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Report No: PAD4660

## INTERNATIONAL DEVELOPMENT ASSOCIATION

# PROJECT APPRAISAL DOCUMENT ON A PROPOSED GRANT

IN THE AMOUNT OF SDR10.60 MILLION (US\$15 MILLION EQUIVALENT)

TO THE

KINGDOM OF TONGA

FOR A

TONGA SAFE AND RESILIENT SCHOOLS PROJECT

November 17, 2021

Urban, Resilience And Land Global Practice Education Global Practice East Asia And Pacific Region

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## **CURRENCY EQUIVALENTS**

(Exchange Rate Effective October 31, 2021)

Currency Unit = Pa'anga (TOP)

TOP 2.237 = US\$1

US\$ 1.41538 = SDR 1

FISCAL YEAR
July 1 – June 30

Regional Vice President: Manuela V. Ferro

Country Director: Stephen N. Ndegwa

Regional Directors: Benoit Bosquet, Daniel Dulitzky

Practice Managers: Ming Zhang, Toby Linden

Task Team Leaders: Simone Lillian Esler, Andrew James Hurley, Ryoko Tomita

# ABBREVIATIONS AND ACRONYMS

СВА	Cost Benefit Analysis		
CERC			
CDU	Contingent Emergency Response Component Curricula Development Unit		
CSU	Central Services Unit		
DA	Designated Account		
DFAT	Department of Foreign Affairs and Trade		
DRM			
EAU	Disaster Risk Management  Examination and Assessment Unit		
ECD			
ECE	Early Childhood Development  Early Childhood Education		
ESF	Environment and Social Framework		
ESCP	Environmental and Social Commitment Plan		
ESIA			
FMA	Environment and Social Impact Assessment		
	Financial Management Assessment		
FS	Feasibility Study Gross Domestic Product		
GDP			
GEMS	Geo-Enabling Initiative for Monitoring and Supervision Global Facility for Disaster Reduction and Recovery		
GFDRR			
GII	Gender Inequality Index		
GoT	Government of Tonga		
GRID	Green, Resilient, and Inclusive Development		
IA	Implementing Agency		
IRR	Internal Rate of Return		
MEIDECC	Ministry of Meteorology, Energy, Information, Disaster Management, Environment Communications and Climate Change		
MET	Ministry of Education and Training		
MIA	Ministry of Internal Affairs		
MLNR	Ministry of Internal Arians  Ministry of Lands and Natural Resources		
MOF	Ministry of Earlds and Natural Resources  Ministry of Finance		
MOI	Ministry of Infrastructure		
O&M	Operations and Maintenance		
PDO	Project Development Objective		
PMU	Project Management Unit		
POM	Project Operations Manual		
PREP	Pacific Resilience Program		
PSC	Project Steering Committee		
PTA	Parent Teacher Association		
PV	Present Value		
RNPGAD	Revised National Policy on Gender and Development		
RF	Results Framework		
SEP	Stakeholder Engagement Plan		
SET	Skills and Employment for Tongans Project		
TA	Technical Assistance		
TSDF II	Tongan Strategic Development Framework (2015-2025)		
TNBC			
TOP	Tonga National Building Code Tongan Paranga		
	Tongan Pa'anga Tashniral and Vasational Education and Training		
TVET	Technical and Vocational Education and Training		

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# DATASHEET

BASIC INFORMATION				
Country(ies)	Project Name			
Tonga	Tonga Safe and Resilient Sch	Tonga Safe and Resilient Schools Project		
Project ID	Financing Instrument Environmental and Social Risk Classification			
P174434	Investment Project Financing  Moderate			
Financing & Implementa	tion Modalities			
[ ] Multiphase Programm	natic Approach (MPA)	[√] Contingent Emergency Response Component (CERC)		
[ ] Series of Projects (SOI	P)	[ ] Fragile State(s)		
[ ] Performance-Based C	onditions (PBCs)	[√] Small State(s)		
[ ] Financial Intermediari	es (FI)	[ ] Fragile within a non-fragile Country		
[ ] Project-Based Guaran	tee	[ ] Conflict		
[ ] Deferred Drawdown		[ ] Responding to Natural or Man-made Disaster		
[ ] Alternate Procuremen	it Arrangements (APA)	[ ] Hands-on Enhanced Implementation Support (HEIS)		
Expected Approval Date	Expected Closing Date			
10-Dec-2021	30-Sep-2027			
Bank/IFC Collaboration				
No				
Proposed Development Objective(s)				
i) to enhance the safety and resilience of selected education facilities; and (ii) to improve the quality of data-driven education management, curricula and assessments in the selected educational programs.				
Components				
Component Name Cost (US\$, millions)				

Component 1: Improving Safety and Resilience of Education Facilities	9,000,000.00
Component 2: Establishment of EMIS and improved quality of curricula and assessments	4,500,000.00
Component 3: Contingent Emergency Response Component	0.00
Component 4: Project Management	1,500,000.00

# **Organizations**

Borrower: Kingdom of Tonga

Implementing Agency: Ministry of Education and Training

# **PROJECT FINANCING DATA (US\$, Millions)**

## **SUMMARY**

Total Project Cost	15.00
Total Financing	15.00
of which IBRD/IDA	15.00
Financing Gap	0.00

## **DETAILS**

## **World Bank Group Financing**

International Development Association (IDA)	15.00
IDA Grant	15.00

# **IDA Resources (in US\$, Millions)**

	Credit Amount	<b>Grant Amount</b>	<b>Guarantee Amount</b>	<b>Total Amount</b>
Tonga	0.00	15.00	0.00	15.00
National PBA	0.00	15.00	0.00	15.00
Total	0.00	15.00	0.00	15.00

# **Expected Disbursements (in US\$, Millions)**

WB Fiscal Year	2022	2023	2024	2025	2026	2027	2028
Annual	0.42	1.74	3.24	4.13	4.48	0.99	0.01
Cumulative	0.42	2.15	5.40	9.52	14.00	14.99	15.00

## **INSTITUTIONAL DATA**

**Practice Area (Lead)** 

**Contributing Practice Areas** 

Urban, Resilience and Land

Education

## **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	Moderate
2. Macroeconomic	<ul><li>Moderate</li></ul>
3. Sector Strategies and Policies	<ul><li>Moderate</li></ul>
4. Technical Design of Project or Program	<ul><li>Moderate</li></ul>
5. Institutional Capacity for Implementation and Sustainability	<ul><li>Substantial</li></ul>
6. Fiduciary	<ul><li>Substantial</li></ul>
7. Environment and Social	<ul><li>Moderate</li></ul>
8. Stakeholders	<ul><li>Moderate</li></ul>
9. Other	<ul><li>Substantial</li></ul>
10. Overall	<ul><li>Moderate</li></ul>

## **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	Not Currently Relevant
Cultural Heritage	Not Currently 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

Without limitation to the foregoing, the Recipient shall no later than one (1) month after the Effective Date, and thereafter throughout the Project implementation period, maintain and make available staff from MET, each with skills, qualifications, and experience satisfactory to the Association, for the purposes of implementing Part 2 of the Project in accordance with the provisions of this Agreement and the Project Operations Manual.

## Sections and Description

The Recipient shall, no later than one (1) month after the Effective Date, establish and thereafter maintain,

throughout the entire period of implementation of the Project, the Project Steering Committee with terms of reference, composition and resources satisfactory to the Association, which shall be responsible for providing strategic oversight and coordination for Project implementation in accordance with the provisions of this Agreement and the Project Operations Manual. To this end, the Project Steering Committee shall be chaired by the Minister for Finance, and shall be comprised of, inter alia, at least one (1) representative of each of the Ministry of Education and Training, the Ministry of Infrastructure, the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Communications and Climate Change, the Ministry of Internal Affairs, and the Ministry of Lands and Natural Resources.

## Sections and Description

The Recipient shall, no later than one (1) month after the Effective Date, establish and thereafter maintain, throughout the entire period of implementation of the Project, the Technical Working Group with terms of reference, composition and resources satisfactory to the Association, which shall be responsible for providing technical and strategic advice and guidance to the Project Management Unit established under Section 1.A.6 of Schedule 1 to this Agreement for Project implementation in accordance with the provisions of this Agreement and the Project Operations Manual. To this end, the Technical Working Group shall be chaired by one (1) representative of the Ministry of Education and Training, and shall be comprised of, inter alia, at least one (1) representative with technical expertise relevant to the implementation of the Project from each of the Ministry of Finance, the Ministry of Infrastructure, the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Communications and Climate Change, the Ministry of Lands and Natural Resources, and the Ministry of Internal Affairs.

## Sections and Description

The Recipient shall, no later than one (1) month after the Effective Date, establish and thereafter maintain, throughout the entire period of implementation of the Project, a Project Management Unit ("PMU") within the Ministry of Education and Training, with terms of reference, composition and resources satisfactory to the Association, which shall be responsible for carrying out day-to-day management and implementation of the Project.

#### Sections and Description

The Recipient shall, no later than one (1) month after the Effective Date, recruit, and thereafter maintain, within the PMU, throughout the entire period of implementation of the Project, at least the following specialists: (i) a Project manager; (ii) a finance officer; (ii) a procurement officer; (iii) an environmental and social officer; and (iv) an engineer, each with terms of reference, qualifications and experience satisfactory to the Association. To this end, the PMU staff shall be responsible for, inter alia, carrying out fiduciary aspects of Project management and implementation, financial management, procurement, contract management, environmental and social risk management, monitoring and evaluation, and citizen engagement and communications activities, in accordance with the provisions of this Agreement and the Project Operations Manual.

## Sections and Description

The Recipient shall prepare and adopt, by no later than one (1) month after the Effective Date, a manual, in form and substance acceptable to the Association, setting forth the arrangements and procedures for implementation of the Project.

## Sections and Description

The Recipient shall prepare and furnish to the Association, by not later than February 1 of each year during the implementation of the Project (or such later interval or date as the Association may agree), for the Association's review and no-objection, an Annual Work Plan and Budget, which shall, inter alia: (a) list all eligible Project activities and Eligible Expenditures proposed to be included in the Project in the Recipient's following fiscal year; (b) provide a budget for their financing (with a financial plan specifying all sources of financing including the Financing and any other resources provided by the Recipient); and (c) describe the environmental and social safeguards measures taken or planned to be taken in accordance with the provisions of Section I.D of this Schedule 2.

#### Sections and Description

The Recipient shall furnish to the Association each Project Report not later than one (1) month after the end of each calendar semester, covering the calendar semester. Except as may otherwise be explicitly required or permitted under this Agreement or as may be explicitly requested by the Association, in sharing any information, report or document related to the activities described in Schedule 1 of this Agreement, the Recipient shall ensure that such information, report or document does not include Personal Data.

## Sections and Description

The Recipient shall carry out, jointly with the Association, not later than three (3) years after the Effective Date, or such other period as may be agreed with the Association, a mid-term review of the Project ("Mid-Term Review") to assess the status of Project implementation, as measured against the Project indicators acceptable to the Association, and compliance with the legal covenants included or referred to in this Agreement.

## Sections and Description

The Recipient shall prepare and furnish to the Association, at least one (1) month before the date of the Mid-Term Review, a report, in scope and detail satisfactory to the Association and integrating the results of the monitoring and evaluation activities performed pursuant to Section II.2 of this Schedule 2 and the General Conditions, on the progress achieved in the carrying out of the Project during the period preceding the date of such report and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objectives thereof.

## **Conditions**

Type Disbursement	Financing source IBRD/IDA	Description  No withdrawal shall be made for payments made prior to the Signature Date.
Туре	Financing source	Description
Disbursement	IBRD/IDA	No withdrawal shall be made for Emergency Expenditures under Category (2), unless and until all of the following conditions have been met in respect of said expenditures: (i)(A) the Recipient has determined that an Eligible Crisis or Emergency has occurred, and has furnished to the Association a request to withdraw Financing amounts under Category (2); and (B) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and, (ii) the Recipient has adopted, in form and

substance acceptable to the Association: (A) the CERC Manual; (B)
the Emergency Action Plan; and (C) the environmental and social
instruments in accordance with Section I.C.3(a) of Schedule 2 to this
Agreement.

#### I. STRATEGIC CONTEXT

## A. Country Context

- 1. Tonga consists of 169 islands with a total population of around 104,000. Situated in the South Pacific, the country stretches 800 kilometers from north to south, with land area of approximately 800 square kilometers. The population is primarily Polynesian, with a literacy rate close to 99 percent and a relatively low incidence of extreme poverty (approximately 1 percent of the population<sup>1</sup>).
- 2. Tonga's small size, geographic dispersion and isolation, and limited natural resources, provide a narrow economic base and make the country extremely vulnerable to external shocks. Agriculture, fishing, and tourism account for most export earnings and are critically exposed to external events offshore. There is a high dependency on consistent external aid (approximately 15 percent of Gross National Income, GNI). Remittances from an estimated 100,000 Tongans abroad have historically been equivalent to about 30 percent of GNI, increasing Tonga's vulnerability to any international crisis impacting on remittances, such as the COVID-19 pandemic related travel restrictions.
- 3. Tonga is one of the world's most exposed countries to climate change and natural disasters. It is ranked the third most at-risk nation in the world to natural hazards, due to the country's high exposure to extreme natural events and the high level of societal vulnerability. Tonga is highly susceptible to the impacts of climate change and multiple disaster risks. The country's vulnerability is primarily due to its geographical isolation and geological and socio-economic characteristics, and consequently the multiple effects of climate change pose significant threats to infrastructure, resources and human health.<sup>2</sup> This, coupled with its susceptibility to natural hazards and adverse weather events such as tropical cyclones, sea level rise, storm surges, drought, flooding and volcanic eruptions make the country vulnerable to current and future climate change events. Each of these hazards, bar volcanic eruptions, are being compounded by the impacts of climate change, resulting in the higher frequency and intensity of adverse events. Catastrophic risk modeling by the World Bank<sup>3</sup> indicates that Tonga is expected to incur, on average, US\$15.5 million per year in losses due to earthquakes and tropical cyclones, and losses of up to 14 percent of GDP in years affected by specific disasters. In the next 50 years, Tonga has a 50 percent chance of experiencing a loss exceeding US\$175 million and casualties higher than 440 people, and a 10 percent chance of experiencing a loss exceeding US\$430 million and casualties higher than 1,700 people.
- 4. In recent years, Tonga has been hard-hit by several economic and natural shocks, which have eroded its fiscal buffers and capacity to respond to further shocks. Tonga was previously negatively impacted by the Global Financial Crisis through a substantial and prolonged decline in remittances and tourism receipts, as well as price spikes in imported food and fuel. Tropical Cyclone (TC) Gita, which struck the Kingdom of Tonga on February 12, 2018 as a Category 4 Tropical Cyclone, caused extensive damage and loss totaling US\$164.2 million, which is equivalent to around 38 percent of Tonga's annual gross domestic product (GDP). More recently, and while the country was still recovering from the impact of TC Gita, TC Harold struck on April 9, 2020, resulting in significant damages and losses totaling at least 12 percent of Tonga's GDP.

<sup>3</sup> Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) Country Risk Profiles, September 2011.

<sup>&</sup>lt;sup>1</sup> United Nations Development Programme, Human Development Report 2020; The Next Frontier: Human Development and the Anthropocene – Tonga, 2020.

<sup>&</sup>lt;sup>2</sup> World Bank Climate Change Knowledge Portal, Tonga Dashboard.

- 5. The COVID-19 pandemic is having severe negative effects on Tonga's tourism-dependent economy and government finances. In March 2020, a State of Emergency was declared, international borders were closed and strict social-distancing measures and domestic travel restrictions were implemented.
- 6. As a result of the dual shocks of COVID-19 and TC Harold in 2020, it is estimated that the economy contracted by 6.1 percent in FY21. Prior to these dual shocks, the economic outlook was positive, with growth expected to reach 3-4 percent over FY20-FY21 as TC Gita reconstruction activity picked up and the tourism and agriculture sectors continued to recover. The Government of Tonga (GoT) had successfully consolidated its fiscal position over the previous few years, with debt to GDP declining. However, the dual shocks have resulted in an economic contraction in FY20, and a contraction of 6.1 percent is projected in FY21. This is due mainly to the reduction in international tourism arrivals and delays in public construction.
- 7. Extreme poverty (consumption of less than US\$1.90 per person per day in purchasing power parity terms) was less than 1 percent in FY16, among the lowest in the Pacific region. However, a quarter of the population suffers from hardship and many of them will face significant additional hardship due to the impacts of the dual shocks. Around 30 percent of households have at least one member working in tourism-linked sectors, which are the hardest hit by the border closure and strict social distancing measures. Business surveys indicate that over 60 percent of firms have reduced staff and/or reduced workers' hours in response to the economic downturn. Moreover, four out of five households receive remittances from abroad. Remittances are projected to decline by 15 percent due to the COVID-19 pandemic. A decline of this size would have a significant negative impact on the poorest and most vulnerable households, for whom remittances tend to account for a higher share of income.
- 8. Tonga is focused on accelerating its gender commitments under its revised National Policy on Gender and Development (RNPGAD) and the Sustainable Development Goal 5: Gender Equality. Based on the 2019 Gender Inequality Index (GII)<sup>4</sup>, the Kingdom of Tonga ranked 79 out of 162 countries on the index with a GII score of 0.354. This is a substantial improvement from 2015, when Tonga was ranked 152 with a GII score of 0.659. While significant progress has been made in education (for example, with an increase to 94 percent of girls achieving some secondary education in 2019), only 7.4 percent of parliamentary seats are held by women<sup>5</sup>. The review of the RNPGAD identified important achievements if the progress of gender equality and empowerment of women for the period, including (i) the enforcement of Tonga's Family Protection Act 2013, that provides greater protection from domestic violence to women and girls; (ii) a Practice Parliament for women in 2014 as an initiative to promote the wider participation of women in the law making process; (iii) a government grant targeting the economic empowerment of women and women's entrepreneurship in 2017, allowing registered women's development groups and NGOs to participate in regional and international handcraft expos and other projects<sup>6</sup>; and (iv) the incorporation of gender components and indicators in policies, major projects and plans involving disaster risk reduction and resilience building (e.g., Tonga's Climate Change Policy 2016 and the Joint National Action Plan II on Climate Change, JNAP 2).

## **B. Sectoral and Institutional Context**

9. Education's share of GoT spending has hovered around 15-20 percent of total government expenditure for several years; the percentage is similar to the neighboring countries<sup>7</sup>. In recent years the composition of sector

<sup>&</sup>lt;sup>4</sup> United Nations Development Programme, Gender Inequality Index Data, 2019.

<sup>&</sup>lt;sup>5</sup> United Nations Development Programme, Human Development Report 2020; The Next Frontier: Human Development and the Anthropocene – Tonga, 2020.

<sup>&</sup>lt;sup>6</sup> Questionnaire for the Content of National Reports on Beijing +25 - Tonga response

<sup>&</sup>lt;sup>7</sup> Between 2017-2019, education's share of GoT spending was 16-17 percent in Kiribati, 18-22 percent in RMI, 19-20 percent in Samoa, and 13-18 percent in Tuvalu. (Source: Global Partnership Education 2021).

spending has remained relatively stable, with around 75 percent for recurrent expenditure and 25 percent for development spending. In FY19, early childhood and primary education accounted for around 49 percent of sector spending, around 20 percent was for secondary and non-tertiary education (i.e., technical and vocational education and training), and less than 10 percent was for tertiary education. The main statutory functions for education policy rest with the Ministry for Education and Training (MET).

10. GoT has recognized the importance of building resilience within the education sector, including through the prioritization of future investment that is resilient to existing and future climate and disaster hazards. In addition to the Tonga Education Policy Framework and the Education Act (2016), key specific frameworks, strategies and policies that contribute to the enabling environment for this proposed Project include the Tongan Strategic Development Framework 2015-2025 (TSDF II), the Tonga Education Policy Framework (2004-2019) (TEPF)<sup>8</sup>, and the Fixed Asset Management Framework and Policy (2019).

## Natural disasters and infrastructure

- 11. The impact of TC Gita in 2018 highlighted the vulnerability of school infrastructure in Tonga and the need to improve the resilience of building stock in Tonga to avoid similar impacts to education facilities in the future. School buildings were affected disproportionately, with 75 percent of the 150 schools on the main island of Tongatapu damaged, compared to 25 percent of all residential buildings. Damage and losses to the education sector were in excess of US\$10.2 million, with many classrooms and Water, Sanitation and Hygiene (WASH) facilities in need of repair, retrofitting and reconstruction to higher engineering and more resilient standards.
- 12. In response to TC Gita, the GoT committed significant resources to reconstruct and strengthen Tonga's school building portfolio, laying the foundation for further investments in safe and resilient school infrastructure. Through Additional Financing to the Tonga Pacific Resilience Program (PREP Tonga, P154840), the GoT has reconstructed 33 new classroom buildings, 21 new WASH facilities and repaired 10 existing buildings to higher resilience standards. The works under PREP account for approximately five percent of Tonga's school building portfolio.
- 13. There remains an urgent need to invest in safer, climate change and disaster resilient, and inclusive school infrastructure in Tonga. Tonga has a high proportion of school buildings that fail to meet the safety, structural adequacy and basic sanitary requirements of the Tonga National Building Code and associated Australian and New Zealand Standards, which pose a substantial risk to lives, buildings and education continuity in the context of a future cyclone or earthquake, in the current COVID-19 pandemic, and as the climate warms. There is also a severe shortage of quality, accessible and code compliant WASH facilities.
- 14. Approximately 92 percent of Government Primary School (GPS) buildings are at high risk to one or more hazards and require immediate intervention to reduce risk and improve their safety and resilience. The portfolio of buildings is most exposed to earthquake and wind, with 100 percent of school buildings at Moderate or High exposure to these risks. Schools in Tonga are also exposed to tsunami, flooding (both coastal and inundation), liquefaction, landslide (both slope collapse and debris impact), and volcanic events (both pyroclastic flow and ash fall). The risk metrics recently developed as part of the ongoing World Bank Resilient Public Facilities in Pacific Island Countries TA (P152037) indicate that Annual Average Losses of approximately US\$2.7 million from earthquakes, US\$3.14 million from wind and US\$1.45 million from floods can be expected in the existing school infrastructure portfolio of both government and non-government primary, middle and secondary schools. The total replacement cost of these assets

<sup>8</sup> A new Tonga Education Policy (2021-2036) will be developed with support from the New Zealand Ministry of Foreign Affairs and Trade (MFAT).

has been estimated at US\$260.2 million.

