitoring of the budget and public finances.** As such, it manages and is responsible for the budgetary framework, procurement, public accounting, public finances, audit and control of the State treasury, issuance and management of public debt, as well as public finance and financial

management reform. MoF also coordinates projects and programs between Timor-Leste and development partners, including HARI. MoF holds the powers to negotiate, sign and manage the implementation of public–private partnership contracts, coordinate national and international technical assistance in conjunction with the relevant ministries, and establish mechanisms for collaboration and coordination with other Government agencies.

6. **MoPT is responsible for promotion of economic and social development of the country, through the implementation of the Strategic Development Plan, especially with regard to infrastructure and Urban Planning, Petroleum and Minerals.** ADN and MPS are part of MoPT. MoPT plans, proposes, and coordinates the implementation of strategic infrastructure. It is also responsible for the supervision of the quality of works and the activities of the execution of physical projects promoted, developed, or financed by the Infrastructure Fund, under whose aegis HARI exists. MoPT has the responsibility to plan and control the costs and quality of development capital projects, promote transparency and quality, evaluate, supervise, monitor, and certify the implementation and implementation of development capital projects at national, district and local level.

7. **MoPW is responsible for the design, implementation, coordination and evaluation of public works, including housing, supply, distribution and management of water, sanitation and electricity, and for executing territorial planning strategies in coordination with the MoPT.** MoPW also establishes coordination and promotes the quality of physical projects executed by the State, alongside the construction, conservation and repair of public buildings and licensing and supervision of all urban buildings in accordance with applicable legislation. Under the tutelage of the MoPW are the Institute of Equipment Management, Electricity of Timor-Leste, the National Authority for Electricity, Bee Timor-Leste, and the National Authority for Water and Sanitation.

8. **MSA is responsible for local Government, administrative decentralization, support to community organizations, promotion of local development, organization and execution of electoral and referenda processes, promotion of hygiene and urban organization and classification and conservation of official documents with historical value.** In particular, it is responsible for promoting and conducting the process of administrative decentralization and installation of local authorities' bodies and services, proposing and implementing local Government law, municipal electoral law and legislation on finance, heritage and municipal supply and other legal and regulatory regulations necessary for administrative decentralization and the installation of representative bodies of local Government. MSA also supports the permanent assistance leading to the process of deconcentration and administrative decentralization, in coordination with Ministries and other relevant entities and promotes cooperation agreements with local authorities of other States, with a view to deepening the decentralization process.

9. **MoH is responsible for health and pharmaceutical activities, in particular, for the policy and the regulations necessary to ensure access to health care for all citizens.** It coordinates activities related to epidemiological control, provides technical support for health care in municipalities and regions, promotes the training of health professionals, and contributes to humanitarian assistance, peace promotion, security and socioeconomic development through coordination mechanisms and collaboration with other Government bodies under guardianship over related areas. The Hospitals of the National Health Service, SAMES, the National Institute of Health, the National Health Laboratory, the National Ambulance service and Medical Emergency fall under MoH.

10. **An Inter-Ministerial PSC will be established at the Director General or Minister level to provide overall guidance, discuss the progress and solve challenges the Project faces during implementation, at least every three months during the first year of the Project, then at least every six months.** The composition of the PSC will include representatives from key Government Ministries and Agencies, including MoH, MoF, MoPW, MoPT and MSA. The roles and responsibilities of the PSC will be included in the POM as a set of terms of reference.

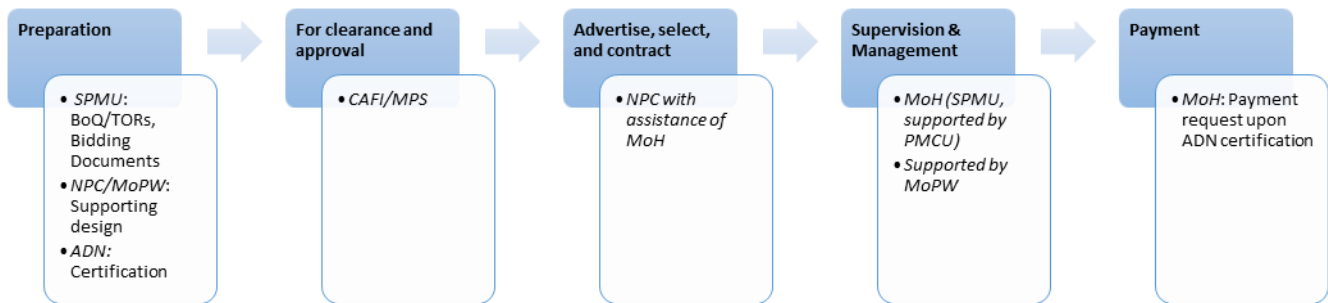
11. **The municipal administrations will have primary responsibility for supporting implementation of the Project at the subnational level.** The SPMU will closely liaise with municipalities to ensure progress, coordination, and

monitoring and evaluation at the municipal level. The Municipal Director of Health, Director of Public Works and Director of Planning will be closely involved in the coordination of the activities implemented at the subnational level. They will be supported by the technical expertise from the PMCU as needed. The Municipal Director of Health will involve different agencies, as needed, to ensure effective management of the activities.

12. **Given that the HARI’I Project is a credit to the Government, NPC will in principle be responsible for all procurement under the Project.** However, given the high procurement load and the need for specialized equipment procurement under the Project, the procurement authority for medical equipment for Lahane Hospital, HNGV, and the Municipality Hospitals, as well as the minor works for the upgrades to CHCs and HPs, would be transferred to MoH. This will need to be agreed by the Ministers of Finance and Health and detailed in the POM, as well as through an internal Ministerial agreement if so required. NPC would retain oversight of procurement processes for the Detailed Engineering Design and Municipal Hospital infrastructure components, as well as the hiring of the PMCU and a consultancy firm and IT goods.

13. **Procurement arrangements for Sub-component 1.1: Strengthening health referral systems at the municipality level; Sub-component 1.3: Feasibility Studies and DED for HNGV Expansion Remaining Phases and municipal hospitals; Sub-component 1.4: Digital infrastructure improvements; and Component 3: Project Management and Monitoring & Evaluation (Figure A1.1).** The SPMU in MoH, with guidance from NPC and, where relevant, MoPW will be responsible for providing the specifications for large infrastructure works and services including the Bill of Quantities (BoQ) and bidding documents for goods and infrastructure, and TORs for consultancy services. Once all relevant documents are finalized and certified by ADN, they are submitted by MoH to the Board of Directors of CAFI, under MPS, for approval. NPC will have the responsibility for advertising, selection and contracting. All monitoring of implementation will be conducted jointly by MoH (SPMU) and MoPW. Payments are to be requested by MoH to MoF upon ADN certification.

