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Report No: PAD5047

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED GRANT

IN THE AMOUNT OF SDR 11.2 MILLION
(US$15 MILLION EQUIVALENT)

TO

TUVALU

FOR A

HEALTH SYSTEM STRENGTHENING PROJECT

JUNE 6, 2022

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

CURRENCY EQUIVALENTS

Exchange Rate Effective April 30, 2022

Currency Unit =	Australian Dollar (AUD)
Currency Unit =	Special Drawing Right (SDR)
US$1 =	SDR 1.3443
US$1 =	AUD 1.39
SDR 1 =	AUD 1.88

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Manuela V. Ferro
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ABBREVIATIONS AND ACRONYMS

AUD	Australian Dollar
°C	Celsius Degree
CERC	Contingent Emergency Response Component
CEO	Chief Executive Officer
CGAP	Consolidated Gender Action Plan
COVID-19	Coronavirus Disease
CPMO	Central Project Management Office
CVD	Cardiovascular Disease
DA	Designated Account
DALYs	Disability-adjusted life years
DFAT	Australian Department of Foreign Affairs and Trade
DPW	Department of Public Works
E&S	Environment and Social
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Review Summary
FAO	Food and Agriculture Organization
FM	Financial Management
GAD	Gender Affairs Department
GBV	Gender-Based Violence
GEP	Gender Equality Policy
GDP	Gross Domestic Product
GHO	Global Health Observatory
GoTv	Government of Tuvalu
GRS	Grievance Redress Service
HCI	Human Capital Index
HEIS	Hands-on Enhanced Implementation Support
HIES	Household Income and Expenditure Survey
HIV	Human Immunodeficiency Virus
HMIS	Hospital Management Information System
HNP	Health, Nutrition and Population
HSSP	Health System Strengthening Project
IDA	International Development Association
IFR	Unaudited interim financial report
IHME	Institute for Health Metrics and Evaluation
IPC	Infection Prevention and Control
IPF	Investment Project Financing
LMP	Labor Management Procedures
M&E	Monitoring and Evaluation
MANA	Monitoring Alliance for NCD Action
MICS	Multiple Indicator Cluster Survey
MICRO	Maritime Investment in Climate Resilient Operations
MM	Millimeter
MoF	Ministry of Finance
MoH	Ministry of Health, Social Welfare and Gender Affairs
MPWIELDMD	Ministry of Public Works, Infrastructure, Environment, Labor, Meteorology and Disaster
MWM	Medical Waste Management

NCDs	Non-Communicable Diseases
NHSP	National Health Strategic Plan
NISC	National Infrastructure Steering Committee
PDO	Project Development Objective
PEN	Package of Essential NCD Services
PHC	Primary health care
PIC(s)	Pacific Island Country(ies)
PMH	Princess Margaret Hospital
PMU	Project Management Unit
POM	Project Operations Manual
PPSD	Project Procurement Strategy for Development
PWIELMD	Public Works, Infrastructure, Environment, Labor, Meteorology and Disaster
RMNCH	Reproductive, maternal, neonatal, child health and nutrition
RPF	World Bank Pacific Regional Partnership Framework
SDG	Sustainable Development Goal
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SIDS	Small Islands Developing States
SOP	Standard Operating Procedures
SPC	The Pacific Community (formerly South Pacific Commission)
STEP	Systematic Tracking of Exchanges in Procurement
TB	Tuberculosis
TC	Tropical Cyclone
TTF	Tuvalu Trust Fund
TOMRS	Tuvalu Overseas Medical Referral Scheme
UHC	Universal Health Coverage
UMIC	Upper-Middle Income Country
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
WHO	World Health Organization

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Tuvalu	Health System Strengthening Project	
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**
P175170	Investment Project Financing	Moderate

Financing & Implementation Modalities

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

Expected Approval Date	Expected Closing Date
29-Jun-2022	30-Jun-2028

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The Project Development Objectives (PDOs) are to improve delivery of select health services, strengthen health management systems, and in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

Components

Component Name	Cost (US$, millions)

Improve the Availability of Essential Public Health and Health Care Services Provided at Princess Margaret Hospital	9.91
Strengthen the Delivery of Primary Health Care and Primary Prevention, with a Focus on Non-Communicable Diseases	3.02
Support the Development of Management Systems	2.07
Contingent Emergency Response Component (CERC)	0.00

Organizations

Borrower:	Tuvalu
Implementing Agency:	Ministry of Health, Social Welfare and Gender Affairs

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	Grant Amount	Guarantee Amount	Total Amount
Tuvalu	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	2029
Annual	0.00	0.40	1.00	2.70	4.40	5.00	1.30	0.20
Cumulative	0.00	0.40	1.40	4.10	8.50	13.50	14.80	15.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Climate Change and Disaster Screening

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

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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

COMPLIANCE

Policy

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

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

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

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently 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

The Recipient shall establish no later than four (4) months after the Effective Date, the Project Steering Committee ("PSC"), in form and resources satisfactory to the Association and which shall be chaired by the Minister of Health, or his or her delegate, and comprising of representatives from the Ministry of Finance, as provided under the Project Operations Manual [Section I.A.1].

Sections and Description

The Recipient shall establish no later than three (3) months after the Effective Date, a Project Management Unit

(PMU), within the MoH, with a mandate, composition and resources satisfactory to the Association, which shall be responsible for, inter alia, carryingout day-to-day implementation of Parts 1, 2 and 3 of Project, with support from the CPMO. To this end, the Recipient shall no later than three (3) months after the Effective Date, recruit and thereafter maintain at all times during implementation of the Project, the following minimum staff and/or personnel: (i) a Project manager; (ii) a procurement officer; and (iii) a Project accountant; each with terms of reference, qualifications and experience satisfactory to the Association [Section I.A.3 and Section I.A.4].

Sections and Description

The Recipient shall, no later than four (4) months after the Effective Date (or such other date which the Association has confirmed in writing to the Recipient is reasonable and acceptable under the circumstances, as determined by the Association in its sole discretion), prepare and furnish to the Association for its review and no-objection a Project operations manual, afford the Association a reasonable opportunity to review the proposed Project Operations Manual; and adopt the Project Operations Manual as accepted by the Association [Section I.B1].

Sections and Description

The Recipient shall prepare and furnish to the Association, by not later than September 30 of each year during the implementation of the Project (or such other 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 activities (including Operating Costs and Training) 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.E of this Schedule 2 [Section I.C.1].

Conditions

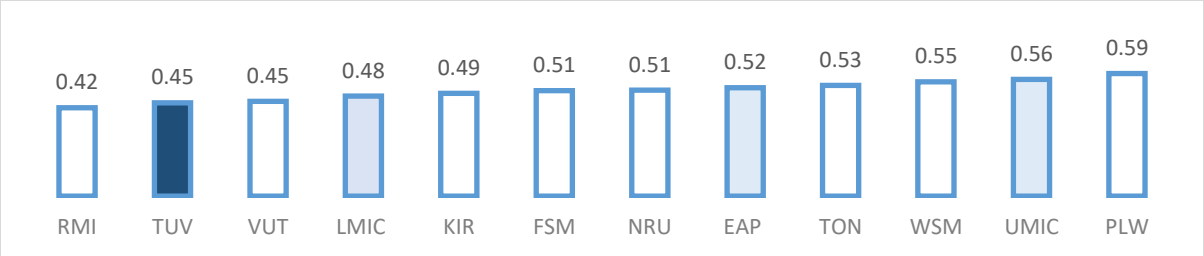
Type	Financing source	Description
Disbursement	IBRD/IDA	For emergency Expenditures under Category (2), unless and until the Association all of the following conditions have been met in respect of said expenditures: (i) the Recipient has determined that an Eligible Crisis or Emergency has occurred and has furnished to the Association a request to withdraw Financing amounts under Category (2); (ii) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and (iii) the Recipient has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association [Schedule 2, Section III.B.1.i].

I. STRATEGIC CONTEXT

A. Country Context

1. **Tuvalu, classified as an upper-middle income country (UMIC) with a gross national income per capita of US$5,820 in 2020[1], is one of the smallest, most remote, and climate change-vulnerable countries in the world, and is categorized as a fragile state.** Scattered over 0.5 million square kilometers of the western Pacific Ocean, the country's population of approximately 10,500 is spread across nine inhabited small islands. With a total land area of only 26 square kilometers, Tuvalu is one of the most densely populated countries in the world (see Maps in Annex 6). Six of the islands (Nukulaelae, Funafuti, Nukufetau, Vaitupu, Nui, and Nanumea) are low-lying atolls made up of islets (motus) with infertile, sandy or gravel coralline soils. The other three islands (Nanumaga, Niutao and Niulakita) are raised limestone reef islands with poor soil quality and limited flora. Most of Tuvalu's population lives on land less than one meter above sea level.[2] Sixty-four percent of Tuvalu's population lives on the capital island of Funafuti, an increase from 54 percent in 2010.[3] While Funafuti attracts the majority of the working-age population, the outer islands have a larger share of the population over 60 years of age. The Human Capital Index (HCI) estimates that a child born in Tuvalu today will be 45 percent as productive when she grows up as she could be if she enjoyed completed education and full health (See Figure 1). This is a lower HCI than the average for East Asia and Pacific region (52 percent) and for UMICs (56 percent).

Figure 1. Human Capital Index (2020), Tuvalu, Comparator Countries and Country Groupings[4]



2. **Tuvalu's small domestic economy, extreme remoteness from major markets, near total dependence on imports, particularly of food and fuel, and vulnerability to external shocks, climate change and rising sea levels pose significant challenges to macroeconomic performance.** The public sector dominates economic activity with an estimated 65 percent of the population employed in government positions.[5] With the exception of fisheries, Tuvalu has few natural resources. As such, earnings from fish exports and licenses in Tuvalu's territorial waters are a significant source of government revenue. International aid, including support from the World Bank and the Tuvalu Trust Fund (TTF),[6] are critical for meeting shortfalls in the government's budget. Private sector

[1] *Source:* World Bank World Development Indicators (WB WDI, accessed April 2022. 2020 latest data available).
[2] The average elevation in Tuvalu is 1 meter above sea level, while the highest point in the country is 4.6 meters above water. The atoll islands also have extremely narrow land masses; for example, Funafuti is less than 100 meters wide on average.
[3] *Source:* WB WDI
[4] *Source Human Capital Index database* https://www.worldbank.org/en/publication/human-capital#Data *and author calculations. Note: East Asia Pacific (EAP) excludes high income countries.*
[5] *http://www.pacmas.org/about/countries/tuvalu/*
[6] An international trust fund established in 1987 by development partners.

development opportunities are highly constrained by remoteness, the lack of economies of scale, a small and fragmented domestic market, and by severe infrastructure deficits in utilities, transport, and communications. Limited economic opportunities are reflected in the fact that 26 percent of the population live below the national poverty line. Tuvalu's macroeconomic performance is highly volatile due to its narrow economic base and vulnerability to external shocks which are exacerbated by the financial impact of climate change and the high costs of climate-related adaptation projects. In line with other Pacific Island Countries (PICs), Tuvalu confronts escalating fiscal costs to meet the health care needs of a population with a high burden of chronic diseases.

3. **Tuvalu remains one of few countries in the world without a confirmed case of COVID-19 not identified at the border entry; and while a recession was avoided due to the Government's substantial COVID-19 response package, fiscal pressures are mounting.** The Government of Tuvalu (GoTv) closed its borders in early 2020 after the first COVID-19 cases were confirmed in Fiji. Although Tuvalu was successful in preventing COVID-19 from entering the country, the initial containment measures resulted in low economic growth in 2020, at one percent of gross domestic product (GDP). In response, the GoTv implemented a COVID-19 response package valued at around 30 percent of GDP to enhance social protection and support economic growth. The substantial increase in expenditures were largely offset by proportionate increases in fishing licenses revenues and COVID-response donor support. Although Tuvalu registered a fiscal surplus in 2020, they moved towards a more neutral fiscal position in 2021 and are projecting a fiscal deficit in 2022, reflecting both declining revenue and continued spending pressures. Tuvalu is a net importer of fuel and food, and the war in Ukraine is expected to heighten inflationary pressures, adversely impacting consumers and the Government's finances. Tuvalu has fully vaccinated 89 percent of adults (2 doses, 18 years and older)[7] with booster doses currently being deployed to frontline workers and children under 18 starting to be vaccinated.