15. The climate and disaster vulnerability of individual schools and school buildings to these natural hazards was found to vary widely across the school portfolio due to their differing building typologies and conditions. The GPS portfolio in Tonga consists of 108 schools in six Districts. In addition to GPS, there are a further 21 non-government Primary Schools and 51 Secondary Schools (15 government, 36 non-government). Phase two of the Safer Schools TA program (World Bank Resilient Public Facilities in Pacific Island Countries TA, P152037) was launched in 2020 with the objective of assessing the risk and vulnerability of all primary and secondary (government and non-government) schools in Tonga and the future needs for educational infrastructure. Leveraging the experience and tools developed by the Global Program for Safer Schools, the TA has supported a performance-based assessment and quantitative risk assessment of common building typologies and school assets for the development of a transparent, robust and multi-criteria investment prioritization framework for investments under the proposed Project. Preliminary results indicate that government school buildings are more vulnerable than non-government facilities and are more likely to experience greater levels of damage, disruption to education, and potential injuries/casualties from future hazard events.

#### Information Management and Quality of Education

- 16. The education information system in Tonga does not currently provide timely and reliable data to support service delivery and help MET make policy decisions. The last education statistical report was produced in 2014, although recent data were collected and analyzed in 2020. Previous attempts to establish a functional Education Management Information System (EMIS) were undertaken on a small scale and neither included substantive resourcing and technical analysis nor plans for a national roll out. The earlier attempts by the UNESCO Institute for Statistics (UIS) date back to the 1980s, with subsequent attempts in 2012, and most recently in 2019. The continued lack of such a system, including the absence of any database to house the MET data, has contributed to challenges with planning, resourcing, decision-making and policy reform within the education sector. The establishment of a functional EMIS will lay important groundwork for improvements to the quality of education management in Tonga.
- 17. Tonga is classified as an upper middle-income country, however, Tonga's harmonized test score of 386 is lower than the averages for lower-middle income countries (392) and upper-middle income countries (411). Learning-adjusted years of school is only 7.1 years in Tonga, lower than the upper middle-income average of 7.8 years. The expected number of years of schooling in Tonga is 11.6 years, which shows a learning loss of 4.5 years. Following continuing low results in high stakes national examinations<sup>9</sup>, the MET decided to conduct a comprehensive outcomes-based review of school curricula and assessment. The review identified substantial inconsistencies in the range and types of learning outcomes of core subjects and misalignment with assessments. These include a disproportionate number of low-level learning outcomes, a limited number of outcomes that reflect subject specific skills and processes and outcomes that target higher order cognitive skills. Furthermore, international benchmarking of core subjects revealed gaps in content, issues with coherent progression across year levels, and weak content matches in science. The MET is eager to address these issues. A review of recent national examinations concluded that there is a variation in the national benchmark standards across years; also the absence of national baseline standards for each qualification raises questions regarding the validity and reliability of the comparison of the results

<sup>&</sup>lt;sup>9</sup> In 2019, the overall pass rate of Tonga School Certificate Form Five (TSC) (Year 11) was 27 percent, and that of Tonga Form Six Certificate (TFSC) (Year 12) were 38 percent, that of Tonga National Form Seven Certificate (TNFSC) (Year 13) were 68 percent.

for each qualification and by years. Such quality standards need to ensure valid and reliable monitoring of the extent of student achievement of the learning outcomes each year.

## **Government policies and priorities**

- 18. The proposed project supports and builds on the Bank's strong engagement and experience of implementing projects in Tonga. The project's design has been developed through wide consultations with GoT and key stakeholders. Tonga's MoF has been instrumental in ensuring that the project is aligned with government priorities and is endorsed by the leadership.
- 19. Tonga has made good progress in preparing for natural disasters and climate change at the national and strategic levels. Tonga's 2015 Nationally Determined Contribution (NDC) has identified that "climate change is the single biggest issue that will determine the future of Tonga over the coming decades and will require a whole-of-Tonga level of cooperation and coordination." This is underscored in Tonga's key strategic and policy documents, including Tonga's National Strategic Development Framework (TSDF, 2015-2025), Climate Change Policy (TCCP 2016-2035), the Joint National Action Plans on Climate Change Adaptation and Disaster Risk Management (JNAP 2018-2028), and the National Infrastructure Investment Plan (NIIP 2013-2023). However, there are gaps in the way these strategic plans have been implemented, with a lack of consistency in mainstreaming climate and disaster risks in sector-specific plans and annual budgets (which remain largely project-based).
- The proposed project aims to reinforce and strengthen the foundations for the achievement of key national outcomes under the GoT's JNAP 2 and TSDF II. The infrastructure strengthening and maintenance activities under TSRSP align with the JNAP 2's Objective 1 of mainstreaming resilience planning, including in the priority education sector. Notably, Sub-objective 1.3 is to 'guide the development of the resilience plans for each sector of society' by increasing adaptive capacity through conducting sector-specific vulnerability assessments to establish baselines and inform resilience planning. The project also supports National Outcomes three, five and six which target: (i) empowering human development and gender equality (Outcome 3); (ii) successful provision and maintenance of infrastructure and technology (Outcome 5); and (iii) effective land administration, environmental management and resilience to climate and risk (Outcome 6). The proposed Project is also aligned with the GoT's sustainable and inclusive development priorities and will contribute specifically to: (i) Outcome 4.4 under Pillar 2 of the TSDF II to provide "more reliable, safe and affordable buildings and other structures, taking greater account of local conditions, helping to lower construction, maintenance and operating costs, increase resilience to disasters, improve the quality of services provided and facilitate increased access"; and (ii) Organizational Outcome 5.4: Improved national and community resilience to the potential disruption and damage to wellbeing, growth and development from extreme natural events and climate change, including extreme weather, climate and ocean events, with a particular focus on the likely increase in such events with climate change.
- 21. The proposed project is aligned with the Tonga Education Policy Framework (TEPF, 2004-2019)<sup>10</sup>. The TEPF has three strategic goals: Goal 1 *To improve equitable access to and quality of universal basic education for all children in Tonga up to Year 8 (Form 2)*; Goal 2 *To improve the access to and quality of post-basic education and training to cater for the different abilities and needs of students*; and Goal 3 *To improve the administration of education and training so that the quality of educational performance is enhanced*. The TEPF notes that 'a principled and planned approach to school property management and development is required' and that the management of the education property portfolio is strengthened. The TEPF sets out MET priorities to: (a) develop a National Strategic Plan for

<sup>10</sup> Though the TEPF has not been extended beyond 2019, it is still considered a key element of METs legislation, policy and plans, as set out in the MET Corporate Plan of 2019/2020 – 2021/2022 (April 2019)

school property development and investment as part of the overall national Strategic Plan for Education; (b) Strengthen Management and Administration to Improve management of GoT's investment in school property and Develop an Education Property Management Strategic Plan; (c) Provide high quality universal education to Year 8; (d) Provide all children in the secondary age cohort (ages 12 to 16) access to educational services appropriate to their interests and abilities; (e) Improve Primary Education, through the development of an improved database (Education Management Information System, EMIS) with school information, guidelines on best practices in primary school management and to help schools with school improvement grants; (f) ensure that school curricula prepare students to live fulfilling lives, is of high quality, and promotes student achievement at a high level; and (g) ensure that the assessment system promotes excellence in teaching and learning, and provides information for teachers to allow them to ensure that each child performs to the best of her or his ability.

22. The proposed project is also aligned with the 'Fixed Asset Management Framework and Policy', endorsed by Cabinet in December 2019. The Framework and Policy sets out the principles and mandated requirement for asset management by all GoT Ministries, Departments and Agencies going forward. The Ministry of Finance (MOF) is responsible for developing and implementing the framework, as well as to develop and manage a monitoring, evaluation and reporting system. MOF will be responsible for a biannual review of the policy with oversight provided by a Government Assets Committee (GAC), with representatives of key ministries (that is expected to include MET). The Fixed Asset Management Framework and Policy provides the impetus and structure for investment in the strengthening of infrastructure asset management by MET.

## C. Relevance to Higher Level Objectives

- 23. The proposed Project is fully aligned with the World Bank's framework for supporting green, resilient, and inclusive development (GRID) in IDA and IBRD countries, and supports the three pillars of GRID as follows: (i) Green Development: the proposed Project will support sustainable infrastructure through the investment in education facilities; (ii) Resilient Development: the proposed Project will support risk identification, reduction and residual management of risk, along with supporting vulnerable groups (children); and (iii) Inclusive Development: through the boosting of human capital through investments in gender and accessibility to sensitive water, sanitation and hygiene (WASH) facilities.
- 24. The proposed project is consistent with the World Bank Group's Pacific Islands Regional Partnership Framework (FY17-FY23)<sup>11</sup> covering nine Pacific Island countries: Kiribati, the Republic of the Marshall Islands (RMI), Federated States of Micronesia (FSM), Republic of Nauru, Republic of Palau, Independent State of Samoa, Kingdom of Tonga, Tuvalu, and Vanuatu. It is in line with Focus Areas 2 and 3 of the Regional Partnership Framework: Focus Area 2: Enhancing access to employment opportunities The key interventions outlined in this area focus on broadening opportunities for labor mobility\_and improving education outcomes; and Focus Area 3: Protecting incomes and livelihoods, through its contribution to the achievement of Objective 3.1: Strengthened resilience to natural disasters and climate change. The project also aims to ensure strong liaison with other development partners, thus avoiding duplication of ongoing efforts and collaborating where possible.
- 25. This Project will reduce climate change vulnerabilities from more frequent adverse weather events (including changes is precipitation, increased flooding, more intense storm events and tropical cyclones). It will contribute to

<sup>&</sup>lt;sup>11</sup> "World Bank Group. 2017. Regional Partnership Framework: for Kiribati, Republic of Nauru, Republic of The Marshall Islands, Federated States of Micronesia, Republic of Palau, Independent State of Samoa, Kingdom of Tonga, Tuvalu, and Vanuatu, FY17-FY21. Report Number 100997-EAP.

climate resilience and adaptation through the construction and retrofitting of more resilient education facilities, support to GoT for climate resilient investment planning, improved maintenance and management of education infrastructure to help better withstand future climate change exacerbated weather events, and through the inclusion of climate change learning within the school curricula. The project will also contribute to climate mitigation through the use, where feasible, of contextually appropriate renewable energy sources, passive cooling options and energy efficiency for the construction and retrofitting of selected education facilities.

#### II. PROJECT DESCRIPTION

## A. Project Development Objective

#### **PDO Statement**

26. The proposed PDO is: (i) to enhance the safety and resilience of selected education facilities; and (ii) to improve the quality of data-driven education management, curricula and assessments in the selected educational programs.

#### **PDO Level Indicators**

- 27. Achievement of the PDO will be measured by the following PDO-level indicators:
  - (a) Targeted education facilities constructed or strengthened to improved performance levels to one or more natural hazards (including climate related impacts);
  - (b) Direct beneficiaries with increased safety from new and strengthened Education Facilities <sup>12</sup> (disaggregated by gender);
  - (c) Primary and Secondary schools using the new EMIS with up-to-date data in the system according to established guidelines; and
  - (d) Teachers delivering revised curricula and assessments.

## **B. Project Components**

28. The proposed project includes four components as set out below. The detailed project description is included in Annex 2.

## Component 1. Improving Safety and Resilience of Education Facilities (US\$9 million)

29. This component will improve the safety and resilience of selected education facilities in Tonga and contribute to the reduction of disaster and climate vulnerabilities from more frequent adverse weather events. It will finance the design, supervision and works contracts to enhance the safety and resilience of selected educational facilities throughout Tonga through structural strengthening, functional improvements, and the *in situ* replacement of existing

<sup>&</sup>lt;sup>12</sup> Education Facilities means certain building types, including but not limited to classrooms, water sanitation and hygiene facilities, teachers' housing and other facilities that are essential to school function (such as halls, dormitories, laboratories, libraries, and administration buildings), which are situated at existing inclusive education schools, early child education centers, primary schools, middle schools, secondary schools, or technical and vocational education and training facilities located within the Recipient's territory.

facilities. Additionally, this component will support the improved operation and maintenance of selected education facilities and multi-year investment planning to lay the foundation for future scaling of investments, and the long-term resilience of the sector. These objectives will be achieved through two sub-components:

- (a) Resilient Infrastructure Investments; and
- (b) Strengthening Education Infrastructure Planning and Maintenance.

## **Component 1.1: Resilient Infrastructure Investments**

- 30. This sub-component will finance:
  - (a) The carrying out of a program of civil works to: (i) construct new Approved Education Facilities<sup>13</sup>; (ii) retrofit and strengthen existing Approved Education Facilities; and (iii) undertake minor repair and maintenance works.
  - (b) The carrying out, inter alia, of detailed building-level structural condition assessments, geotechnical and other site investigations, feasibility design studies, investment planning, detailed engineering designs (incorporating multi-hazard resilience measures as appropriate to site-specific exposures), construction supervision and quality assurance and monitoring of the contractors' environmental and social management plans.

## Component 1.2: Strengthening Education Infrastructure Planning and Maintenance

- 31. This sub-component will finance:
  - (a) The development of a Strategic School Infrastructure Development and Management Plan.
  - (b) The carrying out of activities to strengthen the operation and maintenance processes and practices for the management and maintenance of Selected Schools<sup>14</sup> including, *inter alia*: (i) provision of technical assistance and support to implement an Operation and Maintenance (O&M) program; and (ii) provision of technical assistance to support improved asset management and sustainable maintenance.

<sup>&</sup>lt;sup>13</sup> "Approved Education Facilities" means Education Facilities selected, prioritized and approved for the purposes of sub-component 1.1 of the Project: (i) in accordance with the Project Operations Manual; or (ii) as agreed with the Association in writing, if such approval is requested prior to the adoption of the Project Operations Manual.

<sup>&</sup>lt;sup>14</sup> "Selected Schools" means existing Education Facilities selected and approved for the purposes of sub-component 1.2 of the Project: (i) in accordance with the POM; or (ii) as agreed with the World Bank in writing, if such approval is requested prior to the Recipient's adoption of the POM.

## Component 2. Establishment of EMIS and improved quality of curricula and assessments (US\$4.5 million)

- 32. This component will strengthen data management systems within the education system in Tonga and improve the quality of curricula and assessments. These objectives will be achieved through two sub-components:
  - (a) Establishment of a comprehensive Education Management Information System (EMIS); and
  - (b) Upgrading of curricula and assessments.
- 33. Personal data, personally identifiable information and sensitive data are likely to be collected and used in connection with activities under this Component under circumstances where measures to ensure the legitimate, appropriate and proportionate use and processing of that data may not feature in national law or data governance regulations. In order to guard against abuse of that data, the Project will incorporate good international practices for dealing with such data in such circumstances. Such measures may include, by way of example, data minimization (collecting only data that is necessary for the purpose); data accuracy (correct or erase data that are not necessary or are inaccurate), use limitations (data are only used for legitimate and related purposes), data retention (retain data only for as long as they are necessary), transparency (informing data subjects of use and processing of data), and allowing data subjects the opportunity to correct information about them, etc.

## Sub-component 2.1: Establishment of a comprehensive EMIS

- 34. This sub-component will finance:
  - (a) Supporting the development and operation of an EMIS to provide quality data sources to inform policy decisions within the Education Sector<sup>15</sup>.
  - (b) Building capacity of selected MET employees, principals and teachers on the use and maintenance of the EMIS.

## Sub-component 2.2: Upgrading of curricula and assessments

- 35. This sub-component will finance:
  - (a) Carrying out activities to support the redevelopment of an outcome-based curricula and assessments system for Core Subjects<sup>16</sup> in conformity with recognized international good practice and tailored to the Recipient's country context.
  - (b) Support for the revision of teaching and learning materials including syllabuses, teachers' guides, and pupils' books based on the revised curricula and assessments developed under sub-component 2.2(a) of the Project and printing of such teaching and learning materials.

<sup>&</sup>lt;sup>15</sup> "Education Sector" means, collectively, Tonga's early child education, primary education, secondary education, technical and vocational education and training and higher education sectors.

<sup>&</sup>lt;sup>16</sup> "Core Subjects" means, collectively, the subjects of mathematics, science, English, and Tongan language for school years 1 through to 6.

(c) Support for the development and implementation of: (i) a training program for principals and teachers responsible for delivery of Core Subjects and for selected teacher training institutions; (ii) outreach activities to inform communities, parents, and students of the revised curricula and assessments; and (iii) surveys to measure, *inter alia*, teachers' understanding of the revised curricula and assessments.

## Component 3: Contingent Emergency Response Component (CERC, US\$0 million)

36. This component is designed to provide an immediate response in an event of an "Eligible Crisis or Emergency" (as defined in the legal agreement), by enabling Tonga to request the World Bank to re-allocate project funds to support emergency response and reconstruction.

## **Component 4. Project Management (US\$1.5 million)**

37. The objective of this component is to provide efficient and effective implementation support for the proposed project. A designated Project Management Unit (PMU) will be created specifically to support MET in the areas of Project management, coordination, implementation, and supervision. Individual consultants will be recruited to the PMU to support procurement and contracts management, financial management, environmental and social risk management, monitoring and evaluation, reporting, and citizen engagement and communications activities under the Project.

## C. Project Beneficiaries

- 38. Beneficiaries of the project are as follows:
  - (a) Component 1: 3,000 students will have access to new or strengthened education facilities. Secondary beneficiaries are expected to include school communities (i.e., teachers and family members or community members who may have access to the facilities, and those who are trained on improved maintenance), the MET and potentially the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Communications and Climate Change (MEIDECC) and the Ministry of Infrastructure (MOI). Beneficiaries will have their vulnerability to the impacts of climate change reduced, as the interventions will minimize disruptions to accessing/providing education services when climate-related events occur.
  - (b) Component 2: Beneficiaries will include principals, teachers and MET staff who are trained on the use of the new EMIS system, MET staff from Curricula Development Unit (CDU), Examinations and Assessment Unit (EAU), and Professional Development Unit (PDU), selected teacher training institutions, principals and teachers who are trained on the revised curricula and assessments, and all students in Years 1-6 who receive pupils' books.

#### D. Results Chain

- 39. To develop the results chain for TSRSP, a Theory of Change approach was adopted. The Results Chain outlining the activities of the program is shown in Figure 1. The Critical Assumptions are:
  - (a) Component 1:
    - i. Adequate operation and maintenance budget is allocated over the longer term by the relevant Ministries to operate and maintain investments in new and existing buildings to appropriate levels of

safety; and

- ii. MET provides ongoing support to sustain timely and adequate training for improved education facilities' management and maintenance.
- (b) Component 2 (MET has agreed that throughout the entire period of implementation of the project it would maintain and make available the following staff to implement Component 2. The project will not fund salaries of MET staff<sup>17</sup>):
  - i. MET ensures, with support from TA, that the EMIS and Truancy units will provide training and support on the new EMIS to all officers using the system(s);
  - ii. Each Early Childhood Education (ECE) center, school, center and school teaching Technical and Vocational Education and Training (TVET) courses, and tertiary institution will assign an officer to be a Focal Point for EMIS;
  - iii. MET provides an adequate number of subject specialists (at least four fulltime subject specialists per Core Subject, totaling 16 people) who will work in close collaboration with the recruited firm and consultants to revise the curricula and develop the syllabus, teachers' guides, and pupils' books. This is in keeping with the existing responsibility of the CDU; and
  - iv. MET is expected to provide at least one member of staff from the EAU, who will be supported by TA to carry out the capacity building of staff and provide ongoing training for those involved in the development of the assessments, including school-based classroom assessments, and another staff who will be supported by TA to carry out the analysis of the data and use the results to inform policy decision making. This is in keeping with the existing responsibility of the EAU.

<sup>&</sup>lt;sup>17</sup> MET have confirmed that implementation of Component 2 falls within the employment contracts of the relevant MET staff. Their work program may be amended to incorporate the Project work.