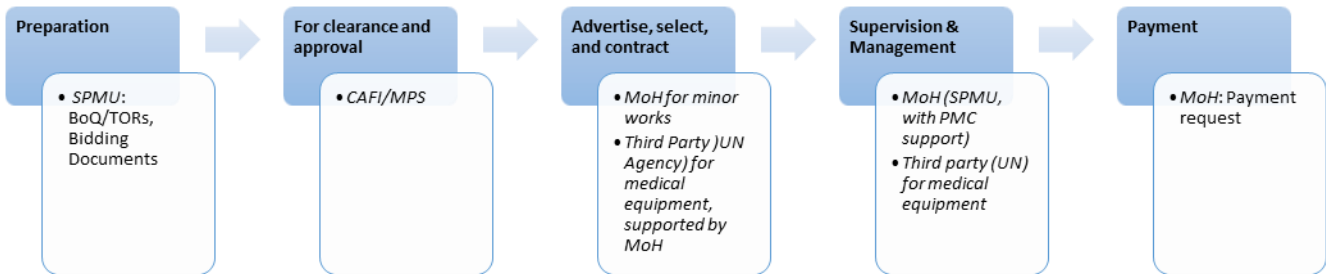
Figure A1.1: Procurement flow for large infrastructure under sub-component 1.1, DEDs under sub-component 1.3, Digital infrastructure improvements under sub-component 1.4, and PMCU hiring under component 3



14. **Procurement arrangement for Sub-component 1.2: Tertiary care equipment; and Minor works for Sub-component 1.1 (Figure A1.2).** The SPMU (MoH) will be responsible for developing the specifications, BoQs, bidding documents or Terms of Reference with support from NPC, which will be submitted to CAFI (MPS) for approval. MoH will have the responsibility for advertising, selection and contracting, with this task outsourced to a designated third party, preferably a UN Agency for medical equipment, given the significant experience of UN agencies such as UNICEF and UNDP with the procurement of medical equipment in Timor-Leste, and partnership with MoH through standing

partnership agreements. MoH will also be responsible for supervision and contract management, together with the third-party agency for medical equipment. Payments are to be requested by MoH to MoF upon certification.

Figure A1.2: Procurement flow for equipment under sub-component 1.2 and minor works under sub-component 1.1



15. **Funds flow for Sub-Component 2.1: Provision of Facility Management Cost.** The implementation arrangements for this component will require a Management Cost Agreement between MoH and CHCs, co-signed by the municipal administrator and municipal director for health. Annual reports are submitted by each CHC to MoH at the national level, and MoH verifies data accuracy and requests funds transfers from MoF to the concerned CHCs, with these data flows being regularly externally verified. In the first year, the Municipal Health Services will receive the management cost in their bank account from MoH upon achievement of the four conditions set above. From the second year onwards, the funds will then be released upon annual report submission by CHC. These funds, targeted at improving service readiness, will then result in improved performance and increasing quality of health services and infrastructure. Upon receipt of the annual report from each CHC, MoH will review the information received, allowing for the annual monitoring of key service readiness indicators. Upon internal verification, MoH will release the next year’s Facility Management Cost to the Municipal Health Services Account.

16. **Table A1.1 below outlines the Gantt chart with the sequencing of Project components and activities over the Project duration:**

Table A1.1: Timeline for the four Project components and sub-components and activities across the Project duration:

Project Components	Y1.1	Y1.2	Y2.1	Y2.2	Y3.1	Y3.2	Y4.1	Y4.2	Y5.1	Y5.2
Component 1: Strengthening health infrastructure for a well-performing health referral system										
1.1: Municipal Hospital Infrastructure										
1.1: Municipal Hospital Equipment										
1.1: CHC/HP Rapid Assessment										
1.1: CHC/HP Upgrade										
1.1: Capacity building										
1.2: Tertiary care equipment HNGV										
1.2: Tertiary care equipment Lahane										
1.3: Feasibility Study & DED for HNGV and municipal hospitals										
1.4: Digital infrastructure improvements										
Component 2: Ensuring the availability of management costs at the primary health care level										
2.1: Provision of facility management cost										
2.2: PFM capacity building										
Component 3 Project Management and Monitoring & Evaluation										

17. **The POM will detail all relevant implementation procedures and terms of reference for respective entities.** The POM will be prepared by SPMU/MoH, and its completion and adoption satisfactory to the World Bank are a condition of Project effectiveness. The POM will be revised and resubmitted to the World Bank for No Objection during the course of implementation to reflect any changes the Project may have.

Strategy and Approach

18. The World Bank will support the implementation of the Project activities by the implementing agency, MoH, through the facilitation of the achievement of PDO along with the implementation of the risk mitigation measures. The World Bank will also build and maintain strategic links with the other key Government agencies at the national and sub-national levels to ensure smooth Project implementation. This includes constructive dialogues with the major stakeholders to ensure timely provision of effective advice and support to implement the Project.

19. Another crucial implementation approach is the regular monitoring of the Project to assess progress and identify potential bottlenecks and monitoring of the Project’s expenditures and costs. The POM will also be developed and updated when necessary for monitoring progress against the Project’s results framework.

Implementation Support Plan

20. The Implementation Support Plan includes technical, fiduciary, and safeguard support to ensure due diligence over the Project implementation. The planned implementation support entails: (i) semiannual implementation support missions, (ii) an MTR in collaboration with MoH, and (iii) provision of thematic support for specific implementation issues.

21. The World Bank will carry out twice yearly formal implementation support missions. These include visits to Project sites to verify the financed work. The sites will be selected in light of the progress of the Project and associated safeguard issues. The MTR mission will be conducted to identify possible challenges and reinforce good practices. The MTR report will be prepared to provide recommendations for the Project implementation. Technical support will be provided periodically along with the implementation support missions and MTR mission through sector specialists to ensure the continuous exchange of information between the World Bank and key stakeholders as a part of monitoring and evaluation.

22. The World Bank will provide additional technical support, particularly in the first 12 months, to assist with effective and efficient implementation arrangements. Timely support will be provided through the World Bank Task Team Leaders based in Indonesia and in Washington, DC, along with one health specialist based in World Bank Dili office as well as other technical staff in Indonesia. The following table is a summary of the implementation support planned for the Project.