B. Sectoral and Institutional Context

4. **The Government is highly committed to financing the health needs of its population; health expenditure in Tuvalu almost doubled in real terms between 2010 and 2019[8] and it is mostly from general government revenues**. From 2009-2019, health expenditure as a share of GDP increased from 17 percent to 24 percent, with per capita health expenditure increasing from US$500 to US$973 in constant 2019 US$. Domestic health expenditure as a percentage of total government expenditure was 14 percent in 2019, fluctuating between 10-17 percent over the same period. Characterized by a very small population with a high burden of disease, a small number of people requiring expensive overseas medical treatment, and a government committed to meeting the health needs of its population, per capita health expenditures in Tuvalu are amongst the highest in the region. All health services in Tuvalu are free, and the majority of the health system is funded by the government, delivered, or arranged (in the case of overseas referrals) by the Ministry of Health, Social Welfare and Gender Affairs (MoH for short). This arrangement ensures a high level of financial protection i.e., Tuvaluans are not vulnerable to impoverishment in accessing health care. It also creates vulnerability to fluctuation depending on the fiscal position of the government. Current health expenditure is sourced largely from general domestic revenue (74 percent in 2019). However, there is a high reliance on external financing which tends to be highly volatile (ranging from a low of 8 percent of total health expenditures in 2012 to 23 percent in 2019). Out-of-pocket expenditure is

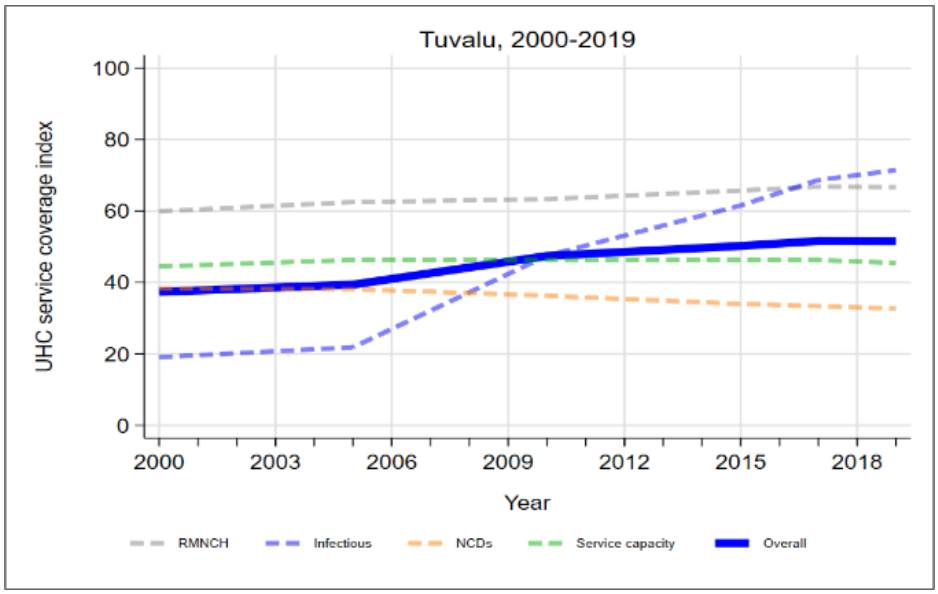
[7] https://www.spc.int/updates/blog/2022/04/covid-19-pacific-community-updates
[8] *Source:* Global Health Expenditure Database (accessed April 2022. 2019 latest data available).

consistently less than one percent of current health expenditure. Because health services depend heavily on government financing, a tightening fiscal space and declining tax revenues (due to the COVID-19 pandemic) has put the delivery of health services at risk. Government expenditures on health have fallen in 2020-2021 because of the inability to refer patients to overseas medical providers during COVID-19, however this will be temporary as there is pent-up demand which will resume once regular travel commences.

Priorities in Population Health

5. **Health outcomes have improved with average life expectancy increasing to 70 years for women and to 66 years for men in 2019, in part due to improvement in Tuvalu's provision of essential health services.** Tuvalu's Universal Health Coverage (UHC) Service Coverage Index improved by 41 percent between 2000-2019 (from 37 to 52)[9] which is similar in performance to other Pacific Island Countries (PICs) but remains far from the Sustainable Development Goal (SDG) target of 80 to be achieved by 2030. Considerable improvement was seen in the capacity to address both infectious diseases and reproductive, maternal, newborn and child health. However, progress was much slower, or even negative, on service coverage for non-communicable diseases (NCDs) as well as general service capacity and access (see Figure 2). Tuvalu's NCD service coverage index score of 38 in 2000 declined to 33 in 2019.[10] Tuvalu continues to grapple with a growing burden of NCDs, while also facing challenges with some communicable diseases (i.e., tuberculosis -TB) as well as broader reproductive, maternal, neonatal, child health and nutrition (RMNCH).

Figure 2. Tuvalu's Progress in UHC Service Coverage

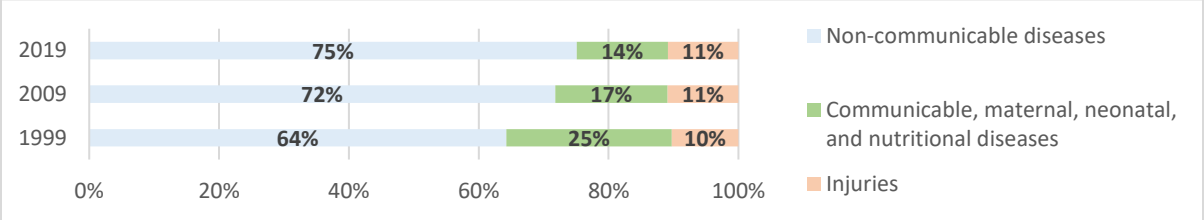


6. **In 2019, NCDs accounted for 75 percent of the burden of diseases, up from 64 percent in 1999 (Figure 3).** Between 1999 and 2019, the NCD disease burden for women has increased from 68 to 79 percent; for men it has

[9] Source: *https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage* (accessed April 2022)
[10] Given that this indicator measures the control of NCDs (i.e., blood pressure and blood glucose levels), it requires effort on both primary prevention of the disease (to reduce incidence of disease in the population) and secondary prevention (to control the severity of the diseases in those affected).

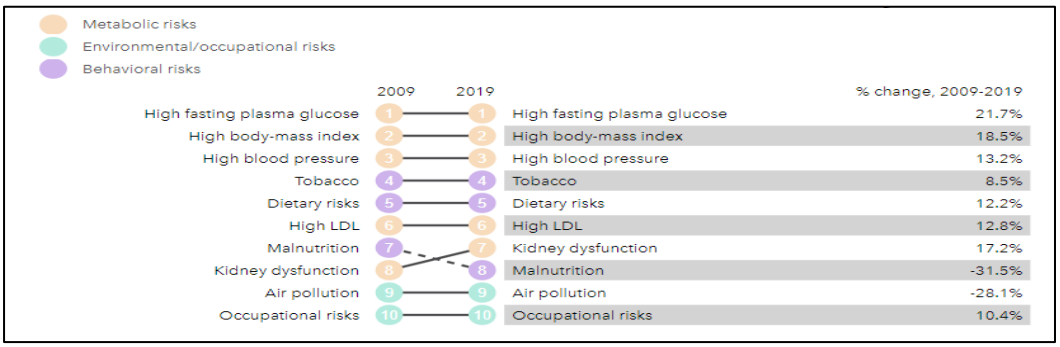
increased from 61 to 72 percent.[11] Tuvalu had the world's fourth highest age-adjusted comparative diabetes prevalence in adults in 2019 (22.1 percent) and is projected to move into third place between 2030-2045.[12] The NCDs causing the most death and disability combined in Tuvalu are ischemic heart diseases, diabetes, and stroke. Childhood malnutrition in all its forms -- including undernutrition (wasting, stunting, underweight), inadequate vitamins and minerals, overweight and obesity – is a significant risk factor for later developing NCDs as an adult. Malnutrition for children aged 2 years and under is a significant problem in Tuvalu, with 46.5 percent classified as obese and 17 percent having mild to severe undernutrition.[13]

Figure 3: Disease Burden by Case in Tuvalu, 2009-2019[14]



7. **The underlaying risk factors driving most of the death and disability related to NCDs link to behaviors and unmanaged onset of diseases.** Overall, the top risk factors associated with death and disability in Tuvalu in 2019 were closely linked to NCDs and included high fasting plasma glucose, high body-mass index, high blood pressure, and behavioral risks such as tobacco use and diet (Figure 4). Since 2009, the top three risk factors as well as high cholesterol and kidney disfunction have all seen double digit increases ranging from 13 to 22 percent. In addition, tobacco smoking and dietary risks continue to increase. In 2016, Tuvalu had the 5th highest obesity rate in the world (51.6 percent). Obesity rates in the country have been steadily increasing and are higher for women than for men (projected to be 59.9 percent and 51.5 percent in 2019, respectively).[15]

Figure 4: Risk Factors Driving Death and Disability Combined in Tuvalu, 2009-2019[16]



[11] Source: Institute for Health Metrics Evaluation, Global Burden of Disease Study 2019 Results.
[12] *Source:* International Diabetes Federation (IDF). "IDF Diabetes Atlas. Ninth Edition 2019". *https://www.diabetesatlas.org/upload/resources/material/20200302_133351_IDFATLAS9e-final-web.pdf*
[13] *Source:* Annual Report 2019. Tuvalu Ministry of Health. Latest international data we could find was from 2007.
[14] *Source:* Institute for Health Metrics Evaluation, Global Burden of Disease Study 2019 Results.
[15] Source: https://globalnutritionreport.org/resources/nutrition-profiles/oceania/polynesia/tuvalu/
[16] Source: Institute for Health Metrics Evaluation, http://www.healthdata.org/tuvalu.

8. **Not all lifestyle risk factors contributing to ill-health are a matter of choice with Tuvaluans constrained by the nature of their remote location, limited landmass, and climate change.** Diet is affected by availability, convenience, affordability, and preferences (which is influenced by marketing). Healthy options are not readily affordable or accessible in Tuvalu. According to the 2015-2016 Household Income and Expenditure Survey (HIES), Tuvaluan households already spent 39.4 percent of their income on food and AUD1.0 could buy almost seventeen times more calories in cereals than in vegetables.[17] Processed foods are highly accessible while fresh fruit and vegetables are not; home gardening is officially promoted, but there is limited land especially in the densely populated Funafuti Island. Climate change is also expected to have a direct or indirect effect on NCDs and its risk factors.[18] Therefore, it can be expected that a prevention-only approach would not be fully successful, and Tuvalu has to prepare for how to manage the NCD services required of its population. There is no systematic approach to screening of the population which currently relies on population coming in to be tested or treated, many of whom may not know that are ill or have high risk of becoming ill. Public health screening programs for NCDs, as well as for TB, leprosy, sexually transmitted infections, cervical cancers, and other early diagnostic assessments are expensive and currently only offered in Funafuti. Similarly, there is no system in place to register chronic disease patients so that their health can be monitored over time, have information easily seen by physicians at PMH, and identify when follow-up visits may be required. This increases the risk of the population developing more severe complications.