Figure 1. Results Chain for Tonga Safe and Resilient Schools Project

#### **INTERMEDIATE** LONGER-TERM PDO OUTCOMES **OUTPUTS ACTIVITY OUTCOMES OUTCOMES** Site investigations, Detailed engineering designs in-Targeted education hazard assessment, corporating relevant hazard resilfacilities constructed feasibility studies, faience measures (new) or strengthcility needs assessened (existing) to im-Tonga's education WASH facilities delivered under ment, engineering facilities are safer proved performance the project include gender and analysis and detailed and more resilient. levels to one or more scoping of works. disability accommodating design Disaster damage. natural hazards (inloss of line, ecocluding climate re-The safety and Beneficiaries are satisfied with Consultations and nomic losses and the quality of new or upgraded lated impacts) resilience of secitizen engagement disruption in the edlected education education facilities on investment qual-Direct beneficiaries ucation sector are facilities are enity, education facility with increased safety reduced. hanced maintenance and from new and disaster risk reduc-Tongas investments strengthened educa-Pilot school maintenance plans tion interventions. in education infration facilities developed and implemented for structure are scaled selected schools and optimized School Infrastructure Maintenance Manuals developed and adopted by MET Assess maintenance Strategic School Infrastructure and training needs Management and Development Inventory of school Plan developed and adopted by infrastructure assets MET Develop investment prioritization framework A comprehensive EMIS is established, and staff trained Curricula for the selected subjects and class levels revised Syllabus, teachers guides, pupils books are developed, printed and distributed Establish and sup-Schools Using the port the provision of Primary schools record sex-disnew EMIS with upa comprehensive aggregated results from classto-date data in the EMIS is used ef-Enhanced data-EMIS within MET room assessments, large scale system according to driven sector manfectively to inform assessments in EMIS established guideagement and decidecision-making. lines sion making Ministry units are able to develop Teachers are trained to implethe curriculum for ment revised curricula and asother subjects and sessments student learning outcomes Teachers with knowledge of gender-sensitive pedagogy, includ-Implement regular ing identifying and referring GBV workshops to redeand Violence against children. velop curricula and as-Quality of curricula sessments for the se-Students benefiting from direct Teachers delivering and assessments lected subjects and interventions to enhance learning revised curricula for selected subjects class levels and assessments and class levels is Communities, parents and stuimproved dents informed about the revision of curricula and assessments

## E. Rationale for Bank Involvement and Role of Partners

- 40. The World Bank has been supporting the Tonga education sector since 2014 and has built a good relationship with the MET through consecutive projects and TA, which provides a strong foundation for the proposed project. These include: (i) Tonga PREP (P154840) to reconstruct and strengthen school facilities to improved resilience standards following the devastating impacts of TC Gita (2015 ongoing); (ii) the Resilient Public Facilities in Pacific Island Countries TA (P152037) which has been supporting MET to better understand the exposure, vulnerability and risk of the infrastructure nationally (2017 ongoing); (iii) TA of curricula and assessment reviews (2020-21); (iv) Pacific Early Age Readiness and Learning Project (P145154 and P159996, 2014-19) which focused on Early Childhood Development (ECD) coverage for young children and improving teaching and learning of reading skills in the early grades; and (v) Skills and Employment for Tongans Project (SET, P161541).
- 41. GoT and the World Bank, along with the Australian Government, have a long-standing partnership on disaster risk management and education sector support in Tonga. In particular, the World Bank, with co-financing from the Australian Government, is providing ongoing complementary support through the Tonga PREP to reconstruct and strengthen school facilities to improved resilience standards following the devastating impacts of TC Gita in 2018. The PREP project has built strong relationships with GoT counterparts, has achieved good results and has generated significant learnings which will be built upon in this proposed project.

#### F. Lessons Learned and Reflected in the Project Design

- 42. The project design incorporates the following lessons from previous operations, analytical work, and international good practice:
  - (a) Experience delivering projects in Tonga emphasizes that key challenges include delays with the recruitment of TA firms and resourcing an appropriately skilled PMU. The project will therefore seek as additional support much as possible on procurement and contract management, financial management, safeguards and monitoring and evaluation from the staff of the Central Services Unit under MOF. Furthermore, issues related to land tenure have also impacted project implementation previously, hence lessons from these experiences have been considered during project preparation and incorporated into the screening process for investment eligibility (as they were for the PREP Tonga). The impact of COVID-19 on ongoing projects in Tonga will also be considered to inform preparation for the proposed project in the context of travel restrictions and the recruitment of TA firms.
  - (b) Lessons learned from the recent experience of school reconstruction and retrofitting under PREP Tonga as well as lessons from other previous and ongoing technical assistance to incorporate activities to: (i) strengthen contractor capacity (particularly related to quality control and assurance); (ii) address gaps in the regulatory framework for building retrofits; and (iii) comprehensively assess school facility needs early. PREP Tonga also highlighted the limitations of: (i) the PMU to effectively administer contracts; and (ii) contractors' ability to deliver on contractual requirements. The Project will build on these experiences to ensure more effective contract management through the appointed PMU Contracts Manager, more realistic timelines for implementation and the inclusion of contractual remedies to promote efficiencies in all bid packages. Strengthening the contractor onboarding process to identify the key materials with long lead times at the outset will also assist in mitigating many of the delays experienced under PREP Tonga.

- (c) The experience of designing and implementing resilience and retrofitting projects such as PREP Tonga (Component 2) and the Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (ISMEP) showed that the cost of the retrofit interventions for existing buildings to increase their multi-hazard performance remains uncertain until a detailed engineering investigation, design and costing is prepared. To avoid delays to implementation, Component 1 of the project is expected to follow a progressively phased implementation process: early implementation is expected to focus on new construction, leveraging existing standard designs for early construction activities, while concurrently carrying out with investigations and preparing designs for priority building upgrades and retrofits which will be delivered in subsequent works packages.
- (d) The Project has been designed to facilitate the scaling of investments. Through convening other development partners, World Bank–funded resilience programs have successfully scaled up investment across infrastructure sectors. For example, the ISMEP project has scaled up from the initial World Bank investment of €400 million to crowd in financial resources from other partners and has become a €2 billion program. The proposed project's design builds on these relevant experiences and will adopt several key features to facilitate scaleup: (i) establishment of clear and evidence-based selection and prioritization criteria for education infrastructure investments; (ii) embedding of investment projects within a larger and longer intervention and the investment strategy and development plans for education assets; (iii) capacity building in relevant agencies to monitor the progress of program implementation; and (iv) building national contractor capability for retrofitting and resilient construction. The development of a multi-year strategic infrastructure and development plan for the resilient upgrade of education facilities in Tonga will build on examples in the region (such as New Zealand) and similar plans supported by the World Bank and the Global Program for Safer Schools to support its effective implementation.
- (e) In recent years, Tonga has made several efforts to develop an EMIS. Previous barriers to a successful system include the high cost to develop and maintain the system, changes in funding, changes in MET management, and lack of provision in the system for district or national staffs. Mitigating strategies are to ensure: (i) high level buy-in and support from senior management of the MET by ensuring ownership and buy-in for the decision making and proposed solutions for the EMIS development, which will help to acquire commitment from the MET to stabilize staff in the EMIS unit and reduce turnover; (ii) comprehensive documentation of all aspects of the reform to be considered; (iii) assess not only the cost of the system development but also long-term maintenance and annual cost to ensure sustainability after the proposed project ends; (iv) emphasis on training and mentoring, including subnational capacity building requirements; and (v) ensuring a system which has external service provision and will therefore not require strong technical capacity within MET to host, develop, and deploy the system.

## III. IMPLEMENTATION ARRANGEMENTS

## A. Institutional and Implementation Arrangements

43. MET will be responsible for the overall implementation of the project and will be the Implementing Agency responsible for Components 1, 2 and 4. MoF will be the implementing agency responsible for Component 3. The planned implementation period for TSRSP is five years. Project effectiveness is expected in the first quarter of 2022. The Closing date is proposed for September 30, 2027.

- 44. A Project Steering Committee (PSC) will be established within one month of effectiveness to provide the strategic oversight and coordination for the Project. Potential governance challenges with respect to coordination between relevant ministries, different levels of government, technical capacity and the leadership needed to move forward on challenging issues will be mitigated through establishment of the PSC, which will be chaired by the Minister for Finance, and will provide the strategic vision, guidance and oversight for the Project. TOR for the PSC will be developed to guide the operations of the PSC, including the frequency of meetings and membership. The PSC is expected to be established within one month of effectiveness.
- 45. A Technical Working Group (TWG) will also be established within one month of effectiveness and will include the participation of technical counterparts from relevant ministries/agencies to provide advice and guidance to the PMU on key decisions, challenges and priorities. It will advise on all four components, ensuring integration across the project, and foster government ownership of the decisions made during the Project. Members of the TWG will be chaired by a representative of MET and will include technical representatives from MEIDECC, MOI, MOF, Ministry of Internal Affairs (MIA) and the Ministry of Lands and Natural Resources (MLNR). This group will further support improved coordination amongst the relevant critical ministries.
- 46. A Project Management Unit (PMU) housed in MET will be created within one month of effectiveness and will be entrusted with overall TSRSP implementation. The PMU will include a project manager, finance officer, procurement officer, environmental and social (E&S) officer, M&E Officer, contract manager, engineer and other technical staff as required to support implementation of the Project. The project manager, fiduciary (finance and procurement), E&S and engineering positions will be recruited within one month of effectiveness. The PMU will collaborate closely with the Central Services Unit (CSU) in MoF to proactively mitigate Project risks, with the CSU advisors providing technical advice and practical support to PMU members as necessary. The PMU will also collaborate with the SET PMU, housed in MIA, on the procurement and implementation of the EMIS. In addition, MET staff from the EMIS and Truancy units will work closely alongside the PMU in the delivery of Component 2.1. Likewise, MET staff from the CDU, EAU, and PDU will work closely alongside the PMU in the delivery of Component 2.2. The Implementation Arrangements are set out in Figure 2. Further details are provided in Annex 1.
- 47. The Recipient will prepare and adopt, by no later than one month after the Effective Date, a comprehensive Project Operations Manual (POM) which will include the arrangements and procedures for implementation of the Project, including: (a) the institutional arrangements for day to day execution of the Project; (b) the arrangements for the implementation of the environmental and social instruments; (c) budgeting, disbursement, and financial management arrangements; (d) procurement arrangements, including the process for consulting and authorizing contractor and consultant terms of reference and invoices; (e) Project monitoring, reporting, and evaluation arrangements; (f) the criteria and procedures for selecting, prioritizing and approving Approved Education Facilities for the purposes of Sub-component 1.1 of the Project; (g) the requirements for retrofits to be financed under Sub-component 1.1 of the Project, including compliance requirements and any necessary building permit applications; (h) the criteria and procedures for selecting, prioritizing and approving Selected Schools for the purposes of Sub-component 1.2 of the Project; (i) the specific arrangements for the implementation of Component 2 of the Project, including the roles and responsibilities of MET staff members assigned by the Recipient for such purpose; (j) the specific arrangements for coordinating the collaboration between the PMU and the SET PMU for the purposes of implementing Subcomponent 2.1 of the Project; (k) personal data collection and processing in accordance with good international practice; and (I) any other arrangements necessary to ensure proper coordination and implementation of the Project.

48. The specific details of the proposed implementation arrangements and procedures governing the use of the CERC funds will be identified in a CERC Manual and Emergency Action Plan to be prepared by MoF adopted by Recipient in form and substance acceptable to the Bank as a condition of disbursement under Component 3 of the project.

Figure 2. Tonga Safe and Resilient Schools Governance Arrangements

**Governance and Project Steering Committee** Coordination Chaired by: MOF Key Ministries: MET, MOI, MEIDECC and MIA Responsible for: Strategic oversite with regular planning and inter-agency coordination delegated to a Technical Working Group, representing the member agencies and the PMU Ministry of Education and Training (MET) Ministry of Finance (MOF) Implementation Implementing Agency Recipient of funds Signs Financing Agreement Overarching Responsibility for Project Implementation Provision of key MET staff with regards to implementation of activities Acts as Implementing agency for CERC under Component 2 Responsible for coordination with other ministries as needed **Project Management Unit (PMU)** Central Services Unit (CSU) **SET PMU** Housed within MET Housed within MOF Housed within MIA Responsible for day to day imple-Collaborate with TSRSP Provides support to MET and PMU for Arrangements Operational PMU as needed regarding mentation of key activities Fiduciary, Safeguards, M&E and Conprocurement of EMIS under Comprises Project Manager, FM, tract Management of Project Component 2 Procurement, Safeguards and other operational and technical officers Responsible for day to day implementation of project

## **B. Results Monitoring and Evaluation Arrangements**

49. The PMU will be responsible for project M&E. M&E will be conducted via periodic monitoring through semesterly reports that track progress in terms of distribution of inputs, disbursement of funds, and achievement of targeted indicators as outlined in the Results Framework (RF, Section VI). Where feasible, each project report will be submitted to the World Bank one month in advance of the six-monthly implementation support missions and will undergo internal clearances within MET in a manner to be set out in the POM. A template for the project reports which sets out key information to be included in each report and the modality for finalization after any clearances required prior to submission to the World Bank will be included in the POM. The project will utilize field-appropriate digital tools for data collection, and analysis of geo-tagged data will be used for example through the World Bank Geo-Enabling Initiative for Monitoring and Supervision (GEMS) information and communications technology capacity-building approach, or something similar.

## C. Sustainability

- 50. The project's use of a transparent, risk-informed decision-making process for Component 1 will promote scalability and sustainability. The project will build on analytical results from the ongoing World Bank TA, which analyzes existing information on the entire school portfolio. By using advanced wind, seismic and cost-efficiency analyses, retrofitting interventions will be optimized to identify cost-efficient solutions for different school building types that can be implemented at scale with the skill sets available locally. Component 1.2 will support the development of a school O&M training and capacity building program, as well as a multi-year Strategic School Infrastructure Development and Management Plan, to enhance the sustainability of investments and lay the foundation for their future scaling and the resilient upgrade of all education facilities in Tonga.
- 51. Long-term sustainability of project interventions will require: (i) ensuring adequate planning and budget for infrastructure maintenance by MET (supported through O&M activities under Component 1.2); and (ii) adequate planning and budget for frequent capacity building programs (including training of trainers) related to school O&M and disaster risk reduction. To maintain the long-term sustainability of the EMIS: (i) the project will fund the procurement of a vendor with a proven track-record in the development of EMIS in other countries and capacities to implement system elements required for the Tongan EMIS; and (ii) the project design includes the full costs of establishing and maintaining a robust EMIS (during and after the life of the proposed Project), provision of hands-on training for all new staff and existing staff managing the EMIS system in Tonga, and low reliance on specific technical skills within MET by outsourcing development, support, and secure hosting to a service provider.
- 52. A key strategy to ensure long-term sustainability of the new curricula and assessment systems is to secure strong stakeholder commitment from all relevant stakeholders, including at senior Ministry levels and among the staff of the key Ministry units who will be engaged in the development process. During the implementation of these activities, a collaborative participatory approach will be adopted, involving Technical Assistance working closely with staff of the key Ministry Units of the EAU, CDU, and PDU to strengthen their capacity to develop and assess the curricula for other subjects and class levels, thereby, assuring ownership and sustainability. Engagement in this process will strengthen the capacities and competences of staff members. In addition, Project design includes the opportunity for staff from these units to independently apply the knowledge, skills and experience gained to develop the curricula and assessment. A bespoke teacher training program that involves a multi-level, multi-site (central/district level, school cluster level and school level) approach to in-service Teacher Education and Training (INSET) will be developed to support the implementation of both curricula and assessment. This will have a dual focus to: (i) ensure school leaders are well-informed of their role in supporting the new initiatives and strategies to enact that role; and

(ii) ensure that teachers receive multiple opportunities to engage in different modes of training in outcomes-based pedagogy and classroom assessment for the duration of the Project.

#### IV. PROJECT APPRAISAL SUMMARY

## A. Technical Analysis

- 53. <u>Component 1.</u> The development impact of this Component can broadly be classified according to the first dividend of the World Bank's Triple Dividend of Resilience Framework, namely avoided losses and saving lives. Additionally, it will support the improved operation, maintenance and investment planning for education facilities, thereby strengthening the sustainability of project investments. The proposed school level risk-informed approach seeks to streamline investment implementation and support scaling of the investment strategy to maximize the economic, social (number of school children protected) and risk reduction benefits within a capacity constrained local contractor market.
- 54. The design has been informed by extensive field investigation, whereby detailed building information on all 1004 school buildings in Tonga have been collected and analyzed using advanced structural performance-based techniques. This analysis has enabled an assessment of the expected performance and disaster risk of the entire school building portfolio and the development of a risk assessment framework, as well as an estimation of the losses induced by different types of natural hazards assuming both the pre (as-is) and post-intervention conditions of the school buildings. These provide a robust basis for school selection prioritization, preliminary scoping and future scaling of project investments.
- 55. All education facilities will be inspected and assessed by qualified structural engineers to confirm the most appropriate interventions. Based on information available at appraisal, retrofitting of educational facilities is likely to include: (i) new roof and framing timber elements; (ii) steel tie-downs, bracing and strapping; (iii) a reinforced mortar layer; (iv) wall panel strengthening; and (v) the addition of lateral elements or concrete ring beam or a combination of these. Retrofitted buildings would demonstrate "significantly improved" structural and resilience capacity. Specific target performance levels, compliance requirements and cost thresholds (e.g., 60 percent of reconstruction cost) for retrofits will be agreed and documented in the POM. Buildings retrofitted for earthquake are expected to substantially reduce (but not eliminate) building damage in the event of the design earthquake and will enable occupants to safely evacuate, thereby reducing fatalities and severe injuries.
- 56. The nine standard classroom and six cubicle WASH designs developed under PREP will generally be used for new construction to minimize risks associated with design, supervision, and construction of new buildings. These designs have been updated to: (i) consider local climate; (ii) provide improved ventilation and natural lighting; (iii) provide flexible and improved learning environments; and (iii) enhanced seismic and cyclone resilient standards to reduce disaster and climate vulnerabilities from more frequent adverse weather events and contribute to climate resilience and adaptation. These designs require a minimum floor elevation of 400 mm from the surrounding ground level to reduce climate vulnerability from increased precipitation and localized flooding. Building design and material selection has considered local building practices and relevant local hazards to minimize ongoing maintenance requirements for the infrastructure. Contractor familiarity with the designs following the PREP reconstruction effort is expected to contribute additional benefits in terms of Occupation Health and Safety and quality of construction.

- 57. The findings from the MET led (supported by World Bank TA) National Maintenance Workshop<sup>18</sup> will be leveraged to ensure a structured and contextually appropriate school O&M pilot is designed and implemented. At present there is no comprehensive formal system for addressing maintenance, repairs and strengthening of school facilities in Tonga. While Minimum Service Standards highlight the need for buildings and facilities to be well maintained and for schools to provide a safe environment for students, there are no defined processes, manuals, or guidance on how this should be done. Sub-component 1.2 will contribute to addressing these gaps by creating the enabling environment for safer and more resilient schools in Tonga by empowering MET and the school community to undertake maintenance work through enhanced systems, tools (guidelines/physical tools) and capacity building.
- 58. <u>Component 2.</u> Component 2.1 will support the establishment and implementation of a comprehensive EMIS to provide decision makers in education with access to the timely information that they need to make informed policy and operational decisions. The EMIS will aim to ensure that data is collected, processed and used in an appropriate and effective way. Training will also be provided to staff in its use and maintenance in order to generate annual education statistics, and to provide quality data to administer, manage and monitor all aspects of the education system, including teachers, students and school infrastructure. A Tonga EMIS situation analysis completed in July 2021: (i) reviewed lessons learned from previous attempts to establish an EMIS in Tonga; (ii) reviewed current data management systems in Tonga; (iii) analyzed well-established EMIS in other countries in the sub-region; and (iv) recommended ways to effectively adapt a comprehensive and contextually appropriate EMIS in Tonga. A core recommendation from this EMIS situational analysis was the importance and benefits of utilizing a single software platform for the management of all sub-sectors of the education system (ECE, primary, secondary, TVET and Higher Education).
- 59. Component 2.2 seeks to improve teacher effectiveness in the classroom, linked with improved teaching and learning materials with a foundation in the revised curricula. This will be done by providing TA, workshops and training sessions, and the supply of goods such as software and books to Government staff to assist MET in revising the core assets of the curricula and assessments for the Core Subjects, developed with reference to recognized international practice. These will be used to inform the design, development and production of comprehensive subject syllabuses, teachers' guides, and pupils' books. Similar guidelines would be developed to guide the assessments. To support implementation of the new curricula and assessment in the selected Core Subjects, a training program that utilizes a multi-level and multi-site approach will be developed and provided for all school principals and subject teachers of the target class levels as well as and selected teacher training institutions. This is likely to involve faceto-face training at central and/or regional level, followed by school level in-service training (INSET), and monitored through school cluster level INSET. Training will focus on developing appropriate learner-centered pedagogical and assessment approaches and strategies to support students in their competency development and monitor achievement of learning outcomes. For the classroom assessments and large-scale assessments, this would involve training of those involved in the development of the assessment instruments, examiners, and moderators, so as to improve the overall quality of the assessments. In addition, this sub-component will likely support the purchasing of education books that focus on curriculum design and subject-specific pedagogy for CDU, purchasing assessment software to support the work of EAU in large scale assessments, and travel to and training for EAU staff in an organization that conducts large regional assessments.