First 12 months	Project start-up, validation of POM, M&E plan, environment and social safeguards, implementation arrangement including procurement and financial management	Project management, FM Procurement, Contract management, Technical specialists, Environmental and Social Safeguards
13 months to 60 months	Implementation support missions, M&E, management of safeguards, midterm review, continuous support for implementation arrangement including procurement and financial management	Project management, FM Procurement, Contract management, Technical specialists, Environmental and Social Safeguards, Fiduciary

ANNEX 2: Fiduciary Assessment

Executive Summary

1. The Project Development Objective is to (a) strengthen the health infrastructure and referral system in Project target areas in Timor-Leste, and (b) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it. The Project will be implemented over five years and financed by IDA Resources. MoH will be the implementing agency. The MoH has established SPMU as per Minister dispatch. The SPMU is headed by a SPMU Administrator, who is a Director or other senior-level official, supported by an SPMU secretariat. It has appointed all the key staff (Deputy Project manager, finance officer and administration officer). The SPMU is responsible for implementing all the donor funded projects including the World Bank funded Project and the SPMU will be strengthened as needed to host the Project implementation. The ministry has prior experience of managing donors’ projects, including World Bank financed projects. Previous Bank-funded projects were managed through dedicated Project Implementation Management Unit arrangements and led by consultants. All those projects have since closed. There is a new HEPR-TF Project totaling US\$ 5 million which is yet to be implement and the FM consultant, who was involved in previous projects, is still working for MoH and will be fully responsible for the Project FM related matters.

2. The purpose of the World Bank’s FM assessment of MoH as Project implementing agency is to determine whether their FM systems have the capacity to produce timely, relevant, and reliable financial information on Project activities. The assessment also aimed to determine if the accounting systems for Project expenditures and underlying internal controls are adequate to meet fiduciary objectives, allow the Bank to monitor compliance with agreed implementation procedures, and appraise progress towards Project objectives.

3. Overall, the Project has three major risks: first, risks to Project implementation may arise from funds flow arrangements to the CHC which may result in cash misappropriation, inadequacy of counterpart financing, and, lastly, the reliability of accounting and reporting system. These risks will be mitigated by (i) ensuring counterpart funds are available during the Project life and stated in the FA; (ii) maintain subsidiary records in excel at the earlier stage. However, during the first supervision, progress towards adapting the Government country system of Free-Balance will be reviewed, and if a need is identified a separate accounting software may be recommended. Mitigation related to improved CHC service delivery component includes (i) placement of qualified FM person at each CHC prior to the disbursement, and (ii) MoH to designed Chart of Account for Municipal Health Services for the designated use of the CHC expenditures, and (iii) Finance SOP to be adopted and implemented at CHC level.

Financial Management Conclusion

4. Taking into account the risk mitigation measures proposed, overall, the financial management residual risk is assessed as **Substantial**. Given the implementation of the action plan, the proposed financial management arrangements will satisfy the Bank’s minimum requirements under the Bank Policy for IPF and therefore be adequate to provide reasonable assurance, accurate and timely financial information on the status of the credit as required by the Bank.

Institutional Arrangements

5. MoH will be the implementing agency who have overall responsibility to effectively deliver the Project. MoH has established a SPMU that will be responsible for the implementation of all the donor funded projects. The SPMU will be

supported by a PMCU that will be responsible for planning, contract administration, financial management, supervision of environmental and social safeguards, and monitoring, all to the satisfaction of the Bank and in accordance with the provision of the POM.

6. The MoH will provide the counterpart funds to implement the Project. To that end, SPMU and PMC prepare its annual program and submit it to MoH to ensure that adequate counterpart funds will be made available. MoH approves the SPMU’s annual work plan and the counterpart budget and submits it as part of its annual consolidated work plan to MoF to be included in the state budget and submitted for parliament for approval and promulgation by the President.

7. The FM consultant hired under PMC will be responsible for IDA credit disbursement following the Government system. The system involves review and approval by Director General Corporate Services of MoH, relevant department or directorates at the MoH, Treasury Directorate of MoF, and for infrastructure activities will extend the review and approval to MPS, and ADN.

8. The MoH will ensure the SPMU will be adequately staffed and funded throughout the implementation of the Project, including hiring a FM consultant with experience, qualifications and terms of reference satisfactory to the Bank. The SPMU will recruit a PMCU responsible for providing administrative and management support to the SPMU in the implementation of the Project. The PMCU will also be responsible, among others, for construction supervision, environment and social safeguards specialist, procurement specialist, monitoring and evaluation specialist.

9. The SPMU, assisted by the FM consultant, will be responsible for preparing the Interim Financial Report (IFR) and ensuring the Project audit report is submitted to the Bank on time.

Strengths

10. The FM assessment identified the following strengths:

- The MoH has already established the SPMU for all the donor funded projects and the consultant, who was involved in the past projects, is still working for MoH and will be fully responsible for the Project’s FM related matters.
- Following the Government system, the Project activities are integrated with the ministry’s budget documents and there will be adequate segregation of duties between the program and financial/administration aspects.
- The Project using the Government internal control includes FM operational procedures that describes operational procedures for budgeting, revenue, expenditures, standards cost, procurement, and asset management.

Weaknesses

11. The FM assessment identified the following weaknesses:

- Delegation of authority is not properly implemented.
- Difficulty of integration the Project’s book into the Government system of Free-Balance.
- The availability of the counterpart funds throughout the Project life.
- The weak coordination among the key relevant institutions delaying the Project implementation.

Action Plan

12. The measures have been proposed and agreed with the implementing agency to mitigate risks arising from the above weaknesses. These include:

- Bank will provide training on Bank system and procedures.
- MoH will develop and adopt a delegation of authority policy agreed with the Bank.
- SPMU will maintain subsidiary records in Excel format at the beginning of Project implementation and closely review the progress toward integrating the Project books into Government country system of Free-Balance.
- MOH should regularly communicate Project information to key relevant institutions at all levels to accelerate the Project implementation.
- MoH to ensure the counterpart funds are available during the Project life and stated in the FA .

Planning and Budgeting

13. As per the new 2023 budget law, all foreign lending will be budgeting under the Timor-Leste Infrastructure Fund, and follow the Government budgeting system for domestic budget. The Project budget will thus be included in the annual Government budget (budget book). After parliament approval and President promulgation, the budget becomes effective. There is a possible delay in the budget approval if the budget is not approved and/or not promulgated at the beginning. Inadequate counterpart budget and delay in issuing and effectiveness of the document may be minimized by including counterpart budget in the legal documents and proactivity of the SPMU to work with the MoF to get budget approval. The MoH should prepare a counterpart budget covering the Project life by entering the budget line item into Free-Balance and monitored by the FM consultant at the SPMU. The FA requires the SPMU to prepare and furnish an AWP agreed with the Bank. The AWP includes the proposed annual budget and sources of financing for the Project (credit, counterpart funds, con-financing and any other source of financing which may become available for the Project).