9. **Tuvalu reports some good progress with core maternal and child health indicators, as well as with various communicable diseases.** Tuvalu has reached the SDG target of less than 25 deaths per live births for child mortality, with the under-five mortality rate declining from 32.8 per 1,000 live births in 2009 to 23.9 per 1,000 in 2019. In that same period, the decline was from 29 to 21.5 per 1,000 for females, and from 35.7 to 26.1 for males.[19] Similarly, infant mortality rates declined from 27 to 20 deaths per 1,000 live births in that same period (24.1 to 17.9 for females, and 30.2 to 22.5 for males), while neonatal mortality rates declined from 21.6 to 16; however, more significant efforts will be needed to reach the SDG goal of less than 12 deaths per 1,000 live births. Immunization rates vary but remain above 85 percent since 2009. Immunization rates for DPT3, HepB and measles were at 92 percent or greater in 2019.[20] In that same period, TB treatment success rates (as a percentage of new cases) increased from 83 percent to 93 percent.[21,22]

10. **Disparate health needs of women reflect the broader socio-economic context of gender equality in Tuvalu.** Tuvalu has nondiscriminatory laws in place to provide equal opportunities and its constitution upholds the fundamental human rights and freedoms of every person regardless of their sex, political opinions, and place of

[17] HIES 2015 data analyzed by FAO and reported in the 2020 Food Security Report.
[18] See Table 3 - The Direct and Indirect Pathways from Climate Change to NCDs under Section IV for further information on the impacts of climate change on NCD outcomes and risk factors.
[19] *Source:* WHO Global Health Observatory (GHO). Note: The 2019 MoH annual report tells a very different story. Indeed, it reports that the infant mortality rate increased from 17.7 in 2017 to 56.7 in 2018, and the under-five mortality rate which has increased from 17.6 to 58.6. It is unclear why the national and global data differs so much.
[20] *Source:* WHO vaccine-preventable diseases: monitoring system. 2020 global summary.
[21] Exacerbated by the high levels of smoking, crowded living conditions, poor nutrition and comorbidity with diabetes, TB is the fifth cause of death in Tuvalu. In 2019 Tuvalu had the fourth largest incidence of TB amongst Pacific Island countries (296 per 100,000 people per year) after the Republic of Marshall Islands, Kiribati and Papua New Guinea. Source: WHO GHO.
[22] *Source:* WB WDI, accessed June 2021.

origin, color, and religious beliefs.[23] However, women still face social and cultural barriers, whereby women normally stay at home and care for children while men tend the subsistence farm or other types of work outside of the home. Government statistical reports and policy documents are not consistent in analyzing gender differences in outcomes or access to services and, therefore, there are no explicit strategies for responding to gender-based differences. This is the case in the health sector. Further, violence against women is recognized as a significant problem. The 2019–2020 Tuvalu Multiple Indicator Cluster Survey (MICS) reported that 44 percent of women reported having experienced some type of physical or sexual violence in their life, 38 percent reported having been subjected to physical violence, 16 percent reported having been subjected to sexual violence, and 10 percent reported having been exposed to both forms of violence. There are efforts of addressing gender-based violence (GBV) and the Government's health, social and legal services available, yet there are significant gaps in capacities to respond.[24]

Challenges in Service Delivery to Address the Population's Health Needs

11. **Princess Margaret Hospital (PMH) is the center of Tuvalu's service delivery system.** The publicly financed and delivered health system places a central service responsibility on the one hospital in the country, the PMH, located in a central position on the main island of Funafuti (see Maps in Annex 6). PMH provides primary and secondary care for patients in Funafuti and those who are referred from outer islands. The hospital has 57 beds with separate wards for men, women, infants and TB patients. It offers basic medical, surgical, obstetric, gynecologic, and psychiatric services. It has the supporting functions including pharmacy, laboratory, and radiological services. PMH also provides accident and emergency services. The national medical store – managing the inventory of medicines and supplies – is also located within the same premises. The hospital has established a specialist department to study and manage climate change-related illnesses, such as dengue and food-born illnesses. NCD clinics are currently offered twice a week at PMH in a single overcrowded room, with severe limitation on treatment and rehabilitation services. At the same time, the general outpatient department of PMH is the main provider of chronic NCD services because it is highly accessible to most of the population.

Box 1. Health Facilities, Location and Population

Location	Facilities	Population
FUNAFUTI	PMH & 2 Health Clinics	6320
Outer-Islands	9 Health Clinics	4187
Nanumea	1 Health Clinic	512
Nanumaga	1 Health Clinic	491
Niutao	1 Health Clinic	582
Nui	1 Health Clinic	610
Vaitupu	2 Health Clinics	1061
Nukufetau	1 Health Clinic	597
Nukulaelae	1 Health Clinic	300
Niulakita	1 Health Clinic	34

12. **PMH does not have sufficient capacity to deliver necessary services for the central referral hospital of the country and its current facility is not suited to expand.** Patients needing more than relatively basic hospital-level diagnostic and clinical care, that is beyond the scope of services offered at PMH, have been referred to overseas hospitals through a government-funded program. The experience of the COVID pandemic demonstrated Tuvalu's vulnerability to meeting the needs of its population when overseas medical referrals were not possible or, at best, delayed. The financing of overseas medical referrals is a large and growing expenditure, putting significant pressure on the GoTv budget. Emergency-related diagnostic and treatment facilities is of particular need, including

[23] United Nations Committee on the Elimination of Discrimination against Women, Combined third and fourth periodic reports of States parties: Tuvalu, 2012.
[24] See Section IV for a detailed discussion on gender and an appraisal of the related activities under the Project.

expansion of laboratory and radiology services, having a proper operating theater, post-operative recovery, and improved intensive care unit. The current facility does not have inpatient space for treating mental health patients and, unfortunately, those patients are now often held at the local jail.

13. **The PMH facility also has limitations in both its current conditions, space, and location.** PMH's current facilities are too confined and not of sufficient quality to accommodate the necessary services which could be delivered by Tuvalu's returning educated and trained doctors and nurses as well as those that could be delivered by contracted and visiting medical teams (once borders re-open). The hospital has begun to establish basic systems for improving the quality of the services it delivers and some progress has been made with infection prevention and control (IPC) at the hospital. Recent efforts to improve cleanliness in departments have resulted in improved infection control and a better experience for patients and staff. However, IPC continues to be a challenge, including in the operating theater and most PMH departments. A new incinerator intended to be used for all combustible waste from the health facilities is being installed in Funafuti. However, there is no safe way to transport medical waste between the PMH, other facilities (from port for outer-island clinics) and the incinerator itself. PMH is located within a few meters from the lagoon coastal line and consequently highly vulnerable to strong winds and storm surges during tropical cyclones.[25] Further, the waste disposal storage site of the hospital is located near to the water's edge, risking waste washing into the sea during periods of flooding.

14. **In addition to PMH, there are 11 health clinics which provide primary health care (PHC) and public health services.** Tuvalu has two health centers on Funafuti (one in the north and one in the south of the island), two health centers on Vaitupu and one health center on each of the other seven outer islands. The health clinics on the outer islands provide general nursing outpatient care and have limited capacity for patients to be admitted for overnight monitoring, with outer islands not having access to a resident doctor.[26] The clinics are supported through weekly teleconsultations with PMH, where individual cases are reviewed, and through periodic supervision and outreach visits.[27] Many of these health clinics are not that old but are exhibiting wear and tear due to limited maintenance and are having difficulty in adapting their water and sanitation systems to the changing weather conditions, such as prolonged period of dry weather and heat. With support from the World Health Organization (WHO), the health clinics have been implementing the package of essential NCD services (PEN package), diagnosing, providing medication and counseling to patients with hypertension and diabetes. However, due to staff turnover, stock-outs of medicines and consumable supplies, and working conditions of medical equipment, there are difficulties ensuring health clinics have the capacity to deliver the PEN package, as well as the other essential health and disaster response services.

15. **Staff shortages, both nursing and medical, have presented challenges in ensuring 24/7 health care is available.** All doctors in Tuvalu are based at PMH and from there they provide the weekly teleconsultations and periodic outreach services with the outer island clinics. The outer island health clinics were expected to be staffed by a midwife, a registered nurse, a nurse aide, and an environmental health officer but this has not been possible due to staff capacity and shortages. The clinics have between one to three nurses (a midwife, nurse practitioner,

[25] Patients are relocated to higher ground for their safety during severe weather events. The current location of PMH was built in 2003 with the support of the Japanese Government.
[26] As shown above in Box 1, the outer islands have small populations ranging from 34 to 1061 people. Source: Tuvalu Population & Housing Mini-Census (2017).
[27] The health clinics may provide emergency delivery services. Most deliveries and other cases requiring diagnosis or treatment by a physician, would be referred to PMH. Transportation to PMH is also financed by the health system.

and/or staff nurse) depending on population size and a sanitation aide (at most clinics). Staff shortages, for both nursing[28] and physicians,[29] present a challenge in ensuring the availability of services. The majority of the medical officers are general practitioners.[30] In non-COVID times, Tuvalu also contracts with overseas medical workers and receives visiting medical teams to address shortages in health workers. PMH has initiated teleconsultation with outer island clinics and does make use of its teleconsultation capacity for receiving and providing training and supervision. However, it has not yet expanded its capacity to deliver services through regularly established teleconsultation channels with international health providers. The current capacity could be expanded for routine tele-health consultations from contracted international health providers, supported by digital radiological equipment and other devices, particularly as Tuvalu improves upon its broadband capacity.

16. **The Tuvalu Overseas Medical Referral Scheme (TOMRS) has been and will remain an essential mechanism for providing a wider range of both diagnostic and therapeutic health services, but it is an expensive way of providing services.** Prior to the COVID-19 travel restrictions, expenditures on the TOMRS continued to increase and are projected to increase in the medium-term due to an aging population and the rising prevalence of NCDs. Between 2016 and 2019, spending on TOMRS as a percentage of GDP fluctuated, with a high of 12 percent in 2017 and a low of 6.5 percent in both 2016 and 2018. In 2018, Tuvalu spent AUD6.6 million on TOMRS for 215 patients, accounting for 59 percent of MoH's expenditure. In 2019, TOMRS spent US$ 4.7 million on 188 patients, accounting for about 39 percent of MoH's expenditure. The main reasons for overseas referral were for diagnosis, cancer treatment, gynecological conditions, kidney, and heart diseases. Following the review of a patient's case by the TOMRS Medical Board, arrangements are made for the patient to be referred for treatment at an overseas medical provider.[31] TOMRS finances the direct medical treatment as well as the travel, living expense and support from one care giver.

17. **The cost of the TOMRS has several factors affecting the demand (quantity of patients requiring its support) and the cost of services (the scope of benefits and the price of the services).** These factors include: (a) the high prevalence of ill-health in the country's population; (b) the lack of early detection and management, which increases the incidence of more complex treatment needs; (c) the limited capacity to provide more advanced diagnostic and treatment capability in-country; (d) the breadth of the benefits which include travel, per diems and allowances for a caretaker; and (e) the prices paid for the larger expenditure items including the medical services and travel. While the TOMRS will continue to be a significant part of the overall health budget and service delivery network, managing the future direction of these expenditures will require effort across all of the factors.

[28] In 2018, 15 of the 72 MoH nursing positions were vacant. *Source:* Tuvalu NHSP 2020-24.
[29] Of the 11 approved doctor positions in 2018, 8 were training overseas in specialty fields of anesthetics, surgery, pediatrics, emergency medicine and obstetrics and gynecology.
[30] Since 2017, Tuvaluan doctors who have been educated in Cuba and Fiji have undertaken a structured 18 months' internship training program in Kiribati to strengthen their skills. Ten of them have already returned to Tuvalu and a further 4 were in the process of completing their internship when COVID-19 hit. Post graduate training of medical staff is ongoing for doctors, nurses, and allied health staff.
[31] There is an office established in Suva, Fiji to support the administration of the Program and facilitate the experience of patients. The primary destinations are Fiji and India, including 13 patients who were sent to live permanently in Fiji for long term kidney dialysis treatment with expenses paid by the scheme.

Limited Capacity of Underlying Systems for Managing Health Systems

18. **The Hospital Management Information System (HMIS) not only supports the function of PMH but is also the main provider of health information in the country.** A preliminary review of HIMS demonstrated that it is not fit-for-purpose. It was donated and partially adapted from a large tertiary hospital outside of Tuvalu and is still partially in a foreign language. Therefore, it is largely not used by managers and clinicians. Health records are partly paper-based and partly electronic, fragmented, and largely inadequate. Other challenges include ongoing software licensing issues and lack of skilled information technology staff. There is no communication between the HIMS and the pharmacy inventory system (supported by MSupply platform that is being commonly used in the Pacific region), so the current stock of medicines is known to the pharmacist but not to the clinicians in the hospital. It is accepted that something needs to change with the system, but there is no clear definition of the needed functionality and, therefore, no decisions on how to adapt or replace the current information system.