<sup>18</sup> The workshop convened representatives from MET, MOI, MEIDECC as well as principals, teachers and Parent Teacher Association representatives to better understand the strengths and weaknesses of current school maintenance practices in Tonga and opportunities for strengthening.

## **B.** Economic and Financial Analysis

- 60. The proposed Project will have a range of quantifiable economic, financial, and social benefits. The economic soundness of interventions pertaining to Component 1 were assessed based on a traditional Cost Benefit Analysis (CBA), while the economic viability of the interventions under Component 2 were assessed through a breakeven analysis. <sup>19</sup> The results of the analysis are summarized below:
- 61. **Component 1** CBA forecasts a positive Net Present Value of US\$2.144 million, with an associated Internal Rate of Return (IRR) and Benefit to Cost Ratio of 10.5 percent, and 1.39, respectively. A sensitivity analysis scenario with a 10 percent increase in the Project's costs and a 10 percent decrease in the Project's forecast benefits (Pessimistic Scenario) accounts for climate risks which might be higher than expected, and unforeseen or unquantified negative externalities associated with the proposed Project. The table below summarizes the results of the analysis and confirms that the proposed interventions are economically viable.

Total (Over 25 Years) **Base Case Scenario Pessimistic Scenario** IRR (percent) 10.5 6.4 Discounted cost (present value of costs) US\$ 5.45 million US\$ 5.99 million Present value of incremental benefits US\$ 7.59 million US\$ 6.19 million Net Present Value US\$ 2.14 million US\$ 1.47 million Benefit/cost ratio 1.39 1.03

Table 1. Results of the Economic Analysis of Component 1 Investments

Source: Authors' estimations based on HIES 2015, Disbursement estimates and Prioritization scheme

- 62. **Component 2** investments are economically justified, based on both tangible and intangible considerations, as summarized below:
  - (a) **Sub-component 2.1.** The cost effectiveness of the investment for establishing an EMIS (US\$1.5 million) was assessed under a conservative scenario with a 0.5 percent reduction in repetition rates within the primary and secondary cycles at the end of the implementation period. Assuming a 6 percent discount rate, education costs indexed to inflation, and a 25-year horizon, the Present Value (PV) of the interventions' costs are US\$1.144 million, while the PV of education costs saved is estimated at US\$0.953 million. The PV of the unquantified benefits that would make the proposed investment break even is US\$0.191 million. However, there are likely to be intangible benefits that cannot be readily measured: (i) improvements to the overall efficiency of the education sector through enhanced data to inform public policies and programs; (ii) improved metrics to track students' records and progress teachers' performance and professional development; and (iii) enhanced ability to identify early signals of teaching and learning challenges, which provides an opportunity for expedited corrective action, if necessary.
  - (b) **Sub-component 2.2**. A scenario where Tonga's test scores reach the average test score among Upper-Middle-Income Countries after the implementation period (corresponding to a rise in the Human capital Index from 0.53 to 0.55) was assessed against the US\$3 million to be invested in the improvement of curricula and teaching. This translates into a 4.72 percent increase in yearly earnings, corresponding to approximately US\$232.5 additional income per person, per year, on average.

<sup>&</sup>lt;sup>19</sup> The project's economic analysis is currently being stress tested for climate and disaster risks, with results becoming available in a technical note at a later stage.

63. The World Bank value-added stems from its significant technical expertise in the activities supported under the proposed Project, as well as its long-standing and in-depth engagement in the country. The design of the proposed Project was informed by the World Bank's extensive experience in similar projects. Additionally, the World Bank has developed a strong engagement with the Government by supporting many projects and analytical studies since Tonga became a member country in 1985. Furthermore, a new agreement signed in August 2021 reinforces the partnership between the GOT and the World Bank, which is therefore well-positioned to prepare the proposed Project in close partnership with the GOT.<sup>20</sup>

## C. Financial Management

64. A financial management assessment (FMA) of the project financial management arrangements identified that the principal FM risk to be the risk of errors and misuse of funds due to the extensive use of spreadsheets to record and report project transactions. To mitigate the FM risks, the PMU will engage a finance officer and will update the FM instructions in the POM to provide step-by-step instructions for project FM functions. MOF CSU will provide close support and training to the Finance Officer, particularly during the early stages of the project. An accounting software package (approved by MoF) is expected to be used for project reporting and reconciliations, and to reduce the use of spreadsheets. MET, PMU, CSU, and MoF will meet regularly to identify opportunities to integrate the project FM arrangements within the existing GoT systems and processes, such for budgeting, contract management, asset management, and reporting. See Annex 1 for more details on FM arrangements under the project.

#### **D. Procurement**

65. Procurement under this project will follow the procedures specified in the World Bank Procurement Regulations for IPF Borrowers (November 2020). MET's PMU will oversee procurement implementation, except the design, supply, and installation of a comprehensive EMIS, which will be procured by the SET PMU. MET has drafted a Project Procurement Strategy for Development (PPSD) and the Procurement Plan (PP). The project's largest investments will be on the construction and retrofitting of school buildings. Tonga's contracting industry has structural limitations, while foreign contractors are unlikely to be interested due to the high mobilization costs. To mitigate the associated risks, the PMU will take a proactive approach to promote business opportunities and ensure that the civil works' program is commensurable with the local contractors' capacity. The PMU's capacity will be augmented by: (i) the employment of an Engineering Firm to design (including to prepare procurement documents) and supervise civil works activities; and (ii) MOF's CSU providing hands-on implementation support. The draft procurement plan contains 20 different procurement activities estimated at US\$11.3 million and procurement of civil works represent the largest procurement category, with two different activities amounting to US\$6.6 million. The scope of civil works activities is yet to be defined as the detailed assessment to be undertaken by Engineering Firm will delineate the number of buildings per school site. See Annex 1 for more details on procurement.

## **E. Corporate Priorities**

66. **Gender.** Tonga has made significant progress in accelerating its gender commitments; however, it has encountered challenges, notably in women's political participation, addressing gender-based violence and in the ratification of the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW). In addition, gender mainstreaming across the government is not well advanced due to a weak enabling environment. Women in

<sup>&</sup>lt;sup>20</sup> World Bank PRESS RELEASE NO: 2022/012/EAP.

Tonga also face unequal access to economic opportunities and employment; the 2016 census reported that 66 percent of men are in work (paid and unpaid) in comparison to 41 percent of women<sup>21</sup>.

- 67. There are serious gaps in access to gender- and disability- appropriate WASH facilities in Tongan schools. A nation-wide study supported by the World Bank identified that WASH facilities that do exist are typically in poor condition and often lack key gender-appropriate elements, such as locks on bathroom doors and sufficient lighting, as well as menstrual hygiene management materials including waste disposal and hand wash dispensers. The baseline study also found that most WASH facilities do not cater to the needs of people with disabilities. As a result, approximately 34 percent of post-pubescent girls at primary school and 32 percent at secondary school who were surveyed said that they prefer not to use WASH facilities on school grounds, which could contribute to increased absenteeism. In Tonga, curricula for the selected subjects reviewed to date have not been consistently updated for many years. As a result, it is likely that they reflect gender stereotypes<sup>22</sup>, which provides the opportunity for review and update with content that promotes gender-equitable norms, eliminates gender stereotypes and promotes nonviolence among learners and educators Finally, although sex-disaggregated data on students' learning exist, it is not systematically analyzed. This does not allow for analysis of gendered trends in student outcomes, precludes the design of evidence-based policy, and limits the potential for evaluating progress towards closing identified gender inequalities in enrolments and academic performance. There is limited capacity within the education sector to respond to the high prevalence of gender-based violence among school-aged children in the country. Based on the 2019 Tonga MICS survey, 28.7 percent of girls aged 15-19 have experienced physical or sexual violence by any perpetrator in their lifetime. Moreover, 27.2 percent reported having felt harassed or discriminated against in the past 12 months, compared to 19.6 percent of boys. The most commonly cited reason for harassment and discrimination among girls was cited as their gender, while among boys it was sexual orientation. The MICS Survey also reported that genderbased harassment is nearly three times higher among women with functional difficulty.
- 68. The proposed project will respond to specific gendered needs of beneficiaries under both Component 1 and Component 2 by targeting gaps in gender inclusive WASH facilities, ensuring that EMIS will be able to monitor male and female school attendance and learning progress, and ensuring that training on GBV/VAC risk, identification, and referral, is integrated into the gender-sensitive pedagogy approach in teacher training. More information is included in Annex 3.
- 69. **Climate co-benefits.** The Project has been screened for short-and-long term climate and disaster risks, as well as assessed for its contribution to climate change adaptation and mitigation. It is expected that the Project will reduce disaster and climate vulnerabilities from more frequent adverse weather events and contribute to climate resilience through adaptation and mitigation, thereby creating climate co-benefits.
- 70. The project will directly support climate change adaptation through the following activities:
  - (a) Under Sub-component 1.1:
    - i. Ensure all schools which benefit from new or retrofitted buildings reduce vulnerability to climaterelated events (including change in rainfall resulting in drought or increased flooding, increases in the intensity or frequency of tropical cyclones etc.) in line with multi-hazard resilient design standards.

<sup>&</sup>lt;sup>21</sup> Kingdom of Tonga, Gender Equality: Where do We Stand? 2019

<sup>&</sup>lt;sup>22</sup> JICA. 2010. Country Gender Profile: Kingdom of Tonga

ii. The feasibility of select buildings being constructed/retrofitted to structural standards required for use as temporary evacuation shelters during and in the immediate aftermath of disaster events (primarily tropical cyclones) will be assessed and if appropriate, will be adopted.

## (b) Under Sub-component 1.2:

- i. The multi-year strategic School Infrastructure Development and Management Plan developed under the project will support the resilient upgrade of education facilities throughout Tonga and provide guidance on appropriate disaster and climate resilient design standards. The plan is expected to adopt a climate and disaster risk informed selection and prioritization approach to target those schools at highest risk from disaster and climate change events (such as floods, earthquakes and cyclones).
- ii. Strengthening of O&M processes and practices for the management and maintenance of Selected Schools will reduce vulnerability and risks to climate related weather events and disasters. Strengthened O&M processes will consider the impacts of weather on infrastructure and increase awareness on the O&M measures that will strengthen climate resilience.

## (c) Under Sub-component 2.2:

i. Climate change will have a specific focus within the science curricula for Tonga developed under the Project and will include dedicated intended learning outcomes across class levels and related units of work that address the causes and effects of global warming, climate change, and specifically tropical cyclones. The accompanying teacher training program will provide opportunities to introduce teachers to relevant pedagogical approaches to teach these content areas.

## (d) Component 3:

- i. The CERC will be ready to provide access to financial resources in case of an eligible climate-related (among others) crisis or emergency.
- 71. The project will support climate change mitigation Under Sub-component 1.1 by exploring the use of contextually appropriate renewable energy sources (i.e., solar), passive cooling options in design, and energy efficiency (i.e., LED lighting) and incorporating them into school construction and retrofitting designs when appropriate and cost efficient.
- 72. **Citizen Engagement** (CE) will be ensured through indicators built within the results framework and a robust grievance redress mechanism that will be established for receiving continuous feedback. A CE indicator will measure how well beneficiaries feel that project investments reflected their needs under Component 1. Surveys are expected to target teachers and/or principals at the targeted facilities as representatives of the students. The School O&M training and capacity building program under Component 1 is expected to include practical, hands-on training and citizen engagement in support of small-scale investments in maintenance, minor repair works and risk reduction interventions. Citizens, including one or more teachers, principals, MET staff and representatives of the Parent Teacher Association at each targeted facility will be reached with information on: (i) planned investments at the school to ensure that they have a clear understanding of the project's scope, benefits, timeline for completion, and the grievance redress system; and (ii) Information and guidance materials to support improved understanding of facility maintenance and disaster risk reduction in education settings. The feedback loop on this engagement will be closed via surveys to confirm if stakeholders feel that their understanding of these topics has been enhanced. Likewise, the

redevelopment of curricula and assessments under Component 2 is expected to include CE. Citizens, including communities, parents, and students, will be informed on changes made in and benefits from the revision of curricula and assessments, as well as the teaching and learning materials. A CE indicator has been included to ensure that communities, parents, and students are informed about the revisions.

## F. Legal Operational Policies

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

#### G. Environmental and Social

- 73. The environmental and social risks of the project are considered to be moderate. Risks and impacts are not likely to be significant, large, or complex and are expected to be predictable and temporary. Risks are expected to be site specific with low probability of serious adverse effects on human health or the environment and can be easily mitigated in a predictable manner.
- 74. Project investments will include capacity building and TA activities, as well as civil works. Small-scale civil works will be undertaken for the renovation and construction of classrooms, WASH facilitates, teachers' housing, and other facilities (such as halls, dormitories, laboratories, libraries, administration buildings) and the construction of ramps and pathways to improve the accessibility of schools. An Environmental and Social Management Plan (ESMP) was prepared to assess environmental and social risks for these works. Key risks include:
  - (a) Occupational health and safety risks;
  - (b) Soil and water risks due to improper management of erosion and sediment controls;
  - (c) Risks associated with management of hazardous materials;
  - (d) Resource efficiency risks associated with sourcing of materials;
  - (e) Risks to air quality via construction dust;
  - (f) Noise impacts; and
  - (g) Construction waste management.
- 75. The negative environmental impacts directly associated with construction activities will be minor and can be readily mitigated via the implementation of mitigation measures outlined in the ESMP. Once specific sites for works have been selected, a site assessment checklist will be completed to assess site specific impacts of the works. This site assessment checklist will also determine the need for contractors to prepare a site-specific construction environmental and social management plan (Contractor ESMP) or environmental and social codes of practice (ESCOP) based on the works to be completed at each site and the environmental and social risks identified. The CESMP or ESCOP will be prepared by the contractor and will consolidate mitigation measures for the sites based on the specific works and construction methodology. Operational risks associated with the education facilities include management of operational waste and potentially fire safety risk.
- 76. Downstream environmental impacts of TA activities have also been considered and the environmental risks of these activities are considered low. The school community-based operation and maintenance capacity building

program will require the management of occupational and community health and safety risks, waste management and hazardous materials management. These risks are expected to be readily mitigated through the implementation of an ESCOP for the program, which will be developed in accordance with EHS guidelines and good international industry practice (GIIP).

- 77. The overall social impact of the project is expected to be positive, with improved access to education, improved education systems and teaching standards, more resilient public sector buildings with potential emergency/ evacuation centers, and gender informed WASH facilities included in the outcomes. The key social risks and impacts associated with the project are expected to include:
  - (a) Community health and safety due to interactions with construction workers and construction equipment;
  - (b) Exposure of workers and building occupants (including school children) to potentially hazardous materials (such as disturbed asbestos) and dangerous activities (such as machinery) before and during demolition and/or construction/rehabilitation activity;
  - (c) Child safety and impact on the school community due to the proximity of workers;
  - (d) Construction impacts such as noise, dust or vibration on the school community;
  - (e) Minor impacts on the communities or livelihoods due to restricted or temporarily reduced access to sites and regular travel routes;
  - (f) Risks to vulnerable groups (poor, disabled, elderly, isolated or ethnic groups) and gender-based violence as a result of construction activities and the movement of people;
  - (g) GBV, Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) risks during construction;
  - (h) The risk of COVID-19 to workers and the school community, if there is community transmission;
  - (i) Potential impacts to land, or access to land, during construction and the operation of works as a result of set down areas; and
  - (j) Failure to provide adequate information and involvement in decision-making on the impacts on the activities on students and families.
- 78. These impacts are considered temporary and minor and will be subject to standard accepted mitigation measures to be implemented by the contractors. No major disruption to education services is expected as a result of a staged construction program taking into consideration examination periods and students having only minor in-situ relocation.
- 79. The project's management of social risks will be guided by the ESMP, which provides a high level environmental and social impact assessment for the types of activities to be carried out by the project, provides generic mitigation measures relevant to these risks, and includes a site specific environmental and social site assessment template which must be completed during the design for each site. This approach was also used in the PREP Tonga project and will allow for continuity in the risk management process and provide the opportunity to build on existing mechanisms and implement lessons learned.
- 80. Labor Management Procedures (LMP) for the Project Management Unit (PMU) and for contracted workers will also be prepared to ensure proper working conditions and management of worker relationships, OHS management, and to prevent sexual exploitation and abuse, as well as sexual harassment. A Project COVID-19 Safety Protocol would also be prepared during project preparation to address COVID-19 Safety risks. A Stakeholder Engagement Plan (SEP) will be prepared during implementation to ensure widespread engagement with communities and more vulnerable groups, including the elderly, people with underlying medical conditions, people with disabilities, and indigenous peoples (among others) to disseminate information related to the project

#### V. GRIEVANCE REDRESS SERVICES

81. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB'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 WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <a href="http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service">http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service</a>. For information on how to submit complaints to the World Bank Inspection Panel, please visit <a href="https://www.inspectionpanel.org">www.inspectionpanel.org</a>.

#### VI. KEY RISKS

#### **Overall Risk Rating and Explanation of Key Risks**

- 82. The overall risk to achieving the PDO is assessed as Moderate. The risk ratings for the Project have been identified using the Systematic Operations Risk-Rating Tool (SORT) and the overall rating has been identified as Moderate, based on moderate ratings for political and governance, macroeconomic, sector strategies and policies, technical design of the project, environmental and social, and stakeholders. Institutional capacity for implementation and sustainably, fiduciary, and Other (COVID-19 related risks are rated Substantial due to ongoing international boarder closures in Tonga and across the Pacific Region and interruptions to global and regional supply chains).
- 83. The overall Environmental and Social risk has been assessed as Moderate for the reasons discussed in Section G above and discussed further below.
- 84. Environmental risk has been classified as Moderate. Environmental risks and impacts are not likely to be significant, large or complex and are expected to be predictable, temporary and reversible. Risks are expected to be site specific with low probability of serious adverse effects to human health or the environment and easily mitigated in a predictable manner. The project will fund construction and renovation of education facilities. The key risks for these works include air quality impacts due to dust, noise impacts, construction waste management, hazardous materials management (including potentially asbestos and lead), sourcing of construction materials from unsustainable sources, occupational health and safety (OHS) risks, and soil and erosion management during construction. Operational risks associated with the construction of education facilities include the management of operational waste and potentially fire safety risks. The School O&M training and capacity building may create OHS risks to community members during hands-on training activities and the ongoing maintenance activities with the management of waste potentially required. The project may consider the development of additional standard designs (with known costs) for new classrooms, WASH facilities and staff housing. The use of these designs in future projects could result in environmental and social benefits through improved standards and the consideration of environmental and social issues. While impacts are limited in terms of preparing designs, there is potential for impacts when facilities are constructed. The risk of downstream impacts for other TA activities is considered low, given the nature of these TA activities, the positive outcomes and the long-term engagement between the World Bank and MET. The risk of Component 3 CERC activities will need to be screened during implementation by using the CERC ESMF.

- 85. Social risk has been classified as Moderate as there are no activities with high potential for harming people. Any risks expected to be temporary, predictable, and readily managed through project design features and mitigation measures. Risks are expected to be easily mitigated in a predictable manner and the project is expected to be largely positive with improved access to education, improved education systems and teaching standards, more resilient buildings with potential emergency/evacuation centers, and WASH facilities included in the outcomes. Neither closure of schools nor relocation of students is expected during the building and upgrade activities, and the works are not expected to impact educational services. The key social risks and impacts associated with the project are expected to include: (i) Community health and safety due to interactions with/proximity to construction workers, construction sites and construction equipment; (ii) Exposure of workers and building occupants (including school children) to potentially hazardous materials (such as disturbed asbestos) and dangerous activities (such as construction machinery operation) before and during demolition and/or construction/rehabilitation activities; (iii) Child safety and impacts to the school community due to the proximity of workers to school children and school staff; (iv) Impacts of construction such as noise, dust or vibration; (v) Minor impacts to communities or livelihoods due to restricted or temporarily reduced access to sites and regular travel routes; (vi) Risks to vulnerable groups (poor, disabled, elderly, isolated or ethnic groups) and gender-based violence as a result of construction activities and the movement of people; (vii) GBV, Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) risks during construction; (viii) the risk of COVID-19 to workers and the school community, if there is community transmission; (ix) potential impacts to land, or access to land, during construction and operation of works; (x) failure to provide adequate information and involvement in decision-making on the impacts of the activities on students and families. The Project has assessed and developed measures to mitigate environmental and social (E&S) risks through the design and the development and implementation of a number of instruments, including a COVID-19 Protocol, SEP (including a GRM), LMPs, ESCP, Operational Environmental Management Plans, and ESMPs. Lessons learnt from the PREP and experience that exists within the PMU and the CSU will also assist support mitigation.
- 86. Institutional Capacity for Implementation and Sustainability has been rated Substantial. MET does not have recent experience in implementing World Bank funded infrastructure projects and will need to build capacity, especially for technical (including engineering), fiduciary and E&S requirements through the establishment of a dedicated PMU. Potential governance challenges with respect to coordination between relevant ministries, different levels of government, technical capacity, and leadership to move forward on challenging issues will be mitigated through the establishment of a PSC and a Technical Working Group (TWG). MET is already in the process of deploying additional staff to the CDU and the EAU. The Project aims to support the foundations for long-term sustainability for investments in school facilities through the development of a robust, multi-criteria analysis and risk-based prioritization framework to lay the foundation for the future scaling of investments. The anticipated development of additional standard designs and a dedicated training and capacity building program for school building operation and maintenance will further contribute to the sustainability of the project.
- 87. **Fiduciary Risk has been rated Substantial.** The ministries are low in FM capacity, so national consultants are in place to maintain project FM arrangements across the World Bank portfolio in Tonga. A national FM Officer will be recruited to the PMU within one month of effectiveness of the proposed Project. The consultants usually need training and development, and existing procedures are generally not useful and are in need of strengthening. Budgeting and contract management are other areas of weakness across the portfolio and need improvement. The CSU was established to provide support to projects with the aim of mitigating these risks, and there is an FM Specialist in place in the CSU providing support to the project FM consultants.
- 88. **Other risks have been rated Substantial.** This risk relates to the ongoing COVID-19 pandemic. Though Tonga has not yet been exposed to a case of domestic transfer of COVID-19, during October 2021 the first case of COVID-19

was detected in a recently arrived international traveler, who was undergoing mandatory quarantine. The COVID-19 pandemic is expected to create continued challenges due to restrictions on travel, site visits and meetings by personnel outside of Tonga. These challenges would be exacerbated in the event of a first wave of COVID-19 infections in the country. Tonga's international border has been closed to non-essential travel since March 2020, and at the time of appraisal, there was no clear timeframe in the immediate term for re-opening the borders. Further, regional suppliers (for example, those based in Australia or New Zealand) have been and will likely continue to be impacted by "hard lock downs", which restrict movement in impacted cities, effecting operations at local ports, and interrupting supply chains beyond the ongoing global COVID-19 supply chain interruptions. During Project implementation, virtual consultations will be held which may reduce outreach to some stakeholders, and site visits will need to be coordinated through locally based counterparts. As a result of COVID-19 travel restrictions, there is currently an increased burden on locally based resources, which is testing their capacity in a resource constrained environment. Ongoing travel restrictions or an outbreak of COVID-19 within Tonga would present significant challenges for technical oversight and quality monitoring of project works, though it appears that international boarder closures may be relaxed prior to the delivery of the entire works program.