Accounting

14. In case of the Project book's is not integrated into the Government system, then all financial transactions for the counterpart fund will be recorded in the Government accounting system of the Free-balance and included in Government financial reports, however, the donor-funded transactions will only be recorded as journal entries in the Free-Balance based on the information from Client Connection. The Free-Balance is run and managed by MoF. MoH has agreed to integrate the Project accounting into Free-Balance. The World Bank will review the progress towards adopting the Government system during the first supervision.

Financial Reporting

15. The FM consultant will prepare a separate set of Project financial reports or IFRs to be submitted quarterly to the Bank. The IFR format will be agreed with the Bank and include total Project receipts (reconciled to the disbursement status in Client Connection), payments for the period (also presenting total year-to-date and total cumulative figures). There are risks to the reliability and timeliness of financial reports. These risks will be mitigated through the SPMU requesting the DG Treasury for Free-Balance access for the Bank-financed projects. The SPMU will be assisted by the FM consultant during the Project implementation.

Internal Control

16. The SPMU has adequate internal control concerning the preparation and approval of transactions and the segregation of duties. An FM manual will be developed to guide the Project's activities and detail the FM arrangements as part of the POM.

17. Payment of activities financed under this Project follows the SPMU internal payment process. It is then submitted to the Director General of Corporate Service of MoH and DG Treasury of MoF, ADN, who will submit the request to the lender for payment and the MPS for counterpart funds. ADN checks invoices and certifies the construction progress and the quality of the materials used before processing the payment to contractors and consultants. ADN also monitors the implementation and execution of projects through a quality certification system. It ensures the rational use of the available financial resources. Implementing agencies require clearance from the ADN before releasing the payments to contractors or consultants. The SPMU will process payments primarily through bank transfers.

18. Regarding civil works payment, there is a risk that verification done by several agencies is not done properly, and progress reports may not reflect the actual progress of constructions in the field. FM instructions or manual under the POM will be prepared to guide the Project to ensure that each agency will verify properly.

19. If the Project uses petty cash, adequate arrangements for petty cash accounting, reconciliation, custody, and settlement will be maintained. An asset register for all assets purchased using Project funds will also be maintained. All documentation evidencing expenditures is retained by SPMU and available to the auditors for audit and to the Bank and its representatives for implementation support mission review.

Internal Audit

20. The Inspection and Audit Unit (IAU) of the line ministry carries out an internal audit for the ministry as per the IAU’s manual. The IAU conducts inspections and internal audit assignments and submits the reports to the minister. IAU audit assignments are primarily in the nature of compliance audits. IAU is facing challenges for improvement due to budget shortages and limitations in the number of qualified auditors. The Bank will continue to dialogue with the IAU for it to cover Project activities.

External Audit

21. The SPMU is responsible for preparing the Project’s annual financial statements. These financial statements will be audited by a private auditor appointed by the MoH instead of *Camara de Contas* (Chamber of Audit). The latter has limited resources to conduct the audit for the Bank-financed projects. The audit fee will be budgeted under the Project. The FM consultant will assist the SPMU in developing the audit terms of reference to be agreed with the World Bank. The FM consultant will also prepare the annual financial statements based on the Project IFRs. The annual audit report will be furnished to the Bank no later than six months after the end of the Government’s fiscal year. The auditor will use agreed audit terms of reference. The audited financial statements will be required to be published by the implementing agency in accordance with the World Bank’s Access to Information Policy.

Disbursement Arrangements

22. The applicable disbursement methods are direct payment, reimbursement, and Special Commitment. SPMU will be responsible for preparing the disbursement duly approved by DG Treasury (MoF) before their submission to the Bank.

23. MoH has to fulfil the following requirements prior to the disbursement of Facility Management Cost for improved health services delivery at the CHC level:

- (a) Placement of a finance officer in each CHC.
- (b) Developed the chart of Account for Municipal Health Services for the designated use of the Facility Management Cost of CHC.
- (c) CHCs Annual report.
- (d) Finance SOP to be adopted and implemented at CHC level

All documentation for expenditures submitted for disbursement will be retained by the implementing unit and be made available to the auditors for the annual audit, and to the Bank and its representatives, if requested.

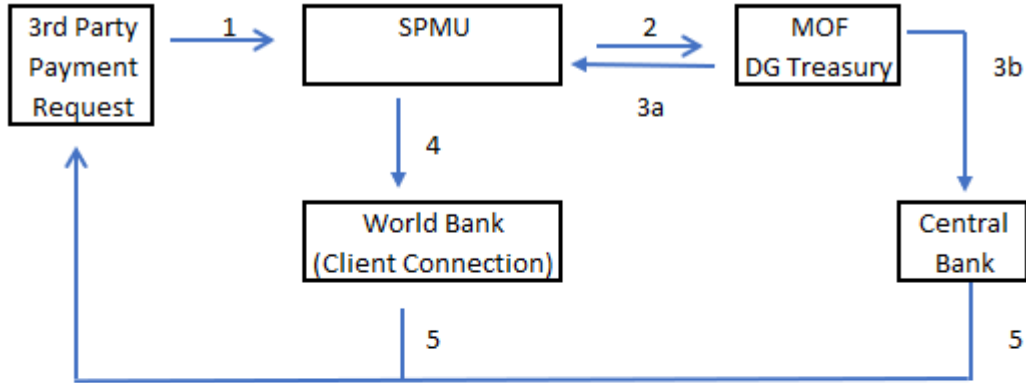
Table A2.1. Allocation of Loan Proceeds

Category	Amount of the Credit Allocated (expressed in million SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Works under Part 1.1(a) of the Project	9.5	100%
(2) Goods under Part 1.1(b) of the Project	8.8	100%
(3) Goods and Works under Part 1.1(c) of the Project	5.6	100%
(4) Goods under Part 1.2(a) of the Project	2.8	100%
(5) Goods under Part 1.2(b) of the Project	4.3	100%
(6) Goods, Consultants/ Non-Consultant’s Services, Training, and Incremental Operating Costs under Parts 1.1(d), 1.3, 1.4, and 3 of the Project	5.7	100%
(7) Facility Management Cost under Part 2.1 of the Project	0.2	100%
(8) Goods, Consultants/ Non-Consultant’s Services and Training under Part 2.2 of the Project	0.2	100%
(9) Emergency Expenditures under Part 4 of the Project	0	100%
TOTAL AMOUNT	37.1	

Flow of Funds (Figure A2.1.)

24. The Project will process the payment to the third parties through direct payment. SPMU will execute the project budget and administer it. All third parties’ invoices (suppliers/consultants) will be submitted to the relevant directorate for verification before SPMU process. There are many parties involved in the review and approval of the payment process. Payment for civil works and consultants will involve four internal parties during the payment process: the SPMU, relevant directorates, Director General Corporate Service and the office of Minister of Health. While it also involves external parties, including MoF, MoPW, ADN, MPS and may also involve the Chamber of Audit for contracts with amounts over US\$5 million.