19. **Maintaining a health system's physical assets requires active management, financial and human resources – all of which are limited in Tuvalu.** As with many of the PICs, Tuvalu's health system has difficulty in maintaining its assets; maintenance is under-resourced both in terms of budget and staffing. The maintenance budget per year is typically less than AUD60,000 in total (or about 0.5 percent of the health budget). There is no register that defines the routine maintenance schedule or records the health assets (facilities or medical equipment). The in-country capacity in biomedical maintenance is understandably limited. Support in biomedical maintenance has been provided by the Public Health Division of the Pacific Community (SPC), but it is not routinely scheduled. As Tuvalu plans to increase its investment in health assets – including the complexity of the facility and equipment assets -- it will require the same additional commitment to planning and resourcing maintenance.

20. **Meeting the public's health needs not only require medical intervention, but also listening to and responding to their feedback.** Tuvalu is a small close-knit society. Currently, receipt of public feedback or complaints is direct and informal, often through a phone call or conversation. This closeness has value, but it also has limitations. For instance, not all people may have the same level of access to calling a government official or representative. Similarly, receipt of more broad-based feedback may help to improve the implementation of policies or help to clarify priorities. Tuvalu has no system in place currently for collecting such feedback and there are no systems in place for how to ensure that any complaint or suggestion received is properly addressed.

Government of Tuvalu's Response to Health Sector Challenges

21. **As a current first priority, the GoTv is managing the current COVID-19 health response by ensuring that Tuvalu remains vigilant against entry of the disease to Tuvalu and protects its population through vaccination.** At the onset of the pandemic, there was a need to build capacity for testing of repatriated population and this was done at the public health laboratory through international support, such as the WHO, United Nations Children's Fund (UNICEF) and others. The GoTv also triggered the activation of the CERC under the World Bank supported Maritime Investment in Climate Resilient Operations Project (MICRO, P161540)[32] which provided operational financing for

[32] Link: *https://projects.worldbank.org/en/projects-operations/project-detail/P161540*

the Government's repatriation effort and has also provided some support for equipment and consumables to maintain essential health.

22. **At a high level, Tuvalu has recognized and committed to respond to the health challenges.** In Tuvalu's National Strategy for Sustainable Development 2021-2030 ("***Te Kete***"), the key health outcomes that are expected to be achieved are (a) a decrease in the number and recurrence of NCDs; (b) an increase in treating patients in Tuvalu through secondary (basic hospital-level) care; and (c) an increase in the retention of Tuvalu's qualified and competent health workforce. Key action points include strengthening of primary prevention, PHC, strengthening of health administration for improved service delivery, investing in quality secondary care service capability, and strengthening of mental health services. The MoH has prepared a National Health Strategic Plan (NHSP) 2020-2024 to further define the strategies necessary to achieve the objectives of the *Te Kete*.[33] Finally, the MoH also has a specific National Strategic Plan for Prevention of NCDs (2017-2021 *extended*) that focuses on addressing the risk factors associated with tobacco, alcohol, diet and physical activity. Tuvalu participates in the Pacific Monitoring Alliance for NCD Action (MANA), an accountability and peer benchmarking mechanism to ensure progress against the NCD primary prevention strategies. The MANA Dashboard consists of 31 indicators across 7 action domains for NCD prevention measured against a traffic light system (see Tuvalu's current status against MANA Framework shown in Annex 2). Tuvalu receives technical support from WHO, SPC, the Food and Agriculture Organization (FAO) and others toward making progress against the MANA Framework though there is still significant scope for improvement in both technical and financial support.

23. **In 2021, the GoTv amended the TOMRS policy in order to strengthen its management and better manage the costs.** Chief among the policy changes was a separation in the policies managing internal referrals to PMH and the policies guiding overseas referrals; clarification that overseas referrals would be made in cases where treatments could significantly extend life or be potentially curative; inclusion of a medical specialist based out of Tuvalu in the Medical Board to strengthen the decision making in referrals; stipulation that the selection of the overseas medical provider would be based on quotation and price would be a factor in the selection; requirement for an itemized breakdown of costs that increase transparency; and defined the eligibility for having a caretaker further. The objective of these changes was to make better use of the funds and therefore to increase the fiscal space that would allow more investment in the prevention and service capacity in Tuvalu. The World Bank supported the TOMRS policy change as part of a package of policy actions supported in the Tuvalu First Resilience Development Policy Operation (P172614).[34]

24. **The Government has mobilized support from a wide range of development partners and technical agencies.** While the ongoing pandemic has concentrated support towards COVID response and vaccine rollout, the 2019 Annual Health Report demonstrates the more routine support by various partners and technical agencies. A key component of the support is for visiting medical teams. Largest in size are the financial and technical support for specific health programs such as human immunodeficiency virus (HIV), TB, family planning and reproductive health, and immunization. Minor amounts are available for strengthening the resiliency of infrastructure. Importantly, DFAT provides access to a full-time residential health advisor providing policy advice, monitoring

[33] The strategies are organized around 7 key results areas: (i) leadership and governance; (ii) non-communicable and communicable disease; (iii) health security and climate change; (iv) reproductive, maternal, neonatal, child and adolescent health services; (v) primary health care; (vi) clinical and allied health services and (vii) stakeholder partnerships

[34] Link: *https://projects.worldbank.org/en/projects-operations/project-detail/P172614*

support, and assistance with the administration of the TOMRS. The nature and value of these resources are more towards technical assistance, medical teams, purchase of routine commodities and small value works, leaving limitations for any major investments in health service delivery or systems building (see Annex 5 for a full breakdown of budgeted development partner and technical agency support (pre-COVID) to Tuvalu's Health Sector).

25. **The GoTv has requested technical and financial assistance from the World Bank for health system strengthening in light of the need to increase service delivery capacity.** While the priority to increase service delivery capacity has been part of the GoTv and MoH health sector development plans, the COVID-19 pandemic has made this need more apparent and timelier. This is the first request to the World Bank for support in the health sector, demonstrating the Government's increased commitment to addressing the health sector challenges.

C. Relevance to Higher Level Objectives

26. **The World Bank Group's Pacific Regional Partnership Framework (RPF) FY2017-FY2021[35] and as extended to FY2023, covering 9 of the Pacific Island Countries (PIC9) including Tuvalu, has the objective of strengthening health systems and addressing NCDs under the Third Focus Area of "Protecting Incomes and Livelihoods".** The RPF recognizes the development challenge of rapidly increasing NCDs, and their related impact on acquired disability and reduced productivity, as well as the related fiscal pressures that the response to NCDs place on the countries. It also highlights the inequities between underserved rural or remote (outer island) populations and those living in or near urban centers. The third focus area also emphasized that protecting lives and livelihoods required strengthening resilience to natural disasters and climate change, including the resilience of health systems to address these challenges. The proposed Project directly responds to these priorities by developing the capacity for NCD prevention, detection, and management in Funafuti but also the outer islands. The Project also has a longer-term objective of affecting the fiscal pressure to refer patients overseas through building more capacity to deliver essential hospital services in country as well as to help the PHC system reduce risks of severe complications. Additionally, the Project will strengthen the capacity of the health system to be more resilient to strong weather events.

27. **Project results will contribute to the achievement of SDG 3 -- ensure healthy lives and promote wellbeing for all ages -- and the Priority Directions for the Health, Nutrition and Population (HNP) World Bank Practice Group.** One of the targets for 2030 under SDG 3 is to "reduce by one-third premature mortality from NCDs through prevention and treatment". Investment in early detection and management of NCDs, the primary focus of this project, is crucial to the achievement of this SDG target. The project also contributes to SDG 3 target for UHC – ensuring that all people have access to needed promotive, preventive, curative and rehabilitative health services, of sufficient quality to be effective, while also ensuring that people do not suffer financial hardship when paying for these services -- by increasing the utilization and quality of necessary essential primary and secondary health services.

[35] The Pacific RPF includes Tuvalu along with 8 other small island Pacific countries and can be found at the following link: *http://Regional Partnership Framework (P156647) FY17-FY21.* (Reports 120479 and 145750-EAP)

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

28. The Project Development Objectives (PDO) are to improve delivery of select health services, strengthen health management systems, and in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

PDO Level Indicators

29. The proposed Project will contribute to Tuvalu's higher-level health outcome and universal health care coverage objectives as set out in its National Health Strategic Plan 2020-2024. The components focus on strengthening the health service delivery capacity (a) at the one national hospital; (b) at the 11 health clinics and through population-based public health interventions; as well as (c) starting to build core management systems that will support better health service delivery, including through routine maintenance and responsiveness to public feedback. Given that this is the World Bank's first engagement with Tuvalu in the health sector, the scope of the Project provides a foundation, helping to ensure availability of core service delivery capacities and systems upon which it will be possible to move towards subsequent phases, supporting the development of a quality driven and resilient health system.

30. Achievement of the PDO will be measured by the indicators listed in Table 1 and as shown in the Project Results Framework in Section VII.

Table 1. PDO Indicators by Element of the PDO

PDO Elements	PDO Indicators
Improve delivery of select health services	1. Increase in the availability of essential hospital services at Princess Margaret Hospital[36]
	2. Increase in the percentage of screened adults with a 10-year cardiovascular disease (CVD) risk ≥30% or with existing hypertension or diabetes that are being managed for their condition (Percentage)
Strengthen health management systems	3. Public feedback mechanism operational[37], feedback analyzed and published in Ministry of Health, Social Welfare and Gender Affairs' Annual Report
In case of an Eligible Crisis or Emergency, respond promptly and effectively to it.	Added to the Project Results only if activated

[36] Following the agreed service plan, tracer services would be defined in at least four categories: (i) diagnostic, including radiological and public health; (ii) general surgery; (iii) mental health; and (iv) integrated approach to NCD management.

[37] Operational is defined by four elements: (i) highly accessible to the population; (ii) is receiving feedback (complaints, comments, suggestions); (iii) responds to feedback provider through a process defined by standard operation procedures; and (iv) would analyze the feedback provided to the health managers for consideration.

31. While more detail is available in the key sectoral challenges and Project description**,** Figure 5 provides a summary of the intended theory of change in Section D. Results Chain.

B. Project Components

Component 1: Improve the Availability of Essential Public Health and Health Care Services Provided at Princess Margaret Hospital (US$9.91 million equivalent)

32. **Subcomponent 1a: Increase the Physical Capacity of the Princess Margaret Hospital (US$9.10 million equivalent)**. This subcomponent will support an increase in the service capacity of PMH through the construction of a new building or wing of the hospital. The enhanced service capacity includes both clinical and public health functions. The clinical capacities include diagnostic services (notably radiology and laboratory), emergency/urgent care, basic surgical operations and post-operative recovery, intensive care, TB inpatient ward, mental health, and rehabilitation. The public health capacities will include an expansion of the laboratory's environmental health testing capacity and expansion of the central medical store which provides warehousing capacity to centrally manage the pharmaceuticals and medical supplies. An emphasis will be placed on improving the patient experience through an integrated approach to providing health promotion, detection, and management of NCDs as well as integration of social service counselling (for GBV and other social needs) at the location of the hospital.

33. The subcomponent activities include:

(a) conducting a more detailed needs assessment[38] to define the specific services further taking into consideration the current and emergent health needs of the population, the service requirements (human resources, equipment, space) as well as assessing the viability for providing these services in-country given the human resources options (in-country, visiting or teleconsultation), financial costs of in-country service versus overseas medical referrals and ensuring minimum standards of quality.

(b) following agreement on the service description, hospital design and engineering technical assistance will be provided for: (i) detailing the functional layout and physical requirements of the facility, including all necessary requirements for ensuring that the facility adapts to the local hazards, changing climatic conditions and energy efficiency; (ii) detailed review of the planned location and site specific plans for mitigation against environmental and social (E&S) impacts as specified in the requirements for environment and social standards[39]; (iii) a procurement and contracting strategy[40]; and (iv) technical support to the procurement for the detailed architectural design, construction and supervision phases of the Project.

(c) with the functional plan and environmental assessments agreed and in accordance with the agreed procurement and contracting strategy, hospital design and construction[41] would include: (a) a detailed architectural design; (b) any demolition works and construction of a new hospital wing on the territory of the PMH complex, including the design characteristics for energy efficiency and resilience to significant weather and climate change events; and (c) purchase of related medical equipment (including digital to

[38] The scope of the needs assessment will be adjusted based on the technical inputs from the MoH.