89. Climate and disaster risks. The Project has been screened for World Bank short-and-long term climate and disaster risks. Climate impacts all aspects of life in Tonga and understanding the possible future climate of Tonga is important so that people and the Project can plan for changes. Projections indicate that the annual average air temperature and sea-surface temperature will continue to increase in the future. By 2050, the mean annual temperature is projected to increase by 1.2 degrees Celsius relative to the seasonal minimum and maximum temperature range of 21-24 degrees Celsius. Spatially selected meteorological stations show a general decrease in annual rainfall in the central and southern parts of Tonga since 1970. Model projections show extreme rainfall days are likely to occur more often, with an increase in wet season rainfall over Tonga but a decrease in dry season rainfall. Tonga is in a region where model projections expect the climate to become more El-Nino like, resulting in more droughts in the southern Pacific and more rain and consequent floods in the equatorial Pacific, with cyclones expected to increase in intensity by about 5-20 percent. Sea level is expected to continue to rise in Tonga, and by 2030 this rise in sea level is projected to be in the range of 3-17 centimeters. The sea level rise, combined with natural year-to-year changes, will accentuate the impact of storm surges and cyclones.<sup>23</sup> The Pacific region is hazard-prone and is renowned for the frequent occurrence of disasters, as was the case with TC Gita in 2018 and TC Harold in 2020. There is the potential for further disasters to impact Tonga during the extended life of the project. In such a situation, the attention of the implementing agencies could easily be diverted from Project activities to the immediate disaster response and recovery needs of the country. A CERC has therefore been incorporated in the design of the Project to facilitate rapid response to disasters during the life of the project.

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<sup>&</sup>lt;sup>23</sup> World Bank Climate Change Knowledge Portal, Tonga 2021

# VII. RESULTS FRAMEWORK AND MONITORING

#### **Results Framework**

COUNTRY: Tonga Tonga Safe and Resilient Schools Project

# **Project Development Objectives(s)**

i) to enhance the safety and resilience of selected education facilities; and (ii) to improve the quality of data-driven education management, curricula and assessments in the selected educational programs.

# **Project Development Objective Indicators**

Indicator Name	PBC	Baseline		End Target				
			1	2	3	4	5	
Targeted education facilitie	es cons	tructed to improve	d performance lev	vels				
Targeted education facilities constructed or strengthened to improved performance levels to one or more natural hazards (including climate related impacts) (Number)		0.00	0.00	10.00	21.00	30.00	30.00	30.00
Direct beneficiaries with in	crease	d safety from new	and strengthened	education facilities				
Direct beneficiaries with increased safety from new and strengthened education facilities (disaggregated by gender) (Number)		0.00	0.00	1,000.00	2,000.00	3,000.00	3,000.00	3,000.00

<b>Indicator Name</b>	PBC	Baseline		Intermediate Targets					
			1	2	3	4	5		
Primary and Secondary schools using the new EMIS with up-to-date data in the system according to established guidelines. (Percentage)		0.00	0.00	0.00	40.00	60.00	70.00	80.00	
Quality of curricula and ass	essme	nts for selected su	ubjects and class lev	vels is improved.					
Teachers delivering revised curricula and assessments (Percentage)		0.00	0.00	0.00	0.00	60.00	70.00	80.00	

# **Intermediate Results Indicators by Components**

Indicator Name	РВС	C Baseline	Intermediate Targets					
			1	2	3	4	5	
Component 1 - Improving S	Safety a	and Resilience of Educa	tion Facilities					
Detailed engineering designs incorporating relevant hazard resilience measures are developed (Number)		0.00	3.00	20.00	30.00	30.00	30.00	30.00
Pilot school maintenance plans developed and implemented for selected schools (Yes/No)		No	No	No	Yes	Yes	Yes	Yes
Strategic School Infrastructure Managemen and Development Plan	t	No	No	Yes	Yes	Yes	Yes	Yes

<b>Indicator Name</b>	PBC	Baseline			Intermediat	e Targets		End Target
			1	2	3	4	5	
developed (Yes/No)								
School Infrastructure Maintenance Manuals are delivered and adopted by MET (Yes/No)		No	No	No	Yes	Yes	Yes	Yes
WASH facilities delivered under the project include gender and disability accommodating design (Percentage)		0.00	0.00	0.00	100.00	100.00	100.00	100.00
Beneficiaries are satisfied with the quality of new or upgraded education facilities (Percentage)		0.00	0.00	20.00	40.00	55.00	70.00	70.00
Component 2 - Establishme	nt of E	MIS and improve	d quality of curricul	la and assessments				
A comprehensive EMIS is established, and staff are trained. (Yes/No)		No	No	No	Yes	Yes	Yes	Yes
Curricula for the selected subjects and class levels are revised. (Yes/No)		No	No	Yes	Yes	Yes	Yes	Yes
Syllabus, teachers guides, pupils' books are developed, printed, and distributed for school years 1-6. (Number)		0.00	0.00	0.00	0.00	2.00	4.00	6.00
Primary schools recorded sex-disaggregated results from classroom assessment and large-scale assessments (Standardized Test of Achievement of Tonga) in		0.00	0.00	0.00	0.00	60.00	80.00	90.00

<b>Indicator Name</b>	PBC	Baseline		<b>End Target</b>				
			1	2	3	4	5	
EMIS. (Percentage)								
Teachers are trained to implement revised curriculum and assessments (Number)		0.00	0.00	0.00	250.00	500.00	750.00	750.00
Teachers with knowledge of gender-sensitive pedagogy, including identifying and referring Gender Based Violence (GBV) and Violence Against Children (VAC) (Number)		0.00	0.00	0.00	175.00	350.00	750.00	525.00
Students benefiting from direct interventions to enhance learning (CRI, Number)		0.00	0.00	0.00	5,500.00	11,000.00	17,000.00	17,000.00
Students benefiting from direct interventions to enhance learning - Female (CRI, Number)		0.00	0.00	0.00	2,600.00	5,200.00	7,800.00	7,800.00
Communities, parents and students are informed about the revision of curricula and assessments (Yes/No)		No	No	Yes	Yes	Yes	Yes	Yes
Component 3 - Contingent E	merg	ency Response Co	mponent					
Immediate response mechanism established and ready to provide access to financial resources in case of an eligible climaterelated crisis or emergency		No	Yes	Yes	Yes	Yes	Yes	Yes

Indicator Name	РВС	Baseline		End Target				
			1	2	3	4	5	
(Yes/No)								

	Monitoring & E	valuation Plan:	PDO Indicators		
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Targeted education facilities constructed or strengthened to improved performance levels to one or more natural hazards (including climate related impacts)	This indicator measures the combined number of new buildings constructed and the number of strengthened/retrofitted buildings under subcomponent 1.1. Education Facilities is defined as certain building types including but not limited to classrooms, water sanitation and hygiene facilities, teachers' housing and other facilities that are essential to school function (such as halls, dormitories, laboratories, libraries, and administration buildings). These facilities may be in place at early child	Six monthly	Six monthly report	Site inspection	MET/PMU

	education centers, primary schools, middle schools, secondary schools, and technical and vocational education and training facilities located in Tonga.  Delivery or results against this indicator will enhance the safety and resilience of selected education facilities.				
Direct beneficiaries with increased safety from new and strengthened education facilities (disaggregated by gender)	This indicator measures the number of total school children who attend the prioritized schools who receive new or retrofitted/strengthened education facilities under sub-component 1.1. Education Facilities is defined as certain building types including but not limited to classrooms, water sanitation and hygiene facilities, teachers' housing and other facilities that are essential to school function (such as halls, dormitories, laboratories, libraries, and administration buildings). These facilities may be in place at early child	Six monthly	Six monthly reports	Site inspection and review of school enrollement records	MET/PMU

	education centers, primary schools, middle schools, secondary schools, and technical and vocational education and training facilities located in Tonga.  Delivery or results against this indicator will enhance the safety and resilience of selected education facilities.				
Primary and Secondary schools using the new EMIS with up-to-date data in the system according to established guidelines.	This indicator will monitor the percentage of primary and secondary schools that are using the EMIS (with upto date data) developed under sub-component 2.1, in accordance with established guidelines. Guidelines will specify roles and responsibilities of all actors for EMIS including responsibilities for timely submission of data. Guidelines will be developed as part of the National Strategy for Development of Education Statistics (NSDES).  Delivery against this indicator will enhance data-driven sector management	Annual	MET/PMU	Data collection for this indicator will include a requirement for primary and secondary schools prepare a short report on how to use the EMIS data to improve their performance.  MET/PMU will conduct a sample-based check to see if primary and secondary schools have prepared a short report on how to use the EMIS data to improve their performance.	MET/PMU

	and decision making				
Teachers delivering revised curricula and assessments	This indicator will monitor the percentage of schools who are delivering the revised curricula and assessments, developed under Component 2.2.  Revised curricula relates to teachers delivering curricula in compliance with the curriculum framework, with an inventory of features of a quality curriculum based upon the International Bureau of Education-UNESCO's prototype of a national curriculum.  Revised assessments refers to schools implementing an assessment plan, and carrying out competency based formative and summative assessments.  Delivery of the revised curricula and assessments will lead to improved quality of curricula and assessments for selected subjects and	Annual	Annual report	Data will be collected for measuring the teaching of the revised curicula as follows: Delivery of the revised curricula will be measured through formal classroom observations, follow up interviews, self-report inventory and focus group interviews conducted at waypoints throughout the project. This will be sample based for teachers who teach Years 1-6 core subjects. delivery of the revised assessments will be measured through observation and survey to monitor the percentage of schools implementing an assessment plan, and carrying out competency based formative and	MET/PMU

class levels	summative assessments.	
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	Monitoring & Evaluatio	n Plan: Interm	nediate Results	Indicators	
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Detailed engineering designs incorporating relevant hazard resilience measures are developed	This indicator measures the number of detailed engineering designs that are developed under component 1.1, incorporating relevant standards and hazard resilience measures	Six monthly	Six monthly reports	Review of deliverables	MET PMU
Pilot school maintenance plans developed and implemented for selected schools	This component measures that school maintenance plans are developed and implemented for schools who are included in the pilot delivered under component 1.2	Six monthly	Six monthly reports	Review of deliverables/trainings delivered etc	MET PMU
Strategic School Infrastructure Management and Development Plan developed	This indicator measures that a Strategic School Infrastructure Management and Development Plan has been delivered under component 1	Six monthly	Six monthly report	Review of deliverables	MET PMU
School Infrastructure Maintenance Manuals are delivered and adopted by	This indicator measures that School Infrastructure	Six monthly	Six monthly report	Review of deliverables, survey	MET PMU

MET	Maintenance Manuals developed under Component 1 are delivered and adopted by MET.				
WASH facilities delivered under the project include gender and disability accommodating design	This indicator monitors that all WASH facilities delivered under Component 1.1 include consideration of gender and accessibility standards and/or requirements within the designs	Six monthly	Six monthly reports	Design firm outputs reviewed and reflected in six monthly report	MET/PMU
Beneficiaries are satisfied with the quality of new or upgraded education facilities	This is a Citizen Engagement indicator which measures the Principals or Head Teachers of the schools that receive investments under Component 1.1 are satisfied that the delivered facilities meet their expectations.	Six Monthly	Six monthly reports	Surveys	MET/PMU
A comprehensive EMIS is established, and staff are trained.	This indicator measures that the EMIS system is developed under sub- component 2.1 and applicable staff are trained in it's use and maintenance	Six monthly	Six monthly report	Deliverable of EMIS and trainings	MET PMU
Curricula for the selected subjects and class levels are revised.	This indicator measures that curricula for Math, Science, English and Tongan language for Years 1-6 have been revised under subcomponent 2.2.	Six monthly	Six monthly report	Deliverables	MET PMU

Syllabus, teachers guides, pupils' books are developed, printed, and distributed for school years 1-6.	This indicator measures that the syllabus, teachers guides, pupils' books for four subjects are developed, printed and distributed for school years 1-6.	Six monthly	Six monthly report	Review of deliverables and proof of distribution to schools.	PMU MET
Primary schools recorded sex- disaggregated results from classroom assessment and large-scale assessments (Standardized Test of Achievement of Tonga) in EMIS.	This indicator measures that data pertaining to classroom assessment and large-scale assessments (Standardized Test of Achievement of Tonga (STAT)) for primary schools are recorded, with sex- disaggregated results in EMIS.	Six monthly	EMIS	EMIS	MET PMU
Teachers are trained to implement revised curriculum and assessments	This indicator measures that the necessary teachers trained to implement revised curriculum and assessments. Targets are cumulative.	Six monthly	Six monthly report	surveys/trainings	MET PMU
Teachers with knowledge of gender- sensitive pedagogy, including identifying and referring Gender Based Violence (GBV) and Violence Against Children (VAC)	This indicator measures that under sub-component 2.2, the number of teachers who will demonstrate knowledge in gender-sensitive pedagogy (following training), including identifying and referring Gender Based Violence (GBV) and Violence Against Children (VAC).	Six monthy	Six monthly report	surveys/trainings	MET PMU

Students benefiting from direct interventions to enhance learning		Six monthly	This indicator will measure the number of students who receive revised textbooks, based on MET Records	MET records on student numbers and those who have received books will be included in six-monthly reporting	MET PMU
Students benefiting from direct interventions to enhance learning - Female		Six monthly	MET records on student numbers and those who have received books will be included in six-monthly reporting	This indicator will measure the number of female students who receive revised textbooks, based on MET Records	MET PMU
Communities, parents and students are informed about the revision of curricula and assessments	MET will inform communities, parents and students that curricula and assessments will be revised as supported under Component 2.2, through radio for example.	Annually	Reporting in Six monthly reports	MET/PMU to monitor and collect information on information sharing initiatives and activities delivered under the project.	MET PMU
Immediate response mechanism established and ready to provide access to financial resources in case of an eligible climate-related crisis or emergency	This indicator measures that a CERC Manual has been developed and received a NO Objection from the	Six monthly	Six monthly reports	Review of deliverable	MET PMU

World Bank.		

### ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Tonga Tonga Safe and Resilient Schools Project

#### **Project Institutional and Implementation Arrangements**

- 1. The Ministry of Education and Training (MET) will be an Implementing Agency (IA) for Component 1, 2 and 4, whereas Ministry of Finance (MoF) will be the implementing Agency for Component 3. MET has some experience with World Bank procedures and requirements and has had some limited recent experience with World Bank projects, including the SET Project, though the SET arrangements differ, with no corresponding PMU housed in MET under the SET. MOF has an understanding of World Bank policies and procedures and will provide early support to ensure appropriate implementation structures are installed.
- 2. A Project Steering Committee (PSC) will be established which will provide strategic oversight and coordination of the project. The Steering Committee will comprise representatives from relevant line ministries and will be chaired by the Minister responsible for MoF. The Terms of Reference for the PSC will clearly set out, among other things, the frequency of which the PSC will meet, the process for making decisions, protocol for circulation of meetings etc. The PSC will be operational within three months of effectiveness of the Project.
- 3. Key stakeholder ministries which will be included within the PSC include:
  - (a) The Ministry of Finance (MOF): MOF will be responsible for implementing Component 3 (CERC) of the project. In addition, the Central Services Unit (CSU) under MOF will provide operational advice related to project preparation, implementation and capacity building to the PMU. MoF will act as chair of the PSC.
  - (b) Ministry of Education and Training (MET): MET will be the Implementing Agency for the Project and responsible for implementing Components 1, 2 and 4 of the Project. MET will house the PMU, which will be responsible for the day-to-day operations of implementing the Project.
  - (c) Ministry of Infrastructure (MOI): The Building Control Division of MOI is responsible for implementing the requirements of the *Building Control and Standards Act* (2016 Revised Edition) (the Act). Under the Act, a Building Controller is responsible for 'issuing all permits for buildings in the Kingdom as prescribed by Regulations'; advising on the 'practicality and range of the Code' (where 'Code' refers to the National Building Code (NBC)'); and examining applications 'for exemptions from specific provisions of the Code'<sup>24.</sup> The requirement of a building permit application and expected levels of building performance, particularly in the case of retrofit will be clarified and agreed with MOI and documented in the POM. Close consultation and a clear written agreement with MOI on these matters on will be critical to the successful implementation of any proposed retrofitting program of works.
  - (d) The Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Communications and Climate Change (MEIDECC). MEIDEC is responsible for climate resilience and disaster risk management in Tonga. It works closely with the MLNR. The MEIDECC houses key institutions responsible for providing risk assessments, early warning services, and emergency response to meteorological, hydrological, and geophysical hazards. The National Emergency Management Office (NEMO) within MEIDECC, is responsible for

<sup>&</sup>lt;sup>24</sup> Building Control and Standards Act (2016 Revised Edition), Section 7, page 7.

coordinating all disaster risk reduction, disaster preparedness and emergency management activities in Tonga and maintain a list of buildings (including school buildings) used for evacuation shelters. If the Project finances civil works for school buildings which can be used as evacuation shelters, close coordination and planning with NEMO will be required to ensure strategic placement of new/retrofitted school buildings to structural standards required for evacuation centres. There will also be collaboration needed to ensure these are located strategically, and in places of greatest need. In addition, MEIDECC is the Implementing Agency for the PREP, and hence a key stakeholder in terms of knowledge sharing with MET regarding lessons learned from the PREP schools' reconstruction.

- (e) The Ministry of Lands and Natural Resources (MLNR): MLNR is responsible for managing lands, mineral resources and energy for the benefit of all its stakeholders. MLNR are expected to provide technical support services such as survey, draughting, computing and advice on physical planning as needed. MLNR holds land lease information which will be relevant for project planning and assessment of the separate investment eligibility criteria applicable for investments under Component 1. This will ensure that Lessons Learnt from previous emergency reconstruction projects in Tonga which have indicated the need to consider land ownership from the outset and MLNR will be central to this assessment. MLNR is expected to provide advice on land ownership and the lease arrangements for school locations to avoid land tenure and consent issues during implementation.
- (f) Ministry of Internal Affairs (MIA): There will be a need for the PMU to collaborate with the SET PMU, housed in MIA with regards to procurement of and the implementation of the EMIS in accordance with the Project Operations Manual.
- 4. A Technical Working Group (TWG) will be established and will include the participation of technical counterparts from relevant ministries/agencies to provide advice and guidance to the PMU on key decisions, challenges and priorities. It will advise on all four components, ensuring integration across the project, and foster government ownership of the decisions made during the Project. Members of the TWG will be chaired by a representative of MET and will include technical representatives from the same ministries as the PSC. This group will further support improved coordination amongst the relevant critical ministries.
- 5. A Project Management Unit (PMU) will be created and housed in MET and entrusted with the overall implementation functions for TSRSP. The PMU will include a project manager, finance officer, procurement officer, environmental and social (E&S) officer, engineer and other technical staff as required to support implementation of the Project. MoF have established a Central Services Unit (CSU) with additional procurement, contract management, financial management, E&S and M&E expertise. Close collaboration between the MET PMU and CSU will be integral to proactively mitigate Project risks.