Figure A2.1. Funds Flow



Notes:

1. Payment request is submitted to PMU with supporting documents
2. SPMU reviews and verifies a payment request and all supporting document and submit to DG Treasury, MOF for approval.
- 3a. DG Treasury provides aproval and return to PMU for WB portion
- 3b. issue a check to Central Bank for counterpart fund portion, if any.
4. SPMU prepare a direct payment for WB portion
5. WB and Central Bank transfer the fund to 3rd party

Supervision Plan

25. Risk-based supervision of Project FM will be conducted. This will involve a review of the Project FM system, including Project expenditures, accounting, reporting and internal control framework. In addition, the review will also include the review of external audit reports, and the follow-up of these audit findings. FM supervision will be conducted by the World Bank’s FM specialist/analyst on a bi-annual basis.

ANNEX 3: Economic Analysis

1. The following section assesses various economic aspects of the proposed investment Project. After outlining the rationale for public investment on health, the section provides an assessment of the equity, efficiency, and fiscal sustainability of the investments envisaged in the Project.

Rationale for public investment on health

2. **Public spending on healthcare could be justified on the grounds of several sources of market failures.**¹⁰⁰ Information asymmetry and inherent externality of investing on health may lead to suboptimal investments by the private sector and underutilization of care.¹⁰¹ Although health is a merit good that ought to be consumed by all, lack of information and ability to pay on the side of citizens may lead to its underutilization. This is particularly so for preventive and promotive services, the benefit of which may not be immediately clear for citizens. Also, the societal returns to investing on health are much higher than the private returns and as such people would logically underinvest on health. Moreover, the distribution of (private) health providers would naturally be inequitable because of the inherent profit motive, resulting in forgone care, loss of productivity, impoverishing out-of-pocket payments and inter-temporally inefficient use of productive resources (such as distress asset sales and distress borrowing) by those seeking care in the private sector. Spending on the health sector is an investment that has implications both for the productivity of the current workforce as well as for future growth and productivity. A child born in Timor-Leste today will only be 45 percent as productive as an adult as they could be if they enjoyed complete education and full health. These factors provide a rationale for public investment on health.

An economically viable prioritization?

3. **The focus of the Project in ensuring service readiness of primary and secondary healthcare facilities (US\$32.15 million equivalent out of US\$50 million equivalent) is economically viable.** Investment decisions in the health sector require careful prioritization to make sure resources are spent where they are most needed. NCDs now account for 55 percent of the burden of disease, with stroke and heart diseases being in the top 10 causes of morbidity and premature mortality. The most cost-effective strategy to reduce the burden of NCDs in any health system is to strengthen preventive and promotive services, ensure early detection of NCD risk factors and manage those diagnosed at the appropriate level of care through an effective back-and-forth referral system. The success of the overall health system to ensure this relies on patient confidence on the quality of care being provided at the first point of contact. As such, investment on service readiness at the primary and secondary care level is critical to manage the otherwise rising costs of treating NCDs at higher levels of care.

4. **The Project addresses critical tertiary care needs aligned with Timor-Leste’s burden of disease.** Given stroke and heart disease are in the top 4 causes of morbidity and premature mortality and that kidney dysfunction is one of the top 10 risk factors, the provision for equipping the Cardiac Center at the Lahane Hospital and the hemodialysis center in the national hospital (US\$9.6 million equivalent out of US\$50 million equivalent) is aligned with Timor-Leste’s existing burden. Of importance for the overall effectiveness of the Project is Government’s commitment to staff these facilities

¹⁰⁰ These include externalities, uncertainty, asymmetric information, monopolistic/monopsonistic behavior, free riding, adverse selection, moral hazard.

¹⁰¹ Inefficiently high level of utilization due to supplier-induced demand is another outcome of information asymmetry.

and maintain the functionality of equipment. The latter has been a critical challenge in Timor-Leste given lack of technical personnel who could maintain medical equipment and minimize downtime. An innovative consideration of this Project is to procure this equipment through a lease contract rather than outright purchase, which is an economically viable risk mitigation strategy.

Table A3.1: Causes of morbidity and premature mortality

Rank in 2019	Diseases/Condition	DALYs lost share			
		2002	2008	2014	2019
1	Neonatal disorders	14.7%	14.7%	13.3%	12.3%
2	Stroke	2.9%	4.5%	6.3%	7.0%
3	Lower respiratory infections	12.8%	9.5%	8.0%	7.0%
4	Ischemic heart disease	2.0%	3.2%	4.9%	5.6%
5	Congenital birth defects	4.2%	4.3%	4.1%	3.7%
6	HIV/AIDS	3.2%	3.6%	3.9%	3.3%
7	Diarrheal diseases	6.2%	4.4%	3.5%	3.0%
8	Tuberculosis	3.4%	2.6%	2.8%	2.7%
9	Road injuries	1.5%	1.6%	2.2%	2.4%
10	Chronic obstructive pulmonary disease	1.0%	1.5%	2.0%	2.3%
DALYs per 100,000		51,298	36,341	31,487	30,353

Source: Institute of Health Metrics and Evaluation (IHME)

Table A3.2: Risk factors for death and disability

Rank in 2019	Risk Factors	DALYs lost share			
		2002	2008	2014	2019
1	Low birth weight and short gestation	14%	14%	12%	11%
2	Particulate matter pollution	13%	11%	11%	11%
3	High systolic blood pressure	4%	6%	9%	10%
4	High fasting plasma glucose	2%	3%	5%	6%
5	Smoking	3%	4%	6%	6%
6	Child growth failure	21%	12%	8%	6%
7	Kidney dysfunction	1%	2%	3%	3%
8	High LDL cholesterol	1%	2%	2%	3%
9	Alcohol use	1%	1%	2%	2%
10	Unsafe water source	5%	4%	3%	2%

Source: Institute of Health Metrics and Evaluation (IHME)

Equity considerations of the Project

5. **The Project addresses critical equity concerns in healthcare provision by focusing on three municipalities with relatively poor access to care.** The overall health service utilization in Timor-Leste is relatively low and there is considerable variation across municipalities and socioeconomic quintiles. Outpatient utilization at 2.5 visits per person per year is significantly lower than most countries in the East Asia and Pacific region and the NHSSP’s target of a minimum of three visits per person per year.¹⁰² The three municipalities under this Project have relatively lower utilization outpatient and inpatient services alike. Utilization of outpatient care in Emera and Lautém is not only lower than most other municipalities in absolute terms but is also lower than expected for their average household income (see tables A3.1 and A3.2). Viqueque also has lower utilization of inpatient services compared to municipalities with similar levels of average household income. Investment in the infrastructure and equipment needs of health facilities in these municipalities is expected to drive up demand for care there by narrowing the existing inequity.