[39] The Project will not finance clearance or removal of unexploded ordnances (UXOs). If UXOs are found and need to be removed, the project would need to be restructured to include clearance and the relevant IPF procedures on demining followed.

[40] This refers the need to assess whether a single stage design/build strategy or a two stage (design/bid/build) strategy would be appropriate for the specific context. As well as to assess the market conditions for the type of contractors needed and how to best approach the market.

[41] While executing this activity, the needs for rehabilitating the existing PMH building will be assessed and subject to available funds, may be considered for financing subject to a project restructuring.

enhance teleconsultation capacity), information or communication technology equipment, furniture, and related supplies.

(d) to support the functioning of the national public health laboratory and support the medical waste management (MWM) collection and disposal systems, two field vehicles for specimen collection and outreach services and a vehicle for medical waste collection (at Port, at PMH, Funafuti Island), including the repair and maintenance of those vehicles, will be supported.

Eligible expenditures to support the above-described activities include technical assistance, works, medical equipment (including radiological equipment), reagents, and medical supplies, furniture, information communication technology equipment and other related goods, and vehicles.

34. **Subcomponent 1b: Increase the Human Resource Capacity of the Princess Margaret Hospital (US$0.81 million equivalent)**. This subcomponent will support an increase in the service capacity of PMH by investing in different means of expanding its human resource capacity.

35. The subcomponent activities include:

(a) the design and then implementation of a human resource development strategy on the basis of the service expansion plan of PMH. The plan will review options for (i) expanding telemedicine consultations with an international provider; (ii) contracting of international medical providers for specific periods of in-country service; (iii) upgrading of Tuvalu's general practitioners with specialists skills; (iv) organizing short visits of international medical teams for services in Tuvalu; and (v) providing short-term training of the health and auxiliary staff including in IPC and MWM, GBV detection, treatment and referral, and other areas as the needs arise.

(b) as a basis for the training in IPC and MWM, technical assistance to assess the current system, standard operating procedures, capacities of human resources and gaps against the MoH's National IPC Policy and Guidelines to define the specifics of the training and any other support to be provided.

(c) to inform the telemedicine approach, technical assistance to assess the context that would allow for making full use of telemedicine including legal environment (i.e., clarifying medical liability), assess the market for provision and contracting models, and the organization requirements for integrating the teleconsultation into the PMH clinical services.

Eligible expenditures to support the above-described activities include technical assistance, training fees and related costs, travel, accommodation, contracting of health providers for in-country consultation and contracting for telemedicine consultations.

Component 2: Strengthen the Delivery of Primary Health Care and Primary Prevention, with a Focus on Non-Communicable Diseases (US$3.02 million equivalent)

36. **Subcomponent 2a: Improve the Delivery of Essential Primary Health Care Services at the Health Clinics, with a Focus on NCD Services (US$2.35 million equivalent)**. This subcomponent will support a more comprehensive and systematic approach to early detection and routine management of NCDs, as well as ensure the readiness of the 11 health clinics to provide comprehensive PHC.

37. The subcomponent activities include:

(a) the design and implementation of an integrated screening program of the adult population (i.e., over the age of 30), including for diagnosis and risk stratification for NCDs, particularly for hypertension and diabetes on the basis of national protocols. In order to raise demand for screening, the screening program would include support community awareness raising and outreach activities.

(b) adaptation and rollout of a simplified digital patient record that can be used from the point of screening, risk identification (or stratification), to the management of NCDs which could be viewed by the health clinic nurse or PMH doctor.[42]

(c) maintaining service capacity of the 11 health clinics to ensure their readiness[43] in providing all essential PHC services through regular monitoring and addressing gaps that arise. To monitor the readiness on a regular basis, a digital system and dashboard will be supported that will routinely measure and identify gaps in service capacity at the health clinics to provide NCD and other essential PHC services, including disaster response.[44] Maintaining updated information on service capacity will be used to inform the regular reviews and supervision visits. When gaps are identified in service capacity, the subcomponent will support addressing those gaps through training of health staff, provision of minor medical equipment and related supplies.[45]

(d) as a foundation for improved service delivery quality, the subcomponent will support a needs assessment and following that assessment an upgrade of the water, sanitation, and hand-hygiene facilities in selective (about 5) outer island health clinics i.e., through improving and expanding the rain-water collection and storage facilities, functioning hand-washing stations with appropriate soaps, and functioning and environmentally appropriate latrines for men, women, and disabled access. The needs assessment will additionally assess the needs for health clinic in the outer island of Niulakita that is currently without a health clinic.

Eligible expenditures to support the above-described activities include technical assistance and training; production of media materials for raising awareness; workshops; in-country transportation; medical equipment and supplies including point of care diagnostic technologies; and minor works.

38. **Subcomponent 2b: Strengthen Public Health Approaches to Primary Prevention and Behavior Change (US$0.67 million equivalent).** This subcomponent will strengthen the population-based approaches to primary prevention and behavior change in response to the defined priorities of NCDs and GBV.[46]

[42] A digital patient record system for monitoring adult patients over time has already been initiated in country due to the need to monitor COVID-19 multiple dose vaccines. The subcomponent will support its further adaption to include the chronic disease screening and management guidelines.

[43] This would be defined based on the national standards for having appropriately trained human resources, adequate facility conditions, functioning minor medical equipment, and stock of essential medicines and supplies.

[44] The dashboard that would display information about the service capacity of the facility (human resources, their recent training, functioning of medical equipment and facility status) and integrate information from the supply chain management system on current stock status of essential medicines that is already being rolled out in Tuvalu.

[45] While the training supported by the subcomponent will be across PHC training needs, special attention will be paid to NCD prevention, detection and management, emergency response and injury in case of hazardous or other trauma event; prevention and awareness raising for heat-related illnesses; and detection and referral in case of gender-based violence. The training approach will be to provide frequent, short, and practical training (using the online platform as much as possible) and adapt to staff-turn over.

[46] Tuvalu also has well-established civil society associations that are active in supporting community engagement, health behavior change, and GBV response. While the MoH will be leading the implementation of these activities, they may engage these Associations to support the implementation. Notably, this includes the Tuvalu Family Health Association, the Tuvalu Women for Change Association, the Tuvalu Red Cross Society, Fusi Alofa for Persons with Disabilities, and the Tuvalu Diabetic Association.

39. The subcomponent activities include:

(a) support for NCD prevention activities that would further progress against the MANA Framework including through the provision of (i) technical assistance and workshops to review and to support the update related policies and regulatory frameworks; (ii) training and workshops to improve monitoring or enforcement of related policies and regulatory frameworks; (iii) workshops to facilitate coordination with other agencies/organizations; and (iv) population-based health promotion through communications, community events, and minor equipment. While the direct objective of these activities is to support progress for NCD prevention, the intended effect is also to build the capacity of the Public Health Department for strategic public health programming and behavior change communication.

(b) support for GBV victims including through (i) development and implementation of an integrated training approach of first responders (including police and health workers) for recognizing the signs, sensitive interviewing, and referrals; (ii) support for the certification training of social service counselors; (iii) minor repair and improvement of the shelter house that is used for temporary housing of GBV victims, to ensure its security and comfort as a place of refuge; and (iv) in-kind support kits or baskets to the relocated GBV victims.

Eligible expenditures to support the above-described activities include technical assistance, training, workshops, equipment, and repair and cosmetic improvement of the house providing a temporary shelter for GBV victims and their children.

Component 3: Support the Development of Management Systems (approximately US$ 2.07 million)

40. **Subcomponent 3a: Strengthen Management Systems for Better Service Delivery (US$0.62 million equivalent).** This subcomponent will strengthen core health management systems.

41. The subcomponent activities include:

(a) developing a prioritized and costed facility maintenance and repair plan and establishing an asset management system[47] that will identify the life cycle, repair, and maintenance schedule for health assets. As part of the maintenance plan, options will be evaluated for sustained maintenance, assessing both in-country support for minor maintenance, and contracting of maintenance and repair service providers.

(b) an assessment of the PMH HMIS in order to lay out options for having a more functional and easier to use system that will also allow for exchange of information with other health information systems. The assessment will look at both the option of adapting the current system; defining the changes that will need to be made; and the option of entirely replacing the current system. Implementing solutions will fall outside the scope of the Project, but any minor investments in hardware, local area network connections, or similar, that may improve the use of the existing system may be supported by the Project.

(c) the development of a Public Feedback System for the health sector with would be highly accessible to the population, that would have standard operating procedures for receiving and responding to complaints or comments, that would be timely and substantive in responding to the feedback provider, and that would analyze and generally report on the feedback, in the MoH's Annual Health Report, to inform health sector performance.

[47] An asset management system would include a database with information such as purchase date, supplier contacts, warranty information, maintenance history and schedule, etc.

Eligible expenditures to support the above-described activities include technical assistance, training, and minor information technology equipment.

42. **Subcomponent 3b: Project Management, Monitoring and Technical Support (US$1.45 million equivalent).** This component will support the necessary full-time consultant team that will constitute the Project Management Unit (PMU) to support the MoH[48] in its responsibilities as the Implementing Agency of the Project; short-term technical assistance in areas of Project management as may be required, such as part-time consultants in specific areas to comply with the E&S standards; the cost of equipping and furnishing a Project office; and incremental operating costs in support of Project management, including travel related costs associated with Project management.

43. **Component 4: Contingent Emergency Response Component (CERC) (US$0.0 million equivalent).** The component will support a rapid response and urgent assistance in respect of an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact to Tuvalu associated with a natural or man-made crisis or disaster. In the event of an emergency, financial support could be mobilized by reallocation of funds from other components to support expenditures on a positive list of goods and/or specific works and services required for emergency recovery. A CERC operational manual, governing implementation arrangements for this component, would be prepared with financing from this Project.

44. **A summary of the Project costs is shown below in Table 2.**

Table 2. Summary Project Cost Table by Component (in US$)

Component	IDA Grant Financing in US$ (in million)
1. Improve the availability of essential public health and health care services provided at Princess Margaret Hospital	9.91
2. Strengthen the delivery of primary health care and primary prevention, with a focus on non-communicable diseases	3.02
3. Supporting the development of management systems	2.07
4. CERC	0
Total:	15.00

C. Project Beneficiaries

45. **The primary beneficiaries of the project are all 10,500 Tuvaluans** who are dependent on the public health facilities, particularly the large share of adults who have or are at risk of developing hypertension or diabetes, those who require urgent diagnosis and treatment, and the victims of gender-based violence. Health workers will also benefit substantially through direct investments in their skills and knowledge.

[48] This team of consultants would be in addition to those that will be part of a Central Project Management Office housed at the MoF which would provide advice and support. See Institutional and Implementation Arrangements Section III for more detail.