## Financial Management

- 6. To comply with World Bank FM policies, a financial management assessment (FMA) of the project financial management arrangements proposed by the implementing agency (MET) has been conducted by the Bank FM Specialist. Due to the ongoing travel restrictions, the FMA was completed virtually using questionnaire and interviews, with the cooperation of MET and support from the MoF CSU.
- 7. **FM risks and mitigation.** The FMA concluded that MET has a High FM Risk due to limited capacity and weaknesses in internal controls. MET proposes to manage the project in a separate Project Management Unit staffed by externally

hired consultants. There is an FM risk of errors due to extensive use of spreadsheets to record and report project transactions which increases the risk of errors and misuse of funds. To mitigate the FM risks the PMU has engaged a finance officer and will update the FM instructions in the POM to provide step-by- step instructions on how to maintain the project FM functions. MOF CSU must provide close support and training to the MET PMU particularly during the early stages of the project. The use of an accounting software package (approved by MoF) is recommended for the project reporting systems and to reduce the use of spreadsheets. It is further recommended that MET, PMU, CSU, and MoF meet regularly to identify opportunities to integrate the project FM arrangements within the existing GoT systems and processes, such for budgeting, contract management, asset management, and reporting. After the application of the abovementioned mitigation measures, the project FM risk is assessed as Substantial.

- 8. **Institutional Arrangements.** MET has the responsibility to ensure that acceptable project FM arrangements are maintained which provide reasonable assurance that the project funds are used for the purposes intended according to the project legal agreements. The MET PMU Project Manager oversees the day-to-day PMU implementation activities, including the FM functions which are undertaken by the Finance Officer. The MoF CSU provides FM advisory support to the MET PMU. All project expenditures are authorized by the CEO MET. All project payments are made by MoF Treasury which also maintains the project bank accounts. The financial year in Tonga covers the twelve-month period from July 1st to June 30th.
- 9. **Budgeting.** The MET PMU Project Manager will be responsible for leading the preparation and monitoring of the project budget. The Finance Officer will support the budget preparation process and maintain the budget file (spreadsheet). The PMU will prepare an annual workplan of activities which will flow through to the project budget. A project budget (the 'Original budget') has been prepared at the start of the proposed project to cover the total expenditure over the life of the project, including separate totals for each financial year of the project. The budget must be reviewed and revised at least annually ('Revised Budgets') by the end of February each year, incorporating actual expenditures to date, and planned expenditure in total, and for each financial year, over the remaining life of the project. The original budget and revised budgets must be submitted to the Bank for acceptance, following approval by MET. The detailed project budget is maintained on a spreadsheet. The approved project budget is assigned a 'vote' and uploaded into the government accounting ('Sun') system, at expenditure account level according to the government chart of accounts.
- 10. Internal Controls. MET through its PMU is required to maintain an effective internal control environment throughout the project life. This will include ensuring proper authorization of all contractual arrangements and eligible expenditures, safeguarding of project assets, segregation of duties, and measures to ensure that financial management risks are managed at an acceptable level. The internal control environment will be described in the FM instructions section of the POM. Where possible internal control procedures will comply with the GoT Public Finance Management Act 2002 and accompanying Public Finance Administration Regulations. The PMU must maintain an accurate contract and commitments register (spreadsheet) and ensure adequate monitoring of contracts so there are no payments inconsistent with the contract payment schedule, and that there is adequate technical input to assess the progress of contracts, consistent with the amounts charged by the contractor. An accurate asset register (spreadsheet) must be maintained to ensure proper recording of project asset identification, responsibility, and location, along with effective asset management policies to manage the asset usage, maintenance, security, and disposal.
- 11. **Accounting Arrangements.** All project financial transactions will be recorded in the Government accounting (Sun) system in accordance with GoT policies and procedures. In order to meet the project reporting requirements (by component and expenditure category) additional an additional reporting process will need to be maintained using a suitable accounting software (approved by MoF) rather than by spreadsheet. The project financial reporting system must be

reconciled to the Sun System and the project bank account on at least a monthly basis.

- 12. **Funds Flow.** The project will initially access funds from the GoT Programmatic Project Advance (PPA) to finance eligible project preparation expenditures. Funds flow from the PPA (P167423) managed by the MoF CSU to an operational account held at a commercial bank in Tongan Pa'anga specifically for the project. The PMU will forward documentary evidence of eligible expenditure to the MoF CSU who will arrange to replenish the operational account and process relevant withdrawal applications through the Bank's Client Connections system. When the main project becomes effective, all documentation for expenditures not yet claimed will be forwarded to the MoF CSU for processing and any funds remaining in the operational account will be returned to PPA. A new project designated account (DA) will be opened by MOF and will be operated by MET and funds will flow directly from the World Bank to the Project DA. Processing of withdrawal applications and management of the Client Connections system for the project will then become the responsibility of the PMU.
- 13. **Financial Reporting Arrangements.** The MET PMU will prepare interim unaudited quarterly financial reports (IFRs) which must be submitted to the World Bank within 45 days of the end of the reporting period, via the Bank's Client Connection system. These reports must be in a format acceptable to the Bank and disclose project progress on a component and subcomponent basis for the current period, financial year-to-date, and cumulative. In addition, the current approved project budget amounts and unused commitments (contractual amounts not yet paid but where a legal obligation exists) will be disclosed in the reports, to provide information on actual compared to planned expenditures, and total committed funds compared to the current value of the total approved financing. Annual project financial statements will be prepared for the financial year ended June 30. The annual financial statements must be in a format acceptable to the Bank, which in Tonga requires compliance with the International Public Sector Accounting Standards Board (IPSAS) cash-based reporting standard.
- 14. **External Audit.** An audit will be required of the project annual financial statements by an auditor acceptable to the Bank. The audited project annual financial statements must be submitted to the Bank within 6 months of the end of the reporting period, via the Bank's Client Connection system. The Tongan Audit Office is the acceptable auditor for World Bank financed projects in Tonga. The auditors will be required to provide a detailed management letter containing their assessment of the internal controls, accounting system, and compliance with financial covenants in the Legal Agreement. The audited project financial statements (excluding the management letter) must be publicly disclosed in a timely manner by MET.
- 15. **FM Supervision Plan.** An FM implementation review field mission will be conducted twice a year by the Bank FM Specialist with a focus early in the project on implementation support to ensure that acceptable project FM arrangements are being maintained. During the COVID-19 travel restrictions the implementation reviews will be conducted 'virtually'. In addition, the FM team will conduct a desk review of the quarterly IFRs and review the annual audit reports and management letters and follow up on material accountability issues by engaging with the Task Team Leader(s), Clients, and/or auditors.

#### Disbursement

16. **Disbursement Methods and Supporting Disbursement Arrangements.** The disbursement arrangements will allow the program to use the following methods: (a) advances into and replenishment of DA; (b) direct payment from the grant account; (c) reimbursement and (d) special commitment. The DA will be operated on an advance basis and the initial advance will be made through the completion of a Withdrawal Application. It is recommended the DA is in local

currency Tongan Pa'anga. An operating account may be opened by MOF in Tongan Pa'anga, and the fund from DA will be further advanced to operating account to make small payment on eligible expenditures for this project

- 17. The subsequent replenishments will be made through submission of withdrawal applications providing details on the use of funds previously advanced, based on Statements of Expenditures. It is expected that direct payments will only be used for payment on large contracts requiring payment in foreign currency i.e. international technical and financial advisors.
- 18. All direct payment applications would be paid based on documentation provided which would include evidence that the good or service had been satisfactorily completed, evidence that the goods or service are part of the work plan and included in the in budget and a copy of the invoice provided by the supplier.
- 19. There will be disbursement categories for this project and the provisional table is shown in Table 1.1.

Amount of the Amount of the Fi-Percentage of Ex-Financing Allonancing Allopenditures to be Category cated (Excated (Expressed Financed (inclupressed in in US\$ sive of Taxes) SDR) equivalent) (1) Goods, works, non-consulting services, and consulting services, 10,547,000 14,925,000 100% Training and Workshops, and Operating Costs for Parts 1, 2 and 4 of the Project (2) Emergency Expenditures under Part 3 of the Project 0 0 100% (3) Refund of Preparation Advance Amount payable pursuant to Section 2.07 (a) 53,000 75,000 of the General Conditions 10,600,000 15,000,000 **TOTAL AMOUNT** 

**Table. 1.1 Project Disbursement Category Allocations** 

#### **Procurement**

20. Procurement under this project will follow the procedures specified in the World Bank Procurement Regulations for IPF Borrowers (November 2020) and the provisions stipulated in the Financing Agreement entered by the World Bank and the Recipient. The project implementation agency is the MET, which will create a Project Management Unit (PMU) to oversee implementation. (MET is currently recruiting the PMU personnel). MET has drafted a Project Procurement Strategy for Development (PPSD) and Procurement Plan (PP).

- 21. The project's largest investments will be on civil works activities, namely the construction and retrofitting of school buildings and will amount to about US\$8.8 million, 59% of the project's total cost. Experience shows that the national contracting industry has structural limitations, interest of foreign contractors is unlikely due to the high mobilization costs. As such, the PMU will need to take a proactive approach to promote business opportunities and be meticulous with its civil works program so that it is, at least, commensurable with the local contractors' capacity. the PMU's capacity will be augmented by (1) the employment of an Engineering Firm to design (including to prepare procurement documents) and supervise civil works activities and (2) by MOF's CSU providing the hands-on implementation support.
- 22. The main risks and mitigation measures, which are key elements of the PPSD proposed by MET are outlined in Table 1.2.

**Table 1.2 Risk Mitigation Actions** 

Aspect	Description of Risk	Mitigation Measure	Responsible Party	Due Date
Procure- ment Reg- ulatory Frame-	MET may lack sufficient human resources to suc- cessfully implement the project	MET to establish its PMU with required staff	MET	December 2021
work and Manage- ment Ca- pability	The PMU may lack the necessary experience and expertise successfully implement the project.	The PMU's capacity will be augmented by (1) the employment of an Engineering Firm to design (including preparation of procurement documents) and supervise civil works activities (2) the employment of individual technical advisors to directly support some of MET's Divisions (3) by MOF's CSU providing the hands-on implementation support.	PMU	August 2022
	Previous experience shows that the implementing arrangements defined "on paper" are not consistently applied "in practice", particularly in relation the required cooperation among the PMU, CSU and Engineering Firms. For instance, there have been several procurement documents that were prepared	All procurement documents (including evaluation reports) shall have an "accountability and version control table", which will document the inputs from the relevant stakeholders. For example, if an Engineering Firm is hired to draft the bid documents, the table shall first record when the draft bid document has been completed. The table should then document the quality assurance undertaken by the CSU and finally the PMU's ac-	PMU	July 2022

	I		T	1
	in silos, while the imple- menting arrangements re-	ceptance. If the first draft is re- turned by the PMU to be revised		
	quire active cooperation.	by Engineering Firm, the table		
	quire delive cooperation.	should then record this.		
	The PMU may not have a	Formal written internal procedures		
	clear accountability system	to be prepared by the PMU clearly		
	with clearly defined re-	showing responsibilities, and dele-		
	sponsibilities and delega-	gation of authority, over procure-		
	tion of authority on who	ment decisions. Also, PMU will		
	has control over procure-	need to define the roles and re-		
	ment decisions	sponsibilities of PMU staff in STEP.		
Integrity	There might be no reliable	The CSU will provide the PMU with	CSU	Febru-
and Over-	external oversight of pro-	quality assurance over procure-		ary
sight	curement that provides	ment: 1. For any activity costing		2023
	timely and regular feed-	US\$500,000 or more, the CSU will		
	back e.g., through procure-	undertake the "Quality Assurance		
	ment audits. The PMU	Review", prior to the award of the		
	might not maintain in	contract, for the PMU. 2. In rela-		
	STEP, suitable records of all	tion to activities costing less than		
	procurement and contract	US\$500,000 the CSU will undertake		
	documents.	at least every 12 months, on sam-		
		ple basis (20% of contracts) and		
		based on STEP records, "Ex Post		
		Facto Procurement Reviews". The		
		report with such review is to be		
D	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	provided to the PMU every July.	DNALL	1
Procure-	While the activities to be	As needed, The PMU will hire tech-	PMU	January 2022
ment Complex-	implemented are not	nical advisors to directly support some of MET's Divisions in prepar-		2022
ity	overly complex, recurrent challenges have been ex-	ing the necessary technical inputs		
ity	perienced in other project	ling the necessary technical inputs		
	in relation to the provision			
	of technical inputs (specifi-			
	cations, TORs and feedback			
	to outputs prepared by			
	consultants)		_	
Procure-	Contracts may not be ef-	In relation to time-based contracts	PMU	July
ment Pro-	fectively managed, which	with Engineering Firms, the PMU		2022
cess and	may cause completion de-	will add a payment retention		
Contracts	lays and excessive contract	clause to increase the Firm's incen-		
Manage-	modifications.	tive to efficiently undertake assign-		
ment		ment (i.e., to minimize extensions		
		of such time-base contracts). SCC		
		53.1(g) Payment Retention- The		

		Client shall retain from each payment to the Consultant's invoices, as determined by GCC 53.1(b), the proportion of five percent until completion of the whole assignment. The total amount retained shall be repaid to the Consultant in accordance with the same conditions set under GCC 53.1(d)  The Project Manager (PM) and Contract Manager (CM) will increase their contract management skills by completing, at least, the course "Certificate Program in Contract Management (CPCM)". With the CSU's support, the PM and CM will investigate other relevant courses (e.g., Online FIDIC Training Courses)  https://www.fidic.org/training	PMU	June 2023
Market Readiness	Experience shows that the national contracting industry has structural limita-	The CSU/PMU will host yearly business opportunities seminars	PMU	October 2022
	tions, and the interest of foreign contractors is un- likely due to the high mobi- lization costs	The Engineering Firm responsible for preparing bid documents for civil works will adopt a "slice and package" arrangement so that the contracts to be offered be commensurable with the local contractors' capacity. The Firms will ensure that the works program does not overload the market	PMU	April 2022

#### **Procurement Plan**

23. MET prepared a draft procurement plan. It contains 20 different procurement activities estimated at US\$11.3 million (75% of the total project cost). Procurement of civil works represent the largest procurement category, with two different activities amounting to US\$6.6 million. The scope of the civil works activities is yet to be defined because the detailed assessment is going to be undertaken by Engineering Firm and this assessment will delineate the number of buildings per school site. The single largest activity is "Schools Construction-Works package (Risk Based Priorities)", which is estimated at US\$4.6 million and planned to be procured by August 2023. The "slice and package" approach for this activity is yet to demarcated. Procurement of consulting services represents the second largest category, with 13 different activities estimated at US\$3.6 million. The hiring of a Quality Education Consultant (Firm) to redevelop an outcome-based curricula and training program for school principals and teachers is the largest activity estimated at US\$1.8 million.

24. The PMU adopted an open market approach and QCBS as the selection method. The hiring of an Engineering Firm is second the largest activity estimated at US\$1.3 million. This activity is as part of the preparatory activities funded by the advance and MET had aim to have the contract signed by August 2022, but this is unlikely to be achieved because the Terms of Reference for the assignment are yet to be prepared. There are eleven individual experts estimated at US\$0.5 million to be hired by MET and most of them are the PMU personnel. The PMU personnel activities are also part of the preparatory activities and they are currently implementation by MET. The PMU is expected to be established by December 2021. In relation to procurement of goods and information technology (estimated at US\$1 million), the main activity relates to the design, supply and installation of a comprehensive EMIS estimated US\$0.8 million, which will be implemented initially under the SET Project by MIA's SET PMU (which supports both MIA and MET under the SET project). The SET PMU, supported by the CSU, has sufficient capacity to procure this activity. (Detailed description is in Annex 2: Detailed Component Description). The market approach open and MET plans to use the standard procurement document: Request for Bids—Information Systems (single stage, 1 envelope). According to the plan, 100% of the total amount to be procured would be concluded by August 2023. The procurement plan, and all its updates will be published on the World Bank's external website through STEP. The summary of the plan is as follows:

**Table 1.3 – Procurement Plan Summary** 

Activity Reference No. / Description:	Category	Market Ap- proach	Planned Signed Con- tract Date	Estimated Amount (US\$)
Schools Construction-Works package (Risk Based Priorities)	Works	Open	August-23	4,650,000.00
Schools Construction- Works Package of Identified/Agreed Government Priorities	Works	Open	April-23	2,000,000.00
Recruitment of Quality Education Consultant (Firm)	Consultant Services	Open	August-22	1,800,000.00
Recruitment of Design and Supervision Firm	Consultant Services	Open	August-22	1,300,000.00
Design, Supply and Installation of EMIS	Goods/Information Technology	Open	May-22	810,000.00
Total				10,560,000.00

25. **Procurement Supervision.** In addition to prior review of procurement transactions (see threshold below), at least one procurement mission will be fielded annually to support implementation. Procurement post reviews will be conducted annually as needed.

**Table 1.4 Procurement Transaction thresholds** 

Type of Procurement	Prior Review Threshold
Works	>= US\$2 million
Goods	>= US\$0.5 million
Consultants: firms	>= US\$0.5 million
Consultants: individuals	>= US\$0.5 million

#### **Environmental and Social Framework**

- 26. Environmental and social risk management will be the responsibility of the PMU, supported by the CSU E&S Team. The CSU Safeguards Team will work with the PMU Project Manager and PMU Environmental and Social officer to ensure that the component activities and CERC are screened and scoped according to the requirements of the Environmental and social management plan (ESMP), Environmental and Social Commitment Plan (ESCP), CERC Environmental and Social Management Framework (ESMF), and that required E&S assessments are carried out prior to the preparation of TORs for works. The CSU Safeguards Team will provide guidance to the PMU with regards to including environmental and social clauses and the relevant E&S instruments in bid documents, consultant's Terms of Reference E&S protection and mitigation measures are implemented by contractors, and that monitoring, grievance management, incident management and other activities are carried out in accordance with the E&S instruments.
- 27. Specialist consultants may be engaged on an ad hoc basis by the PMU, under the joint guidance by the CSU safeguards team, to prepare E&S assessments, instruments and/or to conduct specialist supervision or monitoring services.

# **Monitoring and Evaluation**

- 28. Project M&E will be conducted via periodic monitoring through six-monthly reports that track progress in terms of distribution of inputs, disbursement of funds, and achievement of targeted indicators as outlined in the Results Framework. The template for the six-monthly progress reports will be agreed with the World Bank and included in the POM. The role of the CSU in preparation of the reports will be documented within the POM. Timing of submission of these reports should be aligned to coincide with the implementation support missions.
- 29. The World Bank will provide implementation support on an on-going basis and visit Tonga to monitor and evaluate progress. In country mission support or virtual support will be provided every 6 months.
- 30. The Project will undergo a mid-term review no later than three years after the effective date of the Financing Agreement.

## Strategy and Approach for Implementation Support

- 31. The implementation support plan is based on previous experience and lessons learned from other investment projects in Tonga (including the PREP Tonga Project, P154840) as well as the Project's risk profile. The approach is to provide ongoing and regular implementation support.
- 32. Each implementation mission will result in the production of an Aide Memoire that will be discussed at a wrap up meeting to be chaired by MOF or MET. It is envisaged that the Aide Memoire will provide an overall view of the current situation relating to project implementation, including findings and observations from the World Bank. Representatives from the relevant GoT agencies will be invited to attend the kick-off, wrap-up as well as technical meetings during these implementation missions. Furthermore, any adjustment requiring more frequent reviews will be discussed, agreed upon, and documented in the mission Aide Memoire.
- 33. A mid-term review mission will be held not later than three years after the effective date of the Project, or such other period as may be agreed with the Bank. Following the mid term review, adjustments to project support may be required, including a project restructuring and/or possible additional financing from any other sources based on the

implementation experience. The World Bank task team will work with MET and MOF to clarify the requirements necessary to effect any changes. Any changes to the Project that require a Project restructuring will require a formal request from the Recipient's Minister of Finance.

34. Six months prior to the closing date of the Project, the GoT will commence the preparation of its Implementation Completion and Results Report (ICR). The World Bank ICR author will participate in the final implementation review and will gather the necessary information to help prepare the ICR.

#### **Implementation Support Plan and Resource Requirements**

35. Missions to support implementation of the TSRSP will be carried out every 6 months, in country or virtually. At least once per year the missions will include technical, fiduciary and safeguards team members, who will provide input into education facilities design and construction, advise as necessary on other project activities, carry out post reviews on contract management, review safeguards compliance, and provide formal training where required. The implementation support plan will be reviewed annually to ensure that it meets the support needs of the Project. The estimated level of annual support needed to implement TSRSP is identified in the table below.

**Table 1.5 Project Support Plan** 

Time	Focus	Skills Needed
		Task Team Leader
		Education Co Task Team Leader
		DRM Co Task Team Leader
		Education Technical Advisors
		Project Engineer
First twelve	Drainet launch and start up	Operations Analyst
months	Project launch and start up	Procurement Specialist
		Financial Management Specialist
		Environment Safeguards Specialist
		Social Safeguards Specialist
		Administrative Support
		Gender Specialist
		Task Team Leader
		Education Co Task Team Leader
		DRM Co Task Team Leader
		Education Specialist
		Project Engineer
		Operations Analyst
12-60 months	Project implementation	Procurement Specialist
		Financial Management Specialist
		Environment Safeguards Specialist
		Social Safeguards Specialist
		Administrative Support
		Gender Specialist
Skills Needed	Number of Staff Weeks	Number of Missions

		(Virtual or in Country)
Task Team Leader	12 per year	2 per year
Education Co Task	12 per year	2 per year
Team Leader		
DRM Co Task Team	12 per year	2 per year
Leader		
Education Special-	5 per year	2 per year
ist		
Project Engineer	8 per year	2 per year
Operations Analyst	8 per year	2 per year
Procurement Spe-	3 per year	2 per year
cialist		
Financial Manage-	3 per year	2 per year
ment Specialist		
Environment Safe-	3 per year	2 per year
guard Specialist		
Social Safeguards	3 per year	2 per year
Specialist		
Gender Specialist	3 per year	1 per year
Administrative	3 per year	0 per year
Support		

#### **ANNEX 2: Detailed Component Description**

1. The project's technical design and approaches are underpinned by the following cross-cutting areas: (i) climate change; and (ii) gender. The Project includes four components, as set out below.