6. **By investing a lion’s share of the Project envelope in PHC strengthening and the referral network, where the poor are most likely to seek care, the Project contributes to a more pro-poor benefit incidence of public health spending.** Globally, there is a socioeconomic gradient to where people seek care, with the poor more likely to visit a PHC facility than the better-off who seek care at secondary and tertiary levels. Timor-Leste is not an exception. 80 percent of Timor-Leste’s poor live in rural areas and rural residents are more likely to seek care in a PHC facility than in a hospital. Improving service readiness of these facilities and ensuring an effective referral system will improve quality and access to care for the poor and vulnerable. It is also to be noted that it is the better-off who more frequently utilize tertiary care, even when it is provided free of charge, due to associated indirect healthcare costs and forgone income in seeking treatment. By the same logic, treatment abroad, although paid for by the Government, is less likely to be utilized by the poor than the better-off. This is because the poor cannot afford to pay the indirect costs and the forgone income in

¹⁰² World Bank. 2022c.

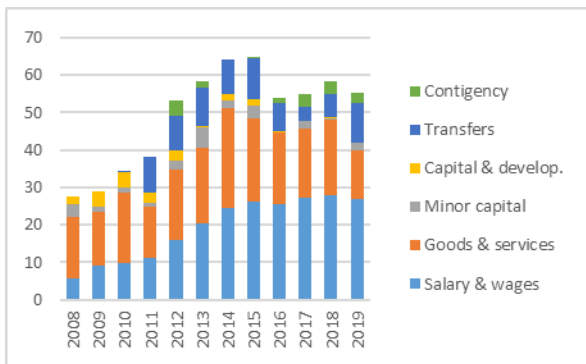
seeking this treatment. As such, the provision to equip the cardiac center at the Lahane Hospital and the hemodialysis center at HNGV will have a positive equity implication.

Efficiency considerations

7. **The Project activities contribute to the improvement of the efficiency of the health system by filling gaps in the current configuration of inputs in the delivery of service provision.** Poor service readiness is an important source of inefficiency in most less developed health systems. Although outpatient facilities—CHCs and HPs—have been built in recent years, the service readiness of these facilities has been limited, leading to patients bypassing the most cost-effective level of care and compromising the overall efficiency of health spending. For example, only 48 percent of CHCs and 6 percent of HPs have a pulse oximeter, 79 percent of HPs have a child scale and stethoscope, only two out of three CHCs and HPs have access to 24-hour electricity, and only 32 percent of CHCs without beds have a constant water supply.¹⁰³ In the absence of these inputs, the spending on other inputs of service delivery such as human resources produce suboptimal quantity and quality of service outputs. As patients bypass this PHC level to seek care at secondary and tertiary facilities, the overall health system becomes inefficient. Poor service readiness of PHCs also limits the capacity of the health system to provide early diagnosis, screening and management of non-communicable diseases that are best served at the primary care level, leading to spiraling of the cost of providing services at tertiary level once conditions become complex and more difficult to treat. By strengthening the PHC level, the Project is expected to contribute to the reduction of the need for hospitalization and treatment abroad.

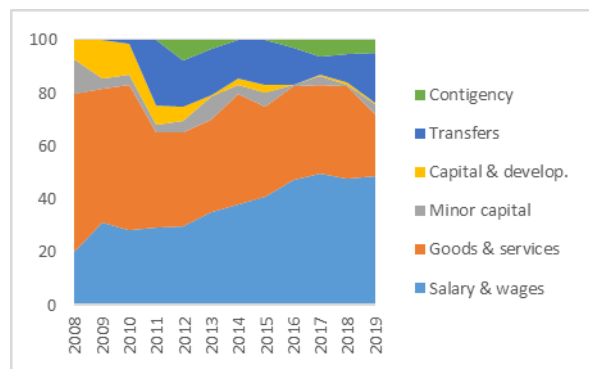
8. **The Project also contributes to improving the allocative efficiency of spending in Timor-Leste.** A recent public expenditure review underscored that the composition of public spending on health has changed significantly, with wages and salaries growing in importance at the expense of goods and services, spending on minor capital and capital development (See Figure A3.1. and Figure A3.2.). The implication of this is poor quality of infrastructure and equipment, which requires regular maintenance and repair, and poor access to electricity, and water and sanitation. The frequent down time of medical equipment that is noted in the health sector is partly an outcome of this resource misallocation. Through the direct investment on infrastructure and equipment and through the PFM capacity building, the Project contributes to improved efficiency of spending.

Figure A3.1.: Composition of spending on health (US\$ million)



Ministry of Finance (BOOST).

Figure A3.2.: Composition of spending on health (%)

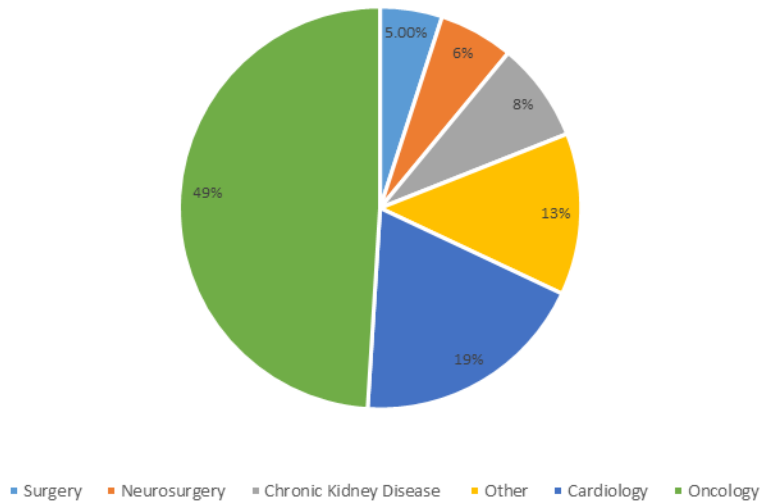


Ministry of Finance (BOOST).

¹⁰³ GoTL. 2020. *Supportive Supervision Results January-September 2020*. GoTL, Dili

9. **Another contribution to improvement in efficiency of spending comes from equipping the hemodialysis center in HNGV and the cardiac center in Lahane Hospital.** The health system in Timor-Leste is primarily publicly funded, with the Government also paying for medical costs for those seeking treatment abroad. Annually the Government spends US\$12 million to cover the costs of these treatment, which is roughly one-fifth of the total MoH budget in 2021. The Project is expected to significantly reduce the Government’s costs of financing treatment abroad for cardiology and chronic kidney disease (Figure A3.3.), which together accounted for 27 percent of total referrals abroad in 2019.¹⁰⁴ Assuming a proportionate share of the estimated US\$12 million is spent on these two specialties alone, and conservatively assuming only half of these referral cases will be averted by the Project’s investment, the Government is expected to save about US\$1.6 million annually, which is a significant resource that can be redirected to further strengthen the domestic healthcare system and improve overall efficiency.