D. Results Chain

46. The Project's Theory of Change is illustrated below:

Figure 5:Theory of Change

KEY CHALLENGES	ACTIVITIES	KEY OUTPUTS	OUTCOME INDICATORS	IMPACT
• Changing Health Needs – Growing incidence of NCDs, Health Needs Affected by Climate Change, Gender-Based Violence while maintaining progress in RMNCAH and Communicable Disease • Overseas Medical Referrals Subject to Disruption and is a significant Fiscal expenditure • The Capacity to Deliver Services from Primary Prevention, Secondary Prevention and Hospital Services need to be expanded • Climate Change is impacting on the severity and frequency of weather events requiring a focus on adaptation • Systems to secure the sustainability of investments and the responsive of the health system to public concerns are under-developed	Subcomponent 1a. • Service Expansion Needs Assessment • Functional Design of Facility, site specific assessment and mitigation plans to meet environment and social impact requirements, Procurement and Contracting Strategy • Detailed Architectural Design, Build, Equip PMH • Vehicles to support public health lab and MWM system	• PMH Hospital designed and constructed to meet local health needs and environment conditions, including improved IPC and MWM systems	• Increase in the availability of essential hospital services available at PMH. The definition of essential hospital services will be in Year 1 and include tracer services from at least the following service categories: (i) diagnostic, including radiological and public health; (ii) general surgery; (iii) mental health; and (iii) integrated approach to NCD management.	Contribute to the achievement of national health outcomes and progress towards Universal Health Coverage goals
	Subcomponent 1b. • Design and Implementation of Human Development Plan • Assess IPC and MWM Systems to determine gaps and provide support	• Human resources available (in-country or thru teleconsultation) ready to provide the expanded package of services		
	Subcomponent 2a. • Design and Implementation of integrated public health screening program of adults • Focus on managing the conditions of high-risk patients, including through use of digital tool • Routinely measure the service readiness of Health Clinics • Adapt the Water, Sanitation and Washing facilities of selective health clinics	• Adult population screened and those of having or at high risk of the disease identified and managed • Health Clinics (11) supported to maintain service readiness • Selective Health Clinics (approximately 5) with adapted waster, sanitation and washing facilities	• Increase in the percentage of screened adults with a 10-year CVD risk ≥30% or with existing CVD that are being managed for their condition (Percentage)	
	Subcomponent 2b. • Technical and material support to advance NCD Prevention policies ,behavior change and communication activities according to MANA framework • Technical and material support provided to the Gender Affairs Department to improve the responsiveness of services to GBV victims from first response to temporary relocation	• Scale up of outputs in support of MANA Progress including review of regulations, behavior change activities, communication activities • Training of first responders on GBV identification, sensitive interviewing, care, and referral		
	Subcomponent 3a. • Asset management and maintenance plans determined • Review and Options Assessment for a functional Hospital Information Management System • Public feedback and response system designed and put into operation	• Asset management system established • HIMS reviewed and way forward agreed • Public Feedback system operating	• Public Feedback system operational and feedback analyzed in annual health report	
	Subcomponent 3b. • Hire staff to support the Project implementation and coordination • Support the Project through coordination, planning, procurement, financial management, safeguard compliance, monitoring			

E. Rationale for Bank Involvement and Role of Partners

47. **The Project will be the first World Bank financed operation supporting Tuvalu's health sector, however, the World Bank has experience in similar Projects globally and, increasingly, in the PICs.** The Project interventions are consistent with other regional and global health sector strengthening operations, allowing the World Bank to draw upon its technical expertise and share lessons and experience across countries. For instance, the experience of Samoa in NCD screening, risk stratification and disease management can be used to inform the experience in Tuvalu. Similarly, the experience in Tuvalu in strengthening of its in-country hospital sector capacity, including through the use of digital tools and teleconsultation, will be of interest to other countries. The knowledge and experience sharing applies to both the desired technical objective, but also in how to implement strengthening measures in challenging country contexts. The World Bank can draw on its worldwide expertise and experiences in procurement, financial management, and safeguard areas to ensure the efficient use of the investment resources and ensure that any potential negative environmental or social consequences will be mitigated. The World Bank's engagement can provide a platform for engagement with the government and development partners for coordinated assistance to the GoTv in the health sector as has been done in other PICs. For instance,

there is support from several bilateral partners to provide visiting medical teams. The human resource development plan can provide a platform for a systematic and coordinated approach to define the human resource needs to mobilize the specific specialist expertise from the partners. Through the implementation of a World Bank-financed Project the objective is to build the GoTv's and MoH capacity in designing and implementing investment projects that can be leveraged to other financial resources (such as those dedicated to climate change adaptation and mitigation financing). As a complement to the investment Project, the health sector can benefit from the World Bank-executed analytical and advisory grants to provide technical inputs that would facilitate Project implementation; and analysis in complementary policy areas (i.e., TOMRS method of purchasing of health services, tobacco, and other 'sin' taxes to support NCD prevention policies). Other development partners, such as DFAT, will provide strategic inputs to support Project implementation. Strong coordination with the DFAT Health Advisor, WHO on NCD-related prevention and PHC will be necessary, and SPC on the service delivery enhancement plan.

F. Lessons Learned and Reflected in the Project Design

48. **The lessons from the COVID pandemic demonstrate that there are fundamental health system capacities that support both the attainment of UHC and increase in the resiliency of health systems in the face of pandemics (or other health-related emergencies).** Such capacities include flexible hospital capacity that can be repurposed based on need, with enhanced health workforce capacity; a strong PHC system close to and with the trust of the community; digital investments to facilitate better and more real-time health information; and climate-smart health investments. While the Project is targeted towards improving UHC, the investments in strong health service delivery capacity and management systems will also go towards strengthening Tuvalu for future health emergencies.

49. **The Project design considers key lessons learned from the global experience with addressing NCDs through primary care.** First, after tobacco cessation, the outpatient management of cardiovascular risk factors such as hypertension and diabetes has been the single most effective intervention to reduce mortality due to NCDs in advanced health systems, accounting for up to 25 percent of longevity gains over several decades. This has motivated the choice of strengthening PHC (provided at the health clinics or through PMH) to address the growing NCD burden of the Tuvaluan population. Moreover, significant progress in improving cardiovascular risk factors and other cost-effective NCD control measures has been achieved in advanced health systems with widely varying institutional designs for primary care payment and organization. This points to the importance of providing the right clinical interventions in the right setting to achieve impact rather than focusing on macro-level service delivery reorganizations. Finally, an additional lesson is to ensure pro-active identification of individuals that have a disease or are at high-risk of developing severe disease and to manage those patients continuously and hence, the Project focuses on population-based screening, risk identification and tools for continuously managing patients.

50. **Conservative cost contingencies are incorporated into the Project's design.** The remoteness and dispersion of many PICs has a significant, and sometimes unpredictable, impact on costs. Lessons learned from other World Bank-supported projects in small island states in the Pacific have shown that cost contingencies should be factored into Project design, where feasible. Consequently, budget estimates for those activities indicating works or major goods procurement are conservative, allowing for price uncertainties and potential change orders during contract implementation.

51. **Capacity limitations in Tuvalu is acknowledged and incorporated into Project design and planning.** Experience from other World Bank-supported projects in the PICs have highlighted key considerations around capacity limitations, including the need for realistic timelines, limited capacity of local project implementation teams, and the need for intensive implementation support. There are often delays along the project cycle from needs identification to delivery. Hence, the Project design has scaled back ambition and focused on foundational activities. For instance, given the time that it will take to design and construct, the Project focuses on making the expanded services at PMH available by the end of the Project, but the expectation to service quality and systems of the hospital could only be supported in subsequent phases. Second, the success of a project is also dependent on the PMU and the PMU Project Manager. The Central Project Management Office (CPMO) will provide support to the MoH in establishing its own PMU and hiring of a PMU Project Manager with appropriate experience and skills, drawing on lessons from other World Bank-financed projects under implementation. Lastly, an increased level of the CPMO and World Bank support during Project implementation period is expected since this will be the first investment Project implemented by the MoH on this size and scale. Other development partners tend to provide in-kind, directly executed assistance.

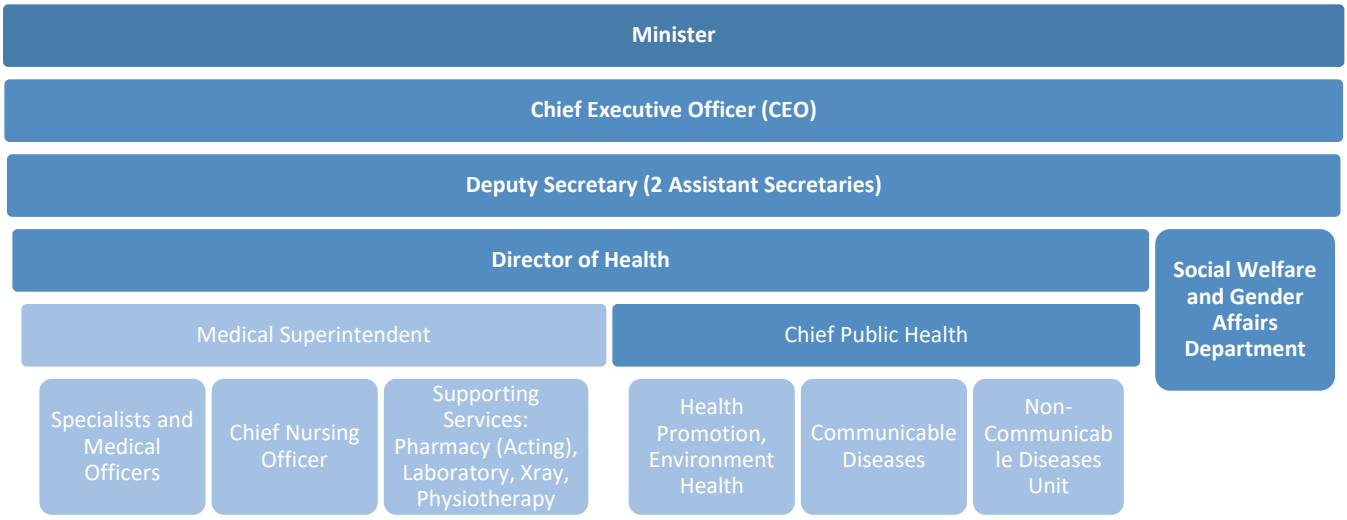
52. **Complementary capacity-building functions by the CPMO are embedded in design.** Experience from other World Bank projects indicates that the burden of carrying out donor-financed projects often rests on one or two individuals in the responsible Ministries who already have a full-time work program. Avoiding overburdening existing implementation capacity has become an ongoing priority of World Bank financed projects in Tuvalu, along with ensuring that sufficient capacity is available for proper design and implementation of each project. To address this problem, Tuvalu has established a CPMO, to support all World Bank-financed projects. Staff in the CPMO will support, advise, and guide the national and state agencies as they proceed to carry out HSSP implementation functions.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

53. **Within the GoTv, the MoH has primary responsibility for the nation's health sector.** The Ministry is led by a Minister and Chief Executive Officer (CEO) with one Deputy Secretary and two Assistant Secretaries, cutting across the three functions – health, social welfare, and gender – of the Ministry. The Director of Health is responsible across the clinical and public health functions of the Ministry. See Figure 6 for the basic organizational structure of the Ministry. The MoH is also responsible for the direct administration of its public health care providers, including the PMH which is managed by the Medical Superintendent and the clinics which is managed by the Chief of Public Health. The MoH has not had any previous experience directly executing a World Bank-financed project or any other similar multi-lateral agency development project. The MoH technical capacity in health is enhanced through a technical adviser supported by DFAT, who reports to the CEO and provides general advice in the execution and monitoring of its national sector strategy and advises on important elements of the Tuvalu health system such as the TOMRS.

Figure 6. MoH Organization Chart



54. **The National Infrastructure Steering Committee (NISC) was established in December 2019 to oversee large (greater than US$5 million) infrastructure projects.** The NISC is co-chaired by the Ministers of Finance, and Public Works, Infrastructure, Environment, Labor, Meteorology, and Disaster (PWIELMD), and the representatives include the Secretary to the Government; Secretaries of Finance, Transport, Communication, PWIELMD; and Directors of Planning, Budget and Aid Coordination, Public Works, Local Government, CPMO, and Environment. The Secretariat of the NISC is the CPMO. The MoH Secretary is not a permanent member of the NISC, but the NISC membership may include the Secretaries of non-permanent members to review or oversee specific Project proposals. The MoH will be responsible for seeking approval and getting the necessary technical inputs from the NISH for the new PMH building. Infrastructure projects of less than US$5 million are managed by the Department of Public Works (DPW) which is part of the MPWIELMD. The MoH will be responsible for coordinating with the DPW on the minor works to upgrade the water, sanitation, and hand-washing facilities of the outer-island health clinics.

55. **The MoF is responsible for implementation of Component 4 if activated; the Implementing Agency for Components 1, 2, and 3 is the MoH.** Overall, implementation responsibility for Components 1, 2 and 3 will rest with the CEO of Health with support from the technical departments, particularly the Director of Health. Given that the Project will be the major investment in health over the next several years, the CEO of Health would be the Project Director with high-level oversight of the Project. Regular oversight of the Project will be provided by a Project Steering Committee chaired by the MoH and comprising representatives from MoF and its CPMO, and other representatives as may be determined. The Project Steering Committee will be established within four months of the effectiveness date of the Financing Agreement and will meet at least twice annually or when needed.