#### Component 1. Improving Safety and Resilience of Education Facilities (US\$9 million)

Component 1.1: Resilient Infrastructure Investments (US\$8.8 million)

- 2. New construction and retrofitting investments will target enhanced building performance levels to reduce damage from natural hazards including cyclones, earthquakes and potentially other adverse geophysical and climate-related events. Investments are expected to reduce climate vulnerabilities from increased precipitation and other adverse weather events. The major benefits of the investments are expected to include (but are not limited to) reduction in building damage, disruption to education and potential injuries/casualties as well as improved climate resilience and adaptation. The Project will replace and or upgrade both government and non-government education facilities, including Inclusive Education (IE), ECE, Primary, Middle, Secondary and potentially TVET facilities. A range of building types, including but not limited to classrooms, Water Sanitation and Hygiene (WASH), teachers housing and other facilities (halls, dormitories, laboratories, libraries, administration) that are essential to school function will be financed. Where appropriate, a multi-hazard intervention approach for the facility/campus (e.g. site drainage to reduce localized flooding) as well as access, energy efficiency and non-structural improvements may also be considered.
- 3. Consulting services, such as for detailed building-level structural condition assessments, geotechnical and other site investigations, feasibility design studies, investment planning, detailed engineering designs (incorporating multi-hazard resilience measures as appropriate to site-specific exposures), construction supervision and quality assurance and monitoring of the contractors' environmental and social management plans will also be financed under this Component. All major construction<sup>25</sup> will be completed by experienced national/locally based contractors. As a complement to the 'hard' risk reduction interventions, citizen engagement activities (including consultations and information sessions related to the investments as well as beneficiary feedback on the appropriateness of investments) will be conducted at each school for which interventions are supported under the Project (financed under Component 4).
- 4. For new construction, the Project will leverage the existing suite of climate resilient and accessible standardized designs<sup>26</sup> developed under the World Bank funded Tonga Pacific Resilience Program (PREP P154840) to: (i) enhance disaster and climate resilience to earthquakes, cyclones, flood and other adverse weather events; and (ii) provide improved learning environments. The Project will also make use of existing standardized house designs for

<sup>&</sup>lt;sup>25</sup> Major construction is defined as works requiring a building permit as per the requirements of the Tonga National Building Code and or as revised by the Ministry of Infrastructure

<sup>&</sup>lt;sup>26</sup> These designs include nine accessible, disaster and climate resilient classroom designs and one six cubicle all access Water Sanitation and Hygiene (WASH) designs.

teachers' quarters where possible, following the completion of the necessary design verification and functional upgrades<sup>27</sup>. Utilization of existing standard designs for classrooms, WASH and staff housing will provide significant benefits in terms of "Project readiness". In addition to leveraging existing standardized designs, the Project will develop new disaster and climate resilient standard designs for other facilities, including but not limited to WASH designs for smaller/outer islands schools if required. All WASH facilities will be gender- and disability accommodating in their design (for example, through provision of adequate lighting, privacy, lockable doors, and accessibility). Recognizing the ongoing use of education facilities as shelters during cyclone events, and the potential for increased intensity and frequency of cyclones from climate change, the Project will explore the opportunity for strategic identification of schools which could benefit from one classroom building being built to the structural standards required for a Tropical Cyclone shelter. This will be decided and agreed as part of the Investment Selection and Prioritization Process for Approved Education Facility investments (refer to Annex 4). The Project may also explore the viability of enhancing energy efficiency (i.e., through use of energy efficient LED lighting) and/or introducing renewable energy sources (i.e., Solar) into education facilities, based on cost benefit.

- 5. Structural retrofitting and strengthening of existing facilities will seek to maximize the number of beneficiaries protected from natural hazards, by implementing contextually appropriate, cost-effective structural retrofitting and functional improvements (where appropriate) in Approved Education Facilities. Retrofitting and strengthening works are expected to be split between major (requiring a building permit) and minor repair works<sup>28</sup> where possible to utilize the full capacity of the local construction industry and school communities to support the timely implementation of investments. Recognizing the challenges of achieving full TNBC compliance for a retrofitted structure, retrofitted buildings would demonstrate "significantly improved" structural and resilience capacity and will reduce climate vulnerabilities from more frequent adverse weather events. Buildings retrofitted for earthquake are expected to substantially reduce, but not eliminate building damage in the event of the design earthquake and will enable occupants to safely evacuate, thereby reducing fatalities and sever injuries. Performance-based design is not currently specified under the TNBC. An agreement on the retrofit design development, verification and building permit approval process will be reached with the Ministry of Infrastructure and documented in the POM. This process will be supported and informed by the World Bank Resilient Public Facilities in Pacific Island Countries TA (P152037<sup>29</sup>), processes utilized for retrofitting school building under the PREP in Tonga (P154840), and international best practice for structural strengthening of existing facilities. All facilities to be retrofitted will be inspected by qualified structural engineers to determine the best approach for retrofitting the building to improved structural and climate resilient standards.
- 6. The design and implementation methodology will contribute to establishing a framework for scaling up interventions nationwide (Component 1.2). Interventions designed and implemented under Component 1.1 are intended to address the needs of different vulnerable school building types in a way that can be replicated nationwide. Instead of the usual case-by-case approach, in which solutions are designed for a specific school facility, the project will build

<sup>27</sup> Five existing staff house designs have been identified for potential use under the Project. These include the one and two room house design developed for the Tropical Cyclone Ian Reconstruction Project, Ministry of Education 'Outer Island' house design and the two recently developed Tropical Cyclone Gita Housing Recovery Designs developed by the Ministry of Infrastructure

<sup>&</sup>lt;sup>28</sup> Minor repair works are those which do not require a building permit. Due to gaps in the current building regulation, the following definition of minor repair works has been agreed with the Ministry of Infrastructure – "A minor repair is a repair that is a like for like replacement of deteriorated elements of a building or the replacement of cladding or non-structural elements following localized damage. Increasing the structural capacity of existing connections between structural elements without changes to the members is also considered a minor repair"

<sup>&</sup>lt;sup>29</sup> This TA work is a collaboration between the Government and the World Bank. It will be completed by June 2022.

on analytical results from ongoing World Bank TA, which analyzes existing information about the entire school portfolio. By using advanced wind, seismic and cost-efficiency analyses, retrofitting interventions can be optimized to identify cost-efficient solutions for different school building types that can be implemented with the skill sets available locally, at scale. Previous experiences indicate that this approach will make the interventions more affordable and the investments more efficient. For instance, an intervention cost reduction of over 50 percent was achieved in a similar safer schools' program in Peru (P152216) using similar analyses. Overall, the outcomes of the project will assist the GoT with a stronger and more transparent technical and operational platform through which to convene donors and leverage further investments.

- 7. The POM will set out the agreed eligibility criteria for investments under Component 1 (refer to Annex 4 for further information with regards to investments under sub-component 1.1). The Project is expected to adopt similar criteria to those implemented under the PREP (P154840), which are as follows: (i) Education Facilities will be registered with and recognized by the Ministry of Education as a school/required facility; (ii) Facilities have documented and undisputed land ownership and lease arrangements which permit MET to undertake project activities on the relevant land; (iii) There are no plans for relocation of the facilities outside of existing site boundaries; and (iv) There is a clear ongoing need, as identified and documented by the government for facility in the foreseeable future. All investments under both sub-component 1.1 and sub-component 1.2 will approved by the World Bank on a "no objection" basis.
- 8. Schools to be financed under Component 1 will generally be selected through a transparent risk informed decision-making process established by the recipient in close consultation with relevant stakeholders and supported by World Bank technical assistance<sup>30</sup>. A 'Risk Level Index' has been developed in consultation with the Government (P152037) to assess at a school level, the direct damage and downtime losses expected from a range of natural hazards including earthquake, wind, and flood. Recognizing students as the primary beneficiaries of the investments, the prioritization considers the expect impact on student orientated facilities, including classrooms, WASH and dormitories. Based on the level of risk assessed for this subset of facilities, schools will be ranked and prioritized accordingly for intervention. All education facilities within the selected schools will then undergo a prioritization process based on the facility needs, costs and benefits of different interventions to reach enhanced resilience and performance standards. Where retrofitting and other structural/functional improvements to agreed resilience standards cannot be achieved within a cost of 60 percent of the in-situ reconstruction costs, new construction (based on needs) is expected to be recommended (Annex 4).

Component 1.2: Strengthening Education Infrastructure Planning and Maintenance (US\$0.2 million)

- 9. In recognition of the scale of education facilities needs and the finite resources currently available to finance these investments, this Component will support:
  - a) The development of a multi-year Strategic School Infrastructure Development and Management Plan, including through the provision of technical assistance and Training and Workshops: This plan is expected to include: (i) an intervention strategy to improve the safety and resilience<sup>31</sup> of school infrastructure country-wide<sup>32</sup>; (ii) an investment strategy to finance the implementation of the plan; and (iii) explicit investment

<sup>30</sup> It is expected that some existing/ known priorities of MET will be prioritized in years 1 and 2 of implementation outside of the risk based prioritization. The final list will be agreed with the World Bank prior to implementation.

<sup>&</sup>lt;sup>31</sup> Both from future natural hazard events and climate change impacts such as increased precipitation, flooding, and more adverse weather events

<sup>&</sup>lt;sup>32</sup> The strategy will include guidance on the resilience standards to be adopted to enhance the disaster and climate resilience of education facilities

- selection and prioritization criteria<sup>33</sup> to maximize the benefits of the investment, with clear short- to long-term goals. The plan is expected to be revised as needed during implementation to reflect lessons learned to ensure the implementation strategy can be optimized.
- b) Strengthening of the existing operation and maintenance (O&M) processes and practices for the management and maintenance of Selected Schools. In Tonga, maintenance of schools, including the WASH facilities, has traditionally been the responsibility of the principal (or Head Teacher) and the Parent Teachers Association (PTAs) who lack the time, financial resources, knowledge and skills to undertake this work sufficiently. The failure to adequately manage and maintain existing school infrastructure has resulted in the premature deterioration of schools and infrastructure more broadly which not only comes at a significant financial cost, but also increases the risks for building occupants. This sub-component will respond to these issues by supporting the piloting of a schools O&M program which would include: (i) the provision of goods, works, training and workshops, and technical assistance to implement a O&M program for Selected Schools; and (ii) provision of technical assistance to support improved asset management<sup>34</sup> and sustainable maintenance of Selected Schools. It is envisioned that this will contribute to: improved asset management in accordance with the new Fixed Asset Management Framework and Policy (MOF, 2019). Under the technical assistance provided, the potential support for establishment of an asset unit to ensure the sustainable maintenance of education facilities will explored. Support to design, produce and integrate a web-based school infrastructure module into the EMIS (Component 2.1) would also be explored - this module would assist MET and other relevant agencies in the management of school assets, including support to monitor implementation of the multi-year investment plan.
- 10. The School O&M program is expected to include practical, hands-on training, capacity building, citizen engagement and small-scale investments in maintenance, minor repair works and risk reduction<sup>35</sup> interventions for select building typologies by the school community under appropriate supervision. With the support of World Bank technical assistance, an O&M Technical Manual and Training of Trainers (ToT) Manuals have been developed for a range of common structural typologies in Tonga. These materials are expected to be piloted in-country and refined over the next six months so that lessons learned can be leveraged by the Project to develop and formally adopt a comprehensive and scalable maintenance program. The program is expected to be established within the existing school management systems of Tonga, in which Principals, teachers, district officers, parents and the PTAs play a critical role. The agreed process and criteria for the selection of schools to be included in the O&M program will be documented in the POM.

#### Component 2. Establishment of EMIS and improved quality of curricula and assessments (US\$4.5 million)

Sub-component 2.1: Establish a comprehensive EMIS (US\$1.5 million)

11. This sub-component will support the development and operation of an Education Management Information System to provide quality data sources to inform policy decisions within the Tonga's Education Sector including through the provision of goods and technical assistance. It will also provide training and Workshops on the use and

<sup>&</sup>lt;sup>33</sup> The plan is expected to adopt a risk informed selection and prioritization approach to target those schools at highest risk from disaster and climate change events (such as floods, earthquakes and cyclones). It will seek to build on and formalize the criteria identified in Annex 4, which relates specifically to investments funded under Component 1.1 with the works budget available at the time of Appraisal and is specific to this Project.

<sup>&</sup>lt;sup>34</sup> In accordance with the MOF's Asset Management Framework.

<sup>&</sup>lt;sup>35</sup> From both future hazard events and climate change related impacts such as increased precipitation, flooding, and more adverse weather events

maintenance of the EMIS to selected MET employees, principals and teachers.

- 12. The goal is to ensure that data is collected, processed and used in an appropriate and effective manner, in order to generate annual education statistics and provide quality data that is necessary to administer, manage and monitor all aspects of the education system including teachers, students and education facilities, while also making important policy decisions.
- 13. The Project will complement and scale up planned activities under the World Bank-financed SET Project (P161541), which already intends to develop an EMIS in the TVET sector, ensuring that the envisaged EMIS covers all levels of education, not solely the TVET sub-sector. In order to establish a robust and coherent EMIS system, it is important to ensure EMIS-related activities are properly coordinated across the two Bank-financed projects (SET and the proposed Project) in Tonga.
- 14. In July 2021, a Tonga EMIS situational analysis was finalized. This comprehensive analysis provided recommendations for further development of an EMIS throughout Tonga. A core recommendation from this EMIS situational analysis was the importance and benefits of utilizing a single software platform for management of all subsectors of the education system (ECE, primary, secondary, TVET and Higher Education). Following this recommended approach would have the following, *inter alia*, comparative advantages:
  - (a) Minimize the costs for implementation;
  - (b) Minimize the technical requirements for MET;
  - (c) Simplify the vendor support and maintenance arrangements;
  - (d) Allow for additional features such as: Student tracking throughout the whole education system; building an academic history for each student within the EMIS; and
  - (e) Enforcing uniform data and coding standards through each education sub-sector.
- These requirements should be considered essential elements regardless of the education sub-sector in which EMIS is implemented. Therefore, when it is implemented in the TVET sector, efforts should be made to ensure it will also be suitable for all other sub-sectors. The SET Project has earmarked approximately US\$0.3 million to finance EMIS-related activities in the TVET sector and the proposed Project/TSRSP will have an additional US\$1.5 million available for EMIS development and implementation for any remaining work for the TVET EMIS and EMIS for all the other sub-sectors. It is envisaged that one overarching contract—covering all EMIS-related activities—will be created for the establishment of this robust EMIS. This contract will clearly delineate the EMIS activities/deliverables to be financed by SET and TSRSP, respectively. The procurement of such a contract will be conducted by the SET PMU while housed in MIA, it supports the MET who is the Implementing Agency of SET Component 2 (which supports EMIS activities).
- 16. The EMIS development under the proposed Project includes, but is not limited to:
  - (a) Cost of licenses for all institutions not covered through the SET Project to ensure all student data are captured in EMIS;
  - (b) Capacity development of staff and hardware procurement in all institutions not covered through the SET Project, and additional training required for staff in institutions offering TVET programs;
  - (c) Other costs not included under the SET Project but required for expanded EMIS implementation, including any additional system configuration for the expanded EMIS, other software, hardware, and IT support;
  - (d) Recurrent costs, including annual support, maintenance, hosting, warranties, related to the operation of

the combined EMIS for the life of the proposed Project; and

(e) Capacity building and implementation costs related to the EMIS.

Sub-component 2.2: Upgrading curricula and assessments (US\$3 million)

- 17. This sub-component aims to improve the quality of learning and teaching by redeveloping and aligning the curricula and assessment system in Tonga. The sub-component will finance the following investments: (i) Carrying out of activities to support the redevelopment of an outcome-based curricula and assessments system for Core Subjects in conformity with recognized international good practice and tailored to the Tongan context; (ii) Supporting the revision of teaching and learning materials including syllabuses, teachers' guides, and pupils' books based on the revised curricula and assessments developed under this sub-component and printing of such teaching and learning materials; and (iii) Supporting the development and implementation of a training program for principals and teachers responsible for delivery of Core Subjects and selected teacher training institutions, outreach activities to inform communities, parents, and students of the revised curricula and assessments, and surveys to measure, *inter alia*, teachers' understanding of the revised curricula and assessments.
- 18. TA will be required to guide, coordinate and support the redevelopment of the curricula and assessments. The MET will assign staff from the Curricula Development Unit (CDU) and Examination and Assessment Unit (EAU) of the MET to work in close collaboration with the TA to develop (i) and (ii) to write the curricula, assessments and teaching and learning materials. MET staff will not be financed under the proposed Project. For (iii), the project will finance TA to lead, coordinate and support the development of a teacher training program and cost of training while the Professional Development Unit of the MET will provide trainers to conduct the training.
- 19. The proposed Project will focus on developing a systematic approach to development and close alignment of curricula and assessment. Central to the intervention will be development of a new model of competency-based intended learning outcomes for Tonga, with clear alignment of the assessments to the intended learning outcomes. For the curricula, this will inform development of a new overarching curricula framework and redeveloping the intended learning outcomes and content specifications for the selected subjects and class levels. Similarly, for assessment, this will require a review of the current assessment system to ensure a close alignment between what teachers teach and what is assessed in the classroom and at the national level, both focusing on the intended learning outcomes.

#### Component 3: Contingent Emergency Response Component (CERC) (US\$0 million)

- 20. This component is designed to provide an immediate response in an event of an Eligible Crisis or Emergency, by enabling Tonga to request the World Bank to re-allocate project funds to support emergency response and reconstruction.
- 21. A CERC establishes *ex ante* mechanisms by which the GoT can rapidly begin to fund post-disaster needs, in response to a natural or man-made crisis or disaster. The CERC will allow for rapid reallocation of uncommitted project funds towards urgent needs in response to events may include cyclones, floods, earthquakes, volcanic eruptions, droughts, and disease outbreaks. Following an eligible "Eligible Crisis or Emergency" (as defined in the legal agreement), the GoT may request the Bank to re-allocate project funds to support emergency response and reconstruction. This component would draw from the uncommitted grant resources from other project components to cover emergency response. Disbursements would be made against a positive list of critical goods, civil works, and

consulting services and other items as agreed that would be required to support the immediate response and recovery needs. Following the meeting of the relevant disbursement conditions, the CERC would be implemented in accordance with the rapid response procedures governed by the World Bank OP/BP 8.0 Rapid Response to Crises and Emergencies. The specific details of the proposed implementation arrangements and procedures governing the use of the CERC funds will be identified in a CERC Manual and Emergency Action Plan to be adopted by Recipient in form and substance acceptable to the Bank as a condition of disbursement under Component 3 of the Project.

# **Component 4. Project Management (US\$1.5 million)**

- 22. The objective of this component is to provide efficient and effective implementation support, including PMU personnel, operating costs, monitoring and evaluation, and the cost of audits. Fiduciary, safeguards and operational functions will be carried out by a designated Project Management Unit (PMU), which will be created specifically to support implementation of the Project.
- 23. This component will finance specialist fiduciary, safeguards and technical consultants and administrative support for the PMU to effectively manage key functions including planning, coordination, financial management (FM), procurement, environmental and social framework implementation, and monitoring throughout the project implementation period. These consultants will be recruited into the PMU to provide institutionalized procurement, finance, accounting, safeguards and M&E support for the Project.
- 24. The CSU under MOF will provide operational advice to the PMU. The CSU has overall oversight of all World Bank financed projects, helping MOF keep track of implementation status and dealing with cross-cutting issues. Implementation of the project will be primarily managed by the PMU, who will draw on the CSU experts for advice on procurement, financial management (FM), safeguards, M&E and contract management.
- 25. A Programmatic Preparation Advance (PPA) of approximately US\$0.5 million has been accessed by the Government to finance the preparatory activities prior to project approval. PPA expenditures will be refinanced into the TSRSP grant once it is approved and effective. Activities which are being financed by the PPA from the point it is mobilized until project effectiveness, include: (i) key PMU positions (including Project Manager, Financial Management (FM), Procurement Officer, Safeguards officer and Project Engineer); and (ii) a design and supervision firm who will support activities under Component 1.