Figure A3.3. Referrals abroad, by specialty



Sustainability considerations

10. **The longer-term operational cost implications of the new health infrastructure can be absorbed by committing a fraction of the year-to-year budget increase of the MoH and repurposing savings from reduced referral abroad for cardiac care and hemodialysis.** One critical concern in new infrastructure investments in a health system relates to whether or not the additional human resource and operational costs can be absorbed by the health sectors budget in the medium to the longer term. In 2021, the average operational budget of four hospitals under the MoH (Maliana, Maubisse, Suai and Baucau) was about US\$740,000 excluding salary and wages, and US\$1.7 million including salary and wages. Assuming that the new municipal hospital to be constructed in Ermera under this Project will cost half of this, the Ministry has to be able to allocate about US\$370,000 in non-salary/wage operational cost and an additional US\$470,000 in salary and wages.¹⁰⁵ This estimated total operational budget need (US\$842,000) can easily be absorbed in the year-to-year budget increase of the MoH. For, example, the MoH budget increased by US\$14 million from 2020 to

¹⁰⁴ MoH. 2020. *Essential Service Package for Secondary and Tertiary care for Timor-Leste*. National Directorate of Support for Hospital Services

¹⁰⁵ We assume the additional operation cost implications of the two other expansion CHCs will be modest and hence are excluded from this estimation.

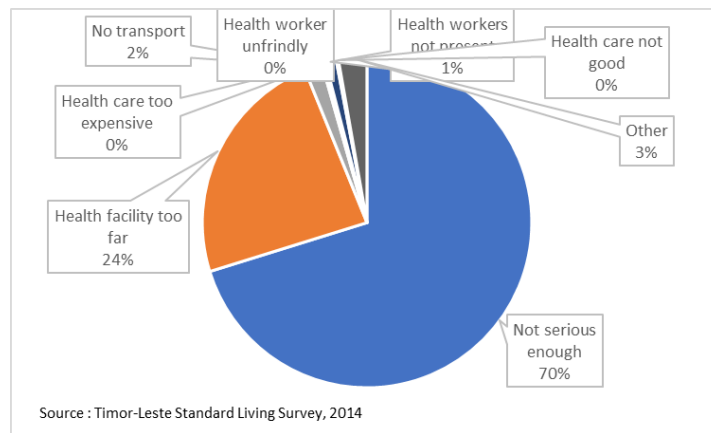
2021 and by US\$2.6 million from 2018 to 2019.¹⁰⁶ Given the country’s non-oil economy is projected to expand by 3 percent in 2022 (up from 1.5 percent in 2021), this assumption of increased MoH budget is likely to hold. Moreover, in the medium term, the potential saving from reduction in treatment abroad for the two specialties (cardiology and chronic kidney disease) can pay for these additional operational costs.

¹⁰⁶ The decline between 2019 and 2020 (~US\$2.6 million) has been excluded because it was caused by the COVID-19-induced economic contraction.

ANNEX 4: Sector and Specific Project Design Analysis

1. **Timor-Leste’s health system ranges from local community health services over primary and secondary municipal-level health facilities, to specialized tertiary health facilities in the capital, Dili, supplemented by referrals abroad for services that cannot be provided in-country.** Since its independence, through this health system, Timor-Leste has made efforts to advance its health service delivery, resulting in the partial improvement of key population health outcomes. These improvements are in part due to an increase in health spending which has enabled important investments in the health sector. Despite these efforts, some health outcomes and service indicators continue to lag regional and income peers, and significant challenges remain. Large disparities in health service availability, delivery, quality, accessibility, utilization, and outcomes are also observed along the urban–rural and socioeconomic spectrum. The latest Timor-Leste Standard Living Survey shows that, beside the tendency to underestimate the severity of illnesses, the major issues indicated by people not seeking health care is the distance that must be travelled to reach a health facility (Figure A4.1.).

Figure A4.1.: Reason for Not Seeking Health Care



2. **The distribution of health facilities and the availability and management of fully trained staff, medical products, vaccines, and technology is uneven, with significant variations across municipalities.** Figures A4.2, A4.3, A4.4 and A4.5 below capture the severe spatial disparities in the municipal distribution of essential health care workers (HCWs), which consist of nurses, midwives, and doctors, at the CHC level relative to the municipal population.¹⁰⁷ Supply chain management of and expenditure on medication, including distribution and stock management, equally differ greatly across the country. While all hospitals have basic equipment such as child scales, stethoscopes, and pulse oximeters, 92 percent of CHCs have a child scale, 99 percent a stethoscope, and only 48 percent a pulse oximeter.¹⁰⁸ For HPs, this picture is even more dire: 79 percent have a child scale, the same proportion share a single stethoscope, and a mere six percent a pulse oximeter. Only two out of three CHCs and HPs has access to 24-hour electricity, and a constant water supply is only available in 32 percent of CHCs without beds (71 percent in those with beds) and 42 percent of HPs. Only 11 out of 70 CHCs (15.7 percent) included in the 2020 Rapid Health Facility Readiness Assessment of CHCs reported having a waste management system in place, with Baucau (six out of nine CHCs) and Aileu (three out of four CHCs)

¹⁰⁷ GoTL and WHO. 2020.

¹⁰⁸ World Bank and Oxford Policy Management. 2015. *Health Worker Survey in Timor-Leste*. <https://openknowledge.worldbank.org/handle/10986/23879>

making up the lion’s share of this total. Rural and poorer households thus have reduced access to care (that is of poorer quality), driving major disparities in health outcomes. Half of all villages have no HP, and therefore rely solely on SISCa and mobile clinics. MoH PHC Guidelines include standards for readiness of primary, secondary, and tertiary health facilities, but only 17 percent of CHCs and 4 percent of HPs meet these standards.¹⁰⁹

Figure A4.2: Number of Doctors per 10,000 Inhabitants for CHCs at the municipal level in Timor-Leste