56. **A PMU will be established within MoH, which will enhance the MoH's technical and project management capacity, necessary to implement the activities under Components 1, 2, and 3.** The PMU will include specialists with project management, health service planning and construction, E&S safeguard, procurement, financial management (FM), monitoring and evaluation (M&E), and stakeholder engagement skills. The CPMO under the MoF will support the MoH in Project administration until such time as the MoH PMU is established with the

minimum necessary capacity to undertake the Project administration functions (i.e., qualified Project Manager, Procurement Consultant, Financial Management Consultant, and accounting system). The proposed implementation arrangement is provided in Figure 7**.**

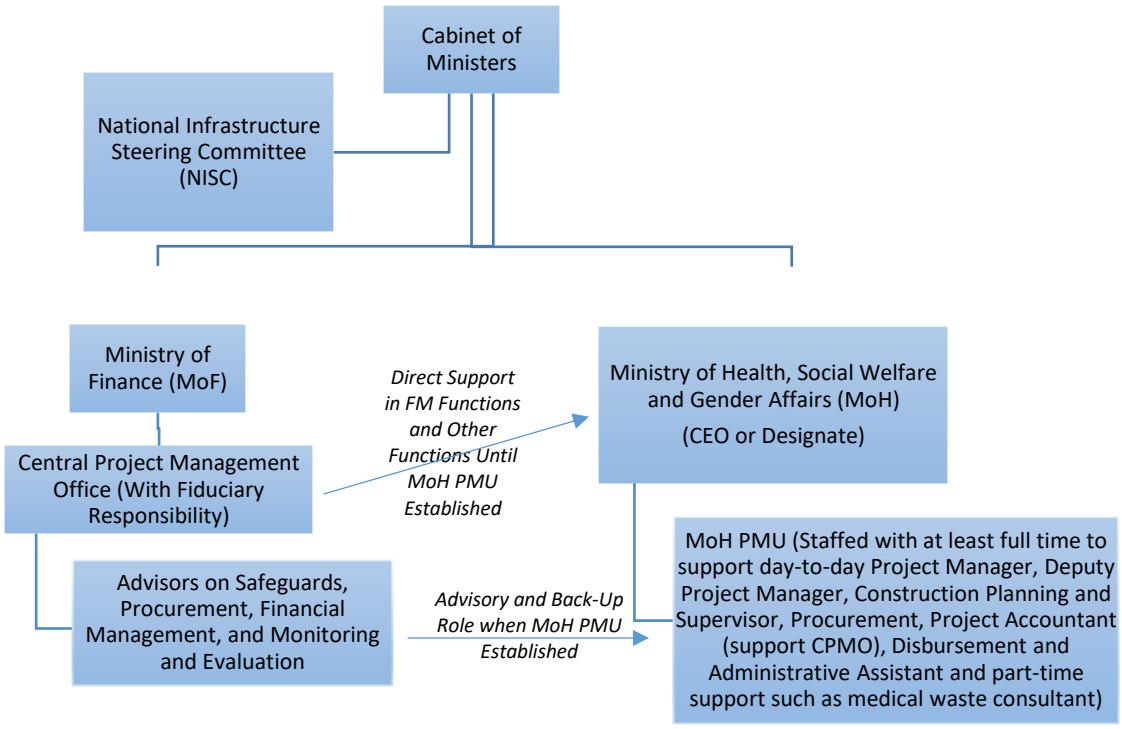
57. **PMU implementation support.** The MoH PMU is expected to be established no later than three months after the effectiveness date of the Financing Agreement.[49] The MoH PMU will be responsible for day-to-day management and implementation of the Project. The PMU will coordinate the implementation of HSSP with the MoH management, the CPMO, and, with respect to the Project construction activities, the NISC or DPW. The MoH PMU will also be responsible for implementing the Project in accordance with annual work plans and budgets. The Project Manager, who leads the PMU, will be responsible for working collaboratively with all stakeholders to facilitate implementation by providing technical support and working with the CPMO to facilitate the procurement, budgeting, and work programming process. In addition to the Project Manager, the PMU is expected to include a Deputy Project Manager; a senior consultant with experience in construction design, contract management and supervising construction; and consultants that can support accounting (supporting the coordination with the CPMO), procurement, E&S management, and disbursement/administrative support. In addition, specific short-term technical expertise such as in Project monitoring, MWM, and other areas may be contracted.

58. **CPMO implementation support.** The CPMO, within the MoF, was established as part of the Tuvalu Learning Project and is a functional unit that supports the implementation of the World Bank portfolio, which has grown quickly and is anticipated to expand even further over the next few years. GoTv identified the need for strong implementation of the World Bank portfolio and to look for ways to maximize efficiencies. The CPMO provides support (advisory or direct implementation support) on core implementation functions needed for all projects. Under HSSP, the CPMO will provide Project implementation advisory and technical support to the MoH until such time as the MoH PMU is established with the minimum necessary capacity.[50] Thereafter, the CPMO – with staff performing Project management, procurement, FM, E&S standards, M&E, and outreach and communications functions – will provide advisory and back-up support to the MoH PMU. The individuals responsible for these functions in the CPMO report to the CPMO Director but may provide hands-on support to the MoH for preparation, implementation, and capacity-building activities. Project implementation responsibilities, however, remain with the MoH. The CPMO will support the MoF in the implementation of Component 4 if activated.

59. **Role of MoH and the PMU or CPMO with respect to contract signing and invoicing.** All contracts with consultants, contractors, and suppliers will be signed by the MoH Secretary, with the administration and contract management tasks of the contract being implemented by the PMU as their day-to-day responsibility. The MoH Secretary will sign off on all consultant and contractor invoices and authorize the PMU to make payments. The PMU will consult with the CPMO to ensure that all the due diligence has been completed and is satisfactory, when necessary.

[49] By established, the minimum expected staff to be hired include the Project Manager, Procurement Consultant, and Project Accountant.
[50] Minimum necessary capacity includes having a Project Manager, a Procurement Consultant, an Accountant, and the adaptation of the Project Accounting System (which will be supported by the CPMO) to maintain proper project accounts.

Figure 7. Project Management Arrangements



60. **A Project Operations Manual (POM) will be prepared and adopted by the MoH within four months of the effectiveness date of the Financing Agreement to support Project implementation of Components 1, 2, and 3.** The manual will be drafted within three months after Project effectiveness and submitted to the World Bank for review. The main purpose of the POM is to support the institutional arrangements for day-to-day execution of the Project, including detailed procedures related to Financial Management. A specific CERC Operations Manual is expected to be prepared and adopted by the MoF prior to any reallocation or release of funds related to Component 4.

B. Results Monitoring and Evaluation Arrangements

61. **Project M&E will be conducted through periodic monitoring using semesterly reports that track progress in terms of progress of Project activities, progress on procurement, disbursement of funds, compliance with Project legal and E&S requirements, and achievement of targeted indicators as outlined in the Results Framework (Section VI).** The MoH, with the support of the PMU, will be responsible for M&E against agreed indicators as presented in the Results Framework, including the provision of timely monitoring reports with operational data, with support from the CPMO where required. Each Project report will be submitted to the World Bank no later than one month after the end of each semester. The MoH and the World Bank will undertake a Mid-Term Review to assess the status of the Project implementation and the need to adjust not later than November 1, 2025 (expected to take place three years after the Project effectiveness date).

C. Sustainability

62. **The Project's sustainability will be enhanced by several factors.** First, there is clear political leadership and Government ownership for the Project activities as evidenced by the priorities defined in the *Te Kete* and NHSP. Second, the sustainability of the Project is enhanced through a consultative process with the different MoH departments, ensuring that the Project will benefit different segments of the health system and, therefore, engages the whole of the Ministry in the Project outcomes. When and as Tuvalu opens up, the consultative process will be extended to additional segments of the society as part of the Stakeholder Engagement Plan (SEP). Third, the Project focuses on building capacities and systems that would enhance the sustainability of the interventions under the Project. For instance, supporting the development of an asset management system and developing a routine system and dashboard for measuring health service readiness will support sustainability of the Project capital investments. Finally, macroeconomic developments and the nature of the Project suggest that the risks of financial unsustainability are minimal. With the International Monetary Fund projected annual real GDP growth of 3.5-4.0 percent (2022-2027), Tuvalu's economic outlook is promising, increasing the probability of embracing any additional recurrent cost in the regular Government health budget. The successful implementation of the Project design is aimed at reducing the need for overseas medical referrals and reducing complications from uncontrolled NCDs. Together, these should produce fiscal savings that can be used to reinvest in the health system.

IV. PROJECT APPRAISAL SUMMARY

A. Technical and Economic Analysis

63. **Tuvalu has a well-established public health system and has made substantial progress in improving its health outcomes.** Access of its population has been assured through both direct access to PHC at health clinics and at PMH, basic secondary care at PMH, and through an extensive overseas medical referral scheme. Given the growing health needs of the population, Tuvalu's experience in having essential health care delivery disrupted due to COVID-19 travel restrictions and the increasing fiscal pressure of the TOMRS, it is technically appropriate for Tuvalu to intensify its efforts to reduce the incidence of NCDs, but also expand its capacity to deliver health services in Tuvalu as long as the three factors are considered: (a) human resource capacity and availability; (b) need to ensure minimum quality standards that include minimum patient volumes; and (c) relative costs of providing services in-country or through purchase agreements with overseas medical providers.

64. **Having basic diagnostic and essential surgery capacity can be both highly cost-effective—saving lives or improving the quality of life—and affordable.** There is growing global evidence in support of investments in surgical facilities at first-level hospitals; in particular, trauma care saves lives. Globally, 77 percent of the deaths preventable by surgery are from injuries, representing 1.04 million deaths annually, while selected maternal and neonatal conditions avertable by surgery account for 234,000 deaths annually. Having adequate hospital capacity is not a luxury for low-and middle-income countries, but an appropriate investment in its population's health.

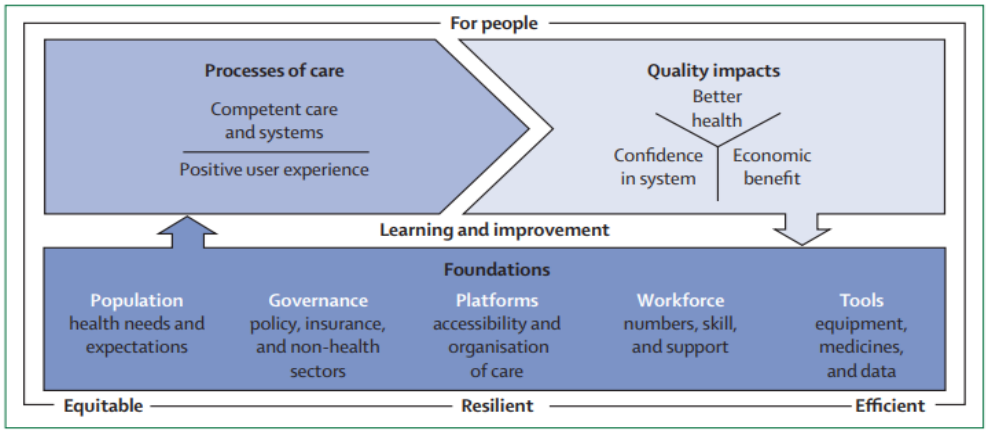
65. **The focus on outpatient care through PHC (at the PMH or health clinics) as the avenue for management of NCDs is in line with recommended practice.** Tuvalu today faces an epidemiological transition, wherein NCDs constitute 75 percent of the disease burden of the nation. Communicable, maternal, neonatal, and nutritional diseases

constitute 14 percent, and about 11 percent is from injuries. The increase in NCDs, which reflects chronic and often complex conditions, requires better skilled staff, longitudinal (over-time), and integrated (between providers) care, and consistency in being able to provide routine follow-up services. The same capacity is also needed to address the substantial residual mortality from maternal and child conditions and infectious disease. This, on the one hand, highlights the need and relevance of focusing on building systems that could support the delivery of comprehensive care, while providing some focused attention to NCDs given that it has not been prioritized until recent years and it is the largest burden on the population's health. The most feasible, affordable, and equitable option for reaching people in need of health care for NCDs is through the PHC system. Thus, by adopting the approach of screening, identification, and management of 'at risk' people through the PHCs, the Project is following best practice.