#### **ANNEX 3: Gender Assessment**

COUNTRY: Tonga
Tonga Safe and Resilient Schools Project

#### **Gender Equality Issues in Tonga**

- 1. Tonga ranked 79 out of 162 countries on the 2019 Gender Inequality Index (GII) with a GII score of 0.354. This is a substantial improvement from 2015 when Tonga was ranked 152 with a GII score of 0.659<sup>36</sup>. Nonetheless, women's employment opportunities continue to be limited with labor force participation in 2019<sup>37</sup> being 46 percent compared to 74 percent for men. 2018 data shows women represent about 40 percent of paid employees in the country and about 15 percent of employees in the transport sector<sup>38</sup>. In addition, once employed, women's average monthly earnings are roughly 71 percent of men's earnings across the main economic sectors (agriculture, services and industry)<sup>39</sup>. Tonga predominantly relies upon subsistence agriculture as the primary source of livelihood for approximately 70 percent of the population, where women account for 43 percent of income earners. Women are primarily employed in handicraft production along with subsistence fishing and agriculture<sup>40</sup>.
- 2. While more boys than girls are enrolled in primary education, the proportion flips in secondary education with a lower transition for boys from primary to lower secondary (79.1 percent for boys and 82.2 percent for girls). Net enrollment rates in primary are 100 percent for boys and 93.1 percent for girls, whereas those in lower secondary are 81.8 percent for boys and 92.7 percent for girls, and those in upper secondary are only 19.5 percent for boys and 41.6 percent for girls (EMIS 2020). As for learning, girls outperform boys. The Human Capital Index (The World Bank 2020) shows that harmonized test scores were higher for girls (399) than boys (375) as calculated using Pacific Islands Literacy & Numeracy Assessment (PILNA) (2018).

## **Gender Based Violence**

3. While, Tongan society is patriarchal, women have traditionally held high social status because of the 'fahu' system within families, where the eldest sister (or another chosen sister) holds a place of honor and respect and plays an important role in family decision-making. This traditional high regard of women (fahu system) conflicts with the reality of relatively high rates of gender-based violence and domestic violence within families <sup>41</sup>. GBV related data, however, is limited with the last national survey undertaken in 2009 - the Ma'a Fafine moe Famili (MFF) National Survey on Domestic Violence. The study found that three out of four women in Tonga reported experience of physical or sexual violence by a partner or non-partner and "two in three women had experienced physical violence more than five times by someone other than their partner since they were 15 years old" <sup>42</sup>. Almost half (47 percent) of abused women had not reported the abuse or violence they experienced due to societal norms, stigma and fear of repercussions.

<sup>&</sup>lt;sup>36</sup> United Nations Development Programme, Human Development Report 2020.

World Bank Data, % of Total Labor force – Tonga.

<sup>38</sup> ILOSTAT based on the 2018 Tonga Labour Force Survey.

<sup>&</sup>lt;sup>39</sup> Government of Tonga. 2018. Tonga Labour Force Survey Analytical Report.

<sup>&</sup>lt;sup>10</sup> UN Women, Asia and the Pacific, https://asiapacific.unwomen.org/en/countries/fiji/co/tonga#b\_anc (accessed 3 June 2021).

<sup>&</sup>lt;sup>41</sup> Kingdom of Tonga, Gender Equality: Where do we stand?, 2019.

<sup>&</sup>lt;sup>42</sup> Ma'a Fafine mo e Famili (MFF), 'National Study on Domestic Violence in Tonga', 2009.

4. The enforcement of Tonga's Family Protection Act 2013 has provided greater protection of women and girls supported by the establishment of a Family Protection Legal Aid Centre in 2018 and the new office for the Domestic Violence Unit. Additionally, a number of new and specialized Non-Governmental Organizations (NGOs) and institutions have been established to provide appropriate support services which respond to the needs of GBV survivors. However, many of the services are concentrated on the main island of Tongatapu with NGOs travelling to provide training or support more general existing social services. All the main specialized GBV services are in Nuku'alofa around the central business district area (CDB) or just on the outskirts of the CBD. Support services in the way of response (counselling, advocacy support, key agency referrals and safe housing) are very limited in the outer islands, however The Women and Children's Crisis Centre which is the largest social service provider in this area, has recently partnered with and is developing training for women's cooperatives in these areas. Whilst there are police and health services in the outer islands, to date, the personnel have had limited training and thus expertise in providing GBV service support is lacking. As a result, unethical practices and processes continue to place survivors and victims at a higher risk of being re-victimized<sup>43</sup>.

#### COVID-19

The COVID-19 pandemic creates an additional challenge on gender for Pacific Island Countries. Despite most of 5. the region being free of the virus, the economic impact of closed borders has had a detrimental effect on the country and more specifically vulnerable members of the community who rely on social services such as health, education and legal services. Countries such as Tonga reliant on tourism have been particularly affected by COVID-19 and the closure of borders, which has had a greater effect on women given the traditionally higher percentage of female workers in this industry. International tourism is a key driver of economic growth in the Pacific with travel restrictions during the pandemic affecting businesses in this region. The Pacific Trade Invest (PTI) Pacific Business Monitor survey in July 2020 found that female-led businesses have been hit hard by the pandemic, with less than a quarter of those in Tonga being fully operational in 2020. The negative impact of the crises on Tongan businesses has been greater compared to the region, with 85 percent of businesses in Tonga facing very negative impacts compared to 58 percent of businesses in the Pacific region<sup>44</sup>. The PTI report on the gendered business impact of COVID-19 reported that 77 percent of femaleowned/led businesses in the Pacific reported a significant decline in revenue in contrast to 66 percent of male owned/led businesses. In addition, more female-led businesses had to temporarily close in comparison to their male counterparts (29 percent). 65 percent of female owned/led businesses also reported facing barriers that are preventing them from actioning initiatives to support their businesses which is nearly double that of male owned/led businesses. Barriers reported included closed international borders and limited access to finance and government support/stimulus<sup>45</sup>.

## **Gender Policy and Actions**

6. Tonga has taken steps to address gender gaps through the development of policies and actions at national, regional and international levels. At the international level, Tonga is committed to the UN Sustainable Development Goals (SDGs) 2030 including strengthening its commitment to SDG 5 (Gender Equality). At the regional level Tonga has committed to the Pacific Island Forum Leaders Gender Equality Declaration, 2012 and the Pacific Platform for Action on Gender Equality and Women's Human Rights 2018 – 2030.

<sup>&</sup>lt;sup>43</sup> Tonga Climate Resilience Transport Project (TCRTP), Gender and Gender Based Violence Draft Plan

<sup>&</sup>lt;sup>44</sup> Pacific Trade Invest (PTI) Pacific Business Monitor 2020, Tonga Focus

<sup>&</sup>lt;sup>45</sup> Pacific Trade Invest (PTI) Pacific Business Monitor Impact On Female-Owned/Led Businesses, July 2020

- 7. At the national level, the Revised National Policy on Gender and Development (RNPGAD) 2014–2018 re-affirmed the country's vision for "Gender Equity by 2025" since the year 2000. The Women's Affairs Division, located in the Ministry of Internal Affairs, is the national implementing body, charged with coordinating, monitoring and providing advisory services in respect of the Policy. The most recent National Women's Empowerment and Gender Equality Tonga Policy and Strategic Plan of Action 2019 2025, identifies five priority policy outcomes building on the progress of RNPGAD. Priority areas 1 and 2 are directly related to gender mainstreaming and GBV while priority area 3 directly relates to women's economic empowerment and access to employment.
- 8. The review of the RNPGAD, identified a number of key achievements contributing to the progress of gender equality and empowerment of women for the period including (i) the enforcement of Tonga's Family Protection Act 2013 which has, provided greater protection of women and girls from domestic violence; (ii) Practice Parliament for Women<sup>46</sup> was initiated in 2014 to encourage wider participation in the law making process; (iii) a grant program in 2017 which focused on economic empowerment of women and women's entrepreneurship, allowing registered women's development groups and NGOs to participate in regional and international handicraft expos and other projects; and (iv) the incorporation of gender components and indicators in policies, major projects and plans involving disaster risk reduction and resilience building (e.g. Tonga's Climate Change Policy 2016 and Joint National Action Plan II on Climate Change (JNAP II))<sup>47</sup>.
- 9. Through implementation of the RNPGAD, the Women's Affairs Division has fostered and promoted increased coordination, cooperation and partnerships with stakeholders working to promote gender equality and the empowerment of women, supported by events such as national stakeholder forums, open consultations and policy dialogues bringing together a wide range of stakeholders to reflect on progress toward gender equality, challenges and lessons learned. There is increased understanding across government, civil society, communities, the private sector and development partners that gender equality and the empowerment of women is central to achieving the Tonga Strategic Development Framework 2015-2025 (TSDF).

#### **Gender Gap Analysis**

- 10. While Tonga has made significant progress in accelerating its gender commitments, it has encountered challenges, notably in women's political participation, addressing gender-based violence and in the ratification of Convention on the Elimination of all Forms of Discrimination against Women (CEDAW). Tonga remains one of only seven<sup>48</sup> United Nations member states yet to ratify CEDAW, widely regarded as the International Bill of Rights for gender equality. In 2015, at the 59th session of the United Nations Commission on the Status of Women, the GoT announced its commitment to ratify the CEDAW, however, later withdrew this commitment amidst widespread protests and opposition from vocal religious leaders and congregations and church groups arguing it also included counter-culture clauses such as same sex marriage and abortion which were unacceptable <sup>49</sup>.
- 11. In addition, gender mainstreaming across the government is not well advanced due to a weak enabling environment. Gender activities are visible in projects mainly made possible through international influence (bilateral donors

<sup>&</sup>lt;sup>46</sup> UNPD, Practice Parliament are designed to fill some of the gaps in the existing efforts to support women's political participation by developing a broader set of skills and by giving women participants the opportunity to immediately apply those skills; https://www.pacific.undp.org/content/pacific/en/home/library/eg/practice-parliament-for-women-manual.html

<sup>&</sup>lt;sup>47</sup> Questionnaire for the Content of National Reports on Beijing +25 - Tonga response

<sup>&</sup>lt;sup>48</sup> Iran, Nauru, Palau, Somalia, Sudan, Tonga and the United States

<sup>&</sup>lt;sup>49</sup> Helen Lee, CEDAW Smokescreens: Gender Politics in Contemporary Tonga, 2017

and regional agencies) and funding and not because of national initiatives. Further challenges include: i) slow progress in completing the Gender Mainstreaming Handbook developed in 2016 to assist with mainstreaming gender across policies, programs and services; ii) lack of gender budgets in corporate plans; iii) the Women's Affairs Division being understaffed and under resourced; and iv) lack of institutional data collection and the capacity to collect this data<sup>50</sup>.

- 12. Women in Tonga also face unequal access to economic opportunities and employment, the 2016 census reported that 66 percent of men are in work (paid and unpaid) in comparison to 41 percent for women<sup>51</sup>. The census disaggregated work according to paid or unpaid, and 29 percent of working women are unpaid compared with 25 percent of men. For the women over 15 years working for pay or profit, 65 percent were working for wages and salaries in the public and private sectors and 28 percent were self-employed. As mentioned above, the COVID-19 pandemic has increased the negative disparity between males and females.
- 13. There are serious gaps in access to gender- and disability- appropriate WASH facilities in Tongan schools. A nation-wide study supported by a World Bank funded study identified that WASH facilities that do exist are typically in poor condition and often lack key gender-appropriate elements such as locks on bathroom doors and sufficient lighting, as well as menstrual hygiene management materials including waste disposal and hand wash dispensers. The baseline study also found that most WASH facilities do not cater to the needs of people with disabilities. As a result, approximately 34 percent of post-pubescent girls at primary school and 32 percent at secondary school who were surveyed said that they prefer not to use WASH facilities on school grounds, which could contribute to increased absenteeism. This is confirmed by the findings of the 2019 Tonga MICS: 16 percent of girls aged 15-19 said that they this gap by not participate in social activities, school, or work during their last menstruation. Moreover, as many schools in Tonga are used as evacuation centers during disasters, a recent post Cyclone Gita gender analysis found that the lack of adequate WASH facilities including the lack of locks and insufficient lighting contributed to increased GBV/safety risks for women and girls at these centers<sup>52</sup>.
- 14. There is limited capacity within the education sector to respond to the high prevalence of gender-based violence among school-aged children in the country. Based on the 2019 Tonga MICS survey, 28.7 percent of girls aged 15-19 have experienced physical or sexual violence by any perpetrator in their lifetime. Moreover, 27.2 percent reported having felt harassed or discriminated against in the past 12 months, compared to 19.6 percent of boys. The most commonly cited reason for harassment and discrimination among girls was cited as their gender, while among boys it was sexual orientation. The MICS Survey also reported that gender-based harassment is nearly three times higher among women with functional difficulty.
- 15. Similarly to other Pacific Island countries, traditional gender stereotypes condoning violence and excluding women from leadership and employment outside the home are prevalent in Tongan society.<sup>53</sup> These perceptions are formed at an early age and could have significant long-term consequences. For instance, 28 percent of girls and 26 percent of boys aged 15-17 surveyed in the 2019 MICS agreed that a husband is justified in beating his wife in various circumstances (such as if she goes out without telling him or if she argues with him). Studies across Asia Pacific show that gender stereotypes about what constitutes appropriate occupations for men and women are also often reinforced

<sup>&</sup>lt;sup>50</sup> National Women's Empowerment and Gender Equality Tonga Policy and Strategic Plan of Action 2019 - 2025

<sup>51</sup> Kingdom of Tonga, Gender Equality: Where do We Stand? 2019

<sup>&</sup>lt;sup>52</sup> 52 CARE 2017, Rapid Gender Analysis, Sub-focus on shelter and food security and livelihoods, Tropical Cyclone Gita, Kingdom of Tonga, Feb 2017

<sup>53</sup> The Kingdom of Tonga. 2019. Gender Equality: Where do we stand?

by school curricula and teacher bias<sup>54</sup>. In Tonga, curricula for the selected subjects reviewed to date have not been consistently updated for many years. As a result, it is likely that they reflect gender stereotypes<sup>55</sup>, which provides the opportunity for review and update with content that promotes gender-equitable norms, eliminates gender stereotypes and promotes nonviolence among learners and educators

16. Finally, although sex-disaggregated data on and students' learning exist, it is not systematically analyzed. This does not allow for analysis of gendered trends in student outcomes, precludes the design of evidence-based policy, and limits the potential for evaluating progress towards closing identified gender inequalities in enrolments and academic performance.

## **Project Activities on Gender**

- 17. The proposed project will respond to specific gendered needs of beneficiaries under both Component 1 and Component 2 as follows:
  - (a) Component 1:
    - i. Beneficiary numbers will be disaggregated by Gender.
    - ii. Designs for any WASH and (if applicable) classrooms designated for use as Evacuation Shelters will be cognizant of gender (and accessibility) specific design requirements and will adequately meet gender specific needs.
  - (b) Component 2:
    - i. The EMIS will be able to monitor male and female students' school attendance and learning progress at all levels of education from ECD through higher education, and the central Ministry and local educational offices can provide policy guidance on how to reduce gender gaps. For example, if there is a regional area where boys' school attendance or particular subject areas of learning are low, the local educational office can work with the local government and schools to make strategic plans on how to encourage more boys to attend school and improve learning of these particular areas. In addition, an EMIS can also monitor teacher deployment, retention, and promotion. It can inform, for example, whether remote schools have an adequate number of qualified female teachers, and in case they do not, the MET can make strategic decisions on how to increase qualified female teachers in remote areas. For teacher promotion, an EMIS can record all the long and short-term teacher training and certification, and the MET can ensure that both male and female teachers will equally participate in training and receive certification and promotions.
    - ii. The new curricula framework will feature systematic inclusion of key cross-cutting issues that are relevant to Tonga and that are underrepresented in the current framework. These include gender sensitivity and the adoption of gender-responsive pedagogy. As a design principle, the curricula should be developed so that it provides equitable access to children of all genders, while at the same being sensitive to local cultural practices and values, and gender sensitive pedagogy can also be included as a cross-cutting approach in teacher training.

<sup>&</sup>lt;sup>54</sup> 54 UNESCO Asia and Pacific Regional Bureau for Education.2020. STEM Education for Girls and Women: Breaking Barriers and Exploring Gender Inequality in Asia

<sup>&</sup>lt;sup>55</sup> JICA. 2010. Country Gender Profile: Kingdom of Tonga

# **Monitoring and Evaluation**

18. An indicator in the results framework will be used to identify the number of teachers who have participated in training on gender-sensitive pedagogical approaches relevant to Tonga's context, which involves a high percentage of boys not completing the upper levels of secondary school education. The project's bespoke classroom observation tool and teacher questionnaire will include items that enable data to be collected on the nature of and extent to which gender sensitive approaches are used by teachers to support the learning of all students. In addition, this indicator will be used to identify the extent to which gender-sensitive approaches are adopted during the process of developing textbooks and teachers' guides. Development of these resources will be monitored and evaluated according to guidelines and criteria related to gender-sensitive approaches to resource development.

# **ANNEX 4: Component 1.1 Education Facilities Selection and Prioritization Process**

1. A final list of specific investments under Components 1.1 will not be determined during Project preparation. Instead, the following eligibility and prioritization process was agreed with the client and will be documented in the POM. Changes to the below are possible with the World Bank's 'no objection'.

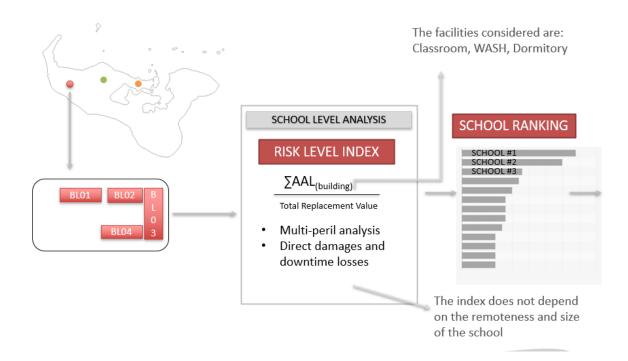
# **Investment Eligibility**

- 2. Facilities that meet the following criteria will be eligible for investments. MET shall provide signed letter(s) with all necessary supporting documentation to the World Bank confirming all criteria for investments under the Project have been met prior to any works commencing. A template for this letter will be developed and included in the POM.
  - (a) Registered with and recognized by the Ministry of Education as a school/required facility;
  - (b) Facilities have documented and undisputed land ownership and lease arrangements;
  - (c) Facilities are situated on Crown Land, or otherwise leased for the purpose of "school site" if located on Noble Estate;
  - (d) There are no plans for relocation of the facilities outside of existing site boundaries;
  - (e) There is a clear ongoing need, as identified and documented by the GoT for the facility in the foreseeable future; and
- 3. The above investment criteria are in keeping with the processes implemented under the PREP Tonga (P154840).

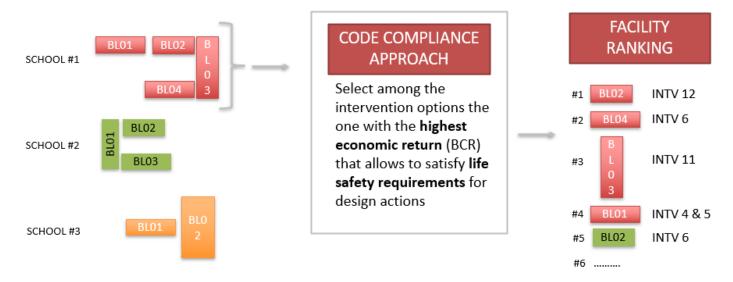
#### **Investment Selection and Prioritization**

4. In order to aid project readiness, a phased approach to investment selection and prioritization will be adopted. The first phase will include pre-existing priority investments identified by the Government and which will be agreed with the World Bank on a 'no objection' basis prior to the Recipient's adoption of the POM in accordance with the legal agreement . A maximum ceiling of US\$2 million has been agreed for these investments, inclusive of all contingencies and taxes. The remainder of the works budget and any future scaling of investments (e.g., through additional financing) will be selected through a transparent risk informed decision-making process established by the recipient in close consultation with relevant stakeholders and supported by World Bank technical assistance<sup>56</sup>. This process is described below.

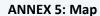
<sup>&</sup>lt;sup>56</sup> It is expected that some existing/ known priorities of MET will be prioritized in years 1 and 2 of implementation outside of the risk based prioritization.



- 5. A collaboration between the Government and the Bank (P152037) has supported the development of a 'School Risk Level Index' to assess at a school level, the direct damage and downtime losses (Average Annual Loss Ratio) expected from a range of natural hazards including earthquake, wind, and flood. Recognizing students as the primary beneficiaries of the investments, the Index considers the expected losses on student orientated facilities, including classrooms (and other learning facilities), WASH and dormitories. Based on the combined level of risk assessed for this subset of facilities, schools will be ranked and prioritized accordingly for intervention.
- 6. Following this initial screening assessment, the selected schools will be reviewed in detail considering the specific facility needs of the school and the individual (ranked) facility risk levels (including staff houses, administrative building etc.). The facility needs assessment will include consideration of current and projected student, teacher, and facility numbers as well as other factors of vulnerability such as remoteness to ensure the final interventions are appropriately targeted.



- 7. All facilities will undergo a detailed inspection by qualified engineers to confirm and finalize the number of interventions per school and the most appropriate intervention strategies to respond to the needs of the school, and to enhance safety and resilience. Where retrofitting and other structural/functional improvements to agreed resilience standards cannot be achieved within a cost of 60 percent of the in-situ reconstruction costs, new construction (based on needs) are expected to be recommended.
- 8. Where individual facilities are identified to have high expected losses (based on a facility level loss ratio) or requiring replacement but have been deprioritized due to a comparatively low 'School Risk Level Index', this Framework provides the flexibility for such facilities to be prioritized on a case-by-case basis with agreement from MET and the World Bank (via 'no objection') subject to the investment eligibility criteria being met.



**COUNTRY:** Tonga