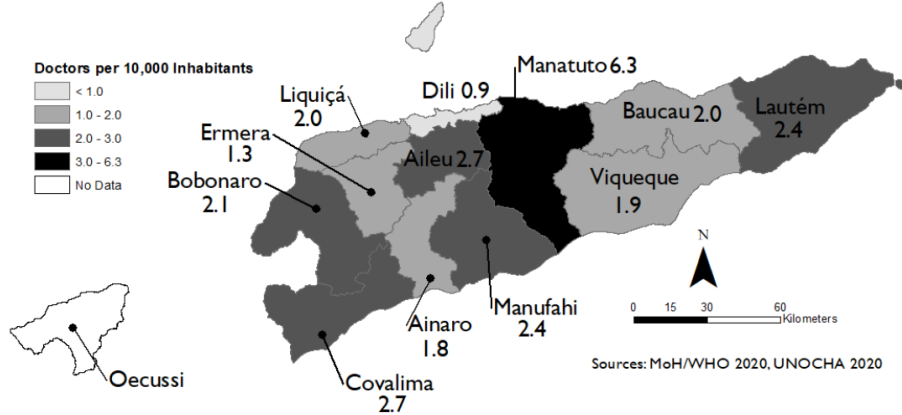
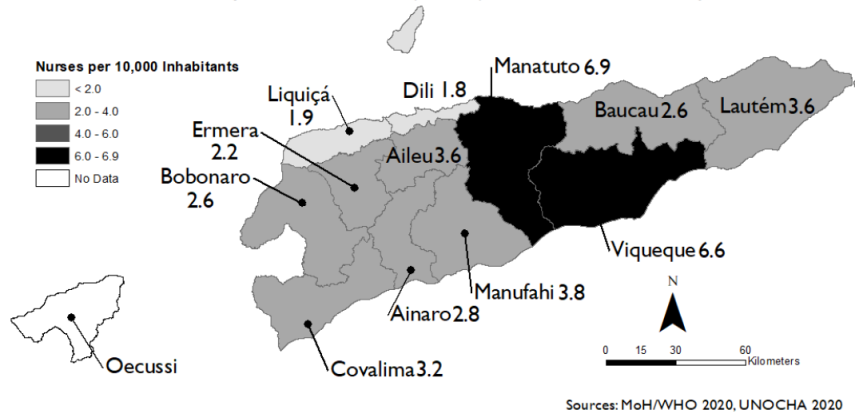


Figure A4.3: Number of Nurses per 10,000 Inhabitants for CHCs at the municipal level in Timor-Leste



¹⁰⁹ GoTL. 2020.

Figure A4.4: Number of Midwives per 10,000 Inhabitants for CHCs at the municipal level in Timor-Leste

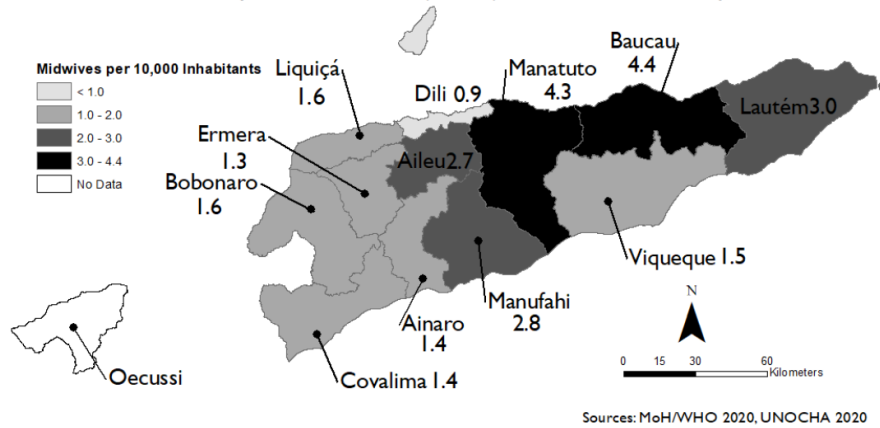
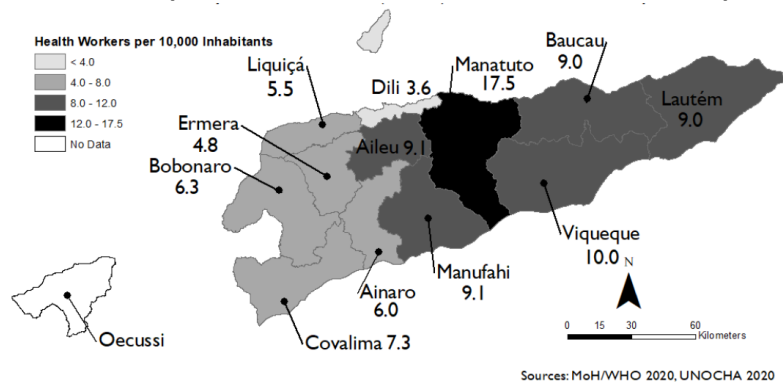


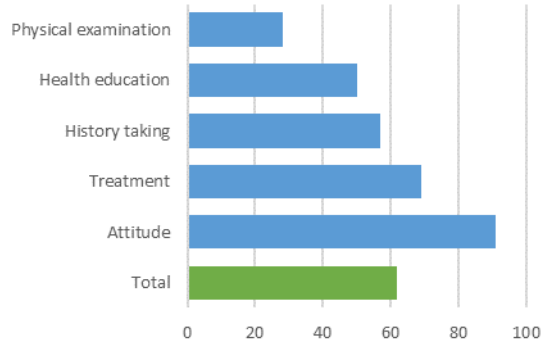
Figure A4.5: Number of HCWs per 10,000 Inhabitants for CHCs at the municipal level in Timor-Leste



3. **The quality of HCWs can be improved substantially.** A 2016 study found that the performance of general practitioners was very good in terms of attitude (91 percent), but only moderate in health education, medical history taking, and treatment accuracy—with values ranging from 50 to 69 percent. More importantly, the average physical examination performance score was low, at 28 percent (Figure A4.6). In terms of the determinants of clinical performance, the same study found that lack of knowledge was significantly associated with lack of performance. Hence, the quality of both pre- and in-service training for health workers can also be improved. Pre-service training, mainly at UNTL, lacks resources such as adequate library facilities, laboratories, and practice sites. Core competency frameworks and competency-based curricula have also not been introduced, which leaves many graduates without suitable skills and competencies when they enter the workforce.¹¹⁰ In-service training at the National Health Institute (INS) is highly dependent on donor resources, and training programs are poorly coordinated with MoH service delivery priorities. This leads to a disconnect between INS training plans and staffing needs on the ground.¹¹¹

¹¹⁰ DFAT. 2019.
¹¹¹ WHO. 2016a.

Figure A4.6: Clinical performance scores (%)



Source: Hou et al (2016).

4. **Government expenditure has been very high during the past decade however, the allocative efficiency of public spending should be improved to better reflect stated priorities and existing challenges.** An increase in health spending has enabled critical investments in the health sector, partially driven by changes in spending patterns with a heavy expenditure focus on health care worker salaries, yet this has not resulted in markedly better service availability or quality.

ANNEX 5: Timor-Leste Map