66. **The use of technology solutions, such as telemedicine to improve quality and outreach of services, has proven to be more and more relevant given the experience of the pandemic.** Telemedicine has been found to be an effective tool for delivering more frequent and timely health care to people with chronic conditions a distance and for improving access to health care. Telemedicine also has the potential to overcome health care disparities in the underserved areas. One limitation highlighted in a study was that while patients reported higher patient satisfaction, there were larger losses to follow up among the telemedicine group participants compared to those who received usual, in-person care. The Project recognizes this by emphasizing the need to establish a strong link between the chronic disease patient and the health care provider.

67. **As highlighted in the Lancet Global Health Commission on High Quality Health Systems in the SDG Era (see Figure 8),[51] in countries where health systems are in place, poor-quality care is a bigger barrier to reducing mortality than insufficient access, but improving health quality requires a systems approach.**[52] Overall, the Project initiates support towards elements of a high quality health system through helping the service availability to be more relevant with the health needs and expectations of the populations; these include establishing

Figure 8: Lancet Global Health Commission on High Quality Health Systems in the SDG Era



[51] Kruk et al. 2018.

[52] Fung, C. H., Y. W. Lim, S. Mattke, C. Damberg, and P. G. Shekelle. 2008. "Systematic Review: The Evidence That Publishing Patient Care Performance Data Improves Quality of Care." *Annals of Internal Medicine* 148 (2): 111–23;
Herrera, C. A., S. Lewin, E. Paulsen, A. Ciapponi, N. Opiyo, T. Pantoja, G. Rada, C. S. Wiysonge, G. Bastías, S. Garcia Marti, C. I. Okwundu, B. Peñaloza, and A. D. Oxman. 2017. "Governance Arrangements for Health Systems in Low-income Countries: An Overview of Systematic Reviews." *Cochrane Database of Systematic Reviews* 9: Article No.: CD011085. DOI: 10.1002/14651858.C D011085.pub2.

platforms for ensuring continued service readiness; supporting tools for better maintenance of health assets; supporting the development of improved data and information sharing; and supporting the development of tools to receive and respond to user experiences.

Rationale for public sector intervention provision and financing

68. **Supporting Tuvalu's efforts to improve its health system will contribute to a healthier, and more productive population, and assist in the achievement of UHC.** The health care system in Tuvalu is almost entirely publicly funded, and there is a strong rationale for public sector financing and provision of health care in Tuvalu. The most compelling reason for public provision of health care is the moral arguments of health as a basic human right and equity in access to health care. In addition, from an economic perspective, public provision of health care is justified on three grounds:

(a) **Alleviation of poverty and increased welfare through better health outcomes and greater equity**. Success in alleviating poverty is premised on the fact that investments in basic health care and nutrition promotes the use of labor and raises productivity of a society. An individual's health not only has a bearing on his or her well-being but also on the value of his or her labor to the economy. Improving access and quality of essential health services is therefore critical for building human capital and is necessary to achieve inclusive and sustainable development.

(b) **The public good nature of health care and the presence of externalities resulting from the provision of health care**. The key characteristic of public goods is that one individual can use them, or benefit from them, without limiting others' consumption or benefit. Positive externalities, or spillovers of benefits, from one individual to another results in cases where a private market would produce too little of the product such that – the social benefit of providing health care to an individual often exceeds the private benefit in the case of positive externalities or the private benefit exceeds the social benefit in the case of a negative externality.

(c) **Failures in markets for health care provide a third rationale for public sector intervention to improve efficiency and equity**. Adverse selection and moral hazard, resulting from uncertainty and asymmetries in information in health care, pose significant challenges in the health sector. Within the context of Tuvalu, moral hazard is where consumers tend to use more of a service when its marginal cost to them decreases. Because the financial cost of disease is reduced, people may take less care of their health, leading to more illness and more subsequent demand for care. Moral hazard also results when health care providers induce demand for services.

World Bank's value-added

69. **The World Bank's engagement has value for improved efficiency in the use of the investment resources.** World Bank support provides a platform for engagement with government and development partners for coordinated assistance to the GoTv in the health sector. The World Bank can draw on its worldwide expertise and experiences in technical, procurement, FM, and safeguard areas to address strengthening the health system, and, at the same time, build GoTv's capacity in developing and implementing its strategies, including the NHSP and the Environment

and Climate Health Action Plan, as well as building the capacity of the health staff in implementing its procedures for addressing GBV.

Cost-Benefit Analysis

70. **The Project is expected to yield several measurable economic benefits.** These benefits consist of gains in productive life by (a) decreasing the number of disability-adjusted life years (DALYs)[53] – years life lost due to premature mortality and loss of life from not living in full health -- from reduced morbidity and mortality particularly for NCD-related conditions including diabetes mellitus, ischemic heart disease and cerebrovascular diseases which represent the highest disease burden (75 percent of Tuvalu's total DALYs in 2019); and (b) decreasing the number of DALYs from reduced morbidity and mortality related to injuries (11 percent of Tuvalu's total DALYs in 2019). The two combined are estimated to have lost 1,400 DALYs in 2019. Although not quantified in this analysis, additional benefits are also expected from reducing the need for some of the overseas medical referrals in the long run.

71. **Early screening and management of the targeted conditions at the primary care level are arguably more cost-effective than treating NCDs once they become complicated and require specialist care.** The global evidence drawn from the Disease Control Priorities Project[54] suggests that interventions for screening and management of some of the targeted NCDs are cost-effective according to the WHO's guideline on thresholds for acceptable costs per DALY averted.[55] Blood pressure management, polypill for high absolute risk CVD, angiotensin-converting-enzyme inhibitor, and cataract surgery are all interventions for adults costing less than US$100 per DALY averted.[56,57] Thus, the secondary prevention of NCDs are globally considered "very cost effective".

72. **A cost-benefit analysis, converting the health gains achieved by the Project into monetary terms by measuring the cost per DALY saved relative to per capita GDP, was conducted.** It is estimated that the benefit of the project will be for 10 years, as many of the services being supported will only start towards the end of the investment period. For the given Project investment expenditure of US$15.0 million and an additional estimated recurrent cost of US$4.8 million[58] over the period of time 10-year time horizon and a GDP per capita of US$5,820 in Tuvalu (2020), the Project will only have to achieve total of 3,402 DALYs saved to "break even". Assuming current health sector utilization remains constant, each outpatient visit, or inpatient admission would only have to result in 0.02 DALYs saved to break even which is reasonably expected.

73. **The Project interventions are not expected to create unmanageable budgetary liabilities.** This is mainly because (a) the Project design will take into account that health spending is already large (15 percent of a Government budget of about US$60.7 million in 2019 or about US$9.3 million) and no significant new recurrent spending obligation would be viable; (b) the cost of providing screening and management of NCDs at primary care level

[53] Mortality does not give a complete picture of the burden of disease borne by individuals in different populations. The overall burden of disease is assessed using DALYs, a time-based measure that combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health, or years of healthy life lost due to disability. One DALY represents the loss of the equivalent of one year of full health.
[54] Link: *https://dcp-3.org/*
[55] Horton, S. 2017. "Cost-Effectiveness Analysis in Disease Control Priorities, Third Edition." In *Disease Control Priorities (third edition): Volume 9,* edited by D. Jamison, H. Gelband, S. Horton, P. Jha, and R. Laxminarayan. Washington, DC: World Bank.
[56] Horton 2017.
[57] Goldie, S. J., L. Gaffikin, J. D. Goldhaber-Fiebert, A. Gordillo-Tobar, C. Levin, C. Mahé, et al. 2005. "Cost-effectiveness of Cervical Cancer Screening in Five Developing Countries." *N Engl J Med* 353: 2158–68.
[58] Estimated at 5% annually of the investment cost for the 10-year period.

would offset the existing cost of doing so at higher level and cost of more expensive disease management for NCDs detected later in life; (c) the cost to provide more in-country services will at least partially be off-set by a reduction in medical referrals; (d) an increase in demand for care should not result in significantly more human resource costs, assuming providers are paid based on input (line-item budgets and salaries) and staff remain relatively stable in facilities; and (e) even if the approach results in additional costs for contracting of human resources (in-country or through teleconsultations) the intended result would be to off-set expensive overseas medical referrals. Furthermore, the health sector budget is an estimated US$9.3 million (2019); any increase to the budget for maintenance and operation of new health assets would be less than 3 percent of that amount.

B. Fiduciary

Financial Management

74. **An FM assessment of MoH was conducted in May 2022** in accordance with the 'Principles-Based Financial Management Practice Manual', issued by the World Bank on February 4, 2015, and further revised on February 10, 2017, and as further elaborated in the 'World Bank Guidance Financial Management in World Bank-financed Investment Operations', issued by the World Bank on February 24, 2015. Under the World Bank's Directive: Investment Project Financing (Directive), OP/BP 10.0, the borrower and implementing agency are required to maintain adequate FM systems, including planning and budgeting, accounting, internal control, funds flow, financial reporting, and auditing systems, to ensure that they can assure the Bank that the funds will be used in an efficient, economical, and transparent way. Overall, the assessment found that the proposed FM arrangements satisfy the requirements as stipulated in the Directive subject to incorporation and implementation of the mitigating measures.

75. **The FM responsibilities include:** (a) ensuring compliance with all financial covenants in the legal agreement; (b) obtaining IDA funds and managing them in an efficient, effective, and transparent manner; (c) furnishing financial reports and project audit reports to IDA, and (d) carrying out overall management of payments and accounting functions of the Project, and any other requests relating to FM made by the WB. The IDA grant proceeds will be used to finance eligible expenditures that are necessary to meet the development objectives of the Project with due attention to considerations of economy and efficiency in accordance with the provisions of the Financing Agreement.

76. **The implementing agency, MOH, is responsible for the FM arrangement for the HSSP project.** The MOH will establish a PMU which will be constituted with all relevant skills including a project accountant and an administrative assistant. The MOH lacks experience in implementing the WB projects and hence will require additional guidance. The Central Project Management Unit (CPMO) established to support the implementation and compliance of the WB portfolio in Tuvalu, will provide guidance and advisory support to set up the PMU and establish the required project documentation and systems to support adequate FM arrangement. The project includes the option for the selection and use and UN agencies and specifically references UNOPS. This is because (i) there has been positive experience of using UN agencies (including UNOPS) in providing procurement for medical goods and supplies in the sub-region recently (COVID-response related); (ii) UN agencies have been able to mobilize necessary contractors for minor works (for improved water and sanitation) in remote locations such as the outer islands that may not otherwise be attractive to the open market; and (iii) use of the procurement

capacity and developed procedures of the UN agencies is a mitigation measure for the Project to help address the capacity constraints and provide an additional quality assurance mechanism. Additional FM measures are proposed under the project to enhance reporting and verification process. The project FM risk is rated Substantial, and Annex 3 presents detailed FM arrangements. The World Bank fiduciary team will continuously monitor project progress and guide as required.

Procurement

77. **Procurement for the project will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers dated November 2020.** The Project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record and track procurement transactions.

78. **The major planned procurement under this Project is expected to include:** (a) recruitment of individual consultants to support Project implementation; (b) a needs and viability assessment for the expanded PMH service package; (c) a large consultant services contract to detail the functional design of the PMH expansion including site specific E&S Impact Assessments, Procurement Strategy and Implementation Support and Project Supervision; (d) a design and build or a design-bid-build procurement for the construction of the expanded PMH facility; (e) a needs assessment and small works in selected outer-islands to upgrade the water, sanitation, and hygiene facilities of the health clinics. The MoH, with the support of the CPMO, has prepared a streamlined Project Procurement Strategy for Development (PPSD) and a draft procurement plan for the first 18 months for the Project which will be updated during Project implementation as necessary.

79. **The HSSP procurement functions will be carried out by CPMO until such time as the MoH PMU is established with necessary minimum qualifications and then the MoH PMU, in close partnership with the MoF and the CPMO, will undertake the procurement functions.** The CPMO has had experience implementing procurement activities under World Bank financed projects and is staffed with an international procurement advisor. The MoH PMU will be staffed with a national procurement advisor but will also receive technical assistance from a hospital design and engineering firm with respect to the procurement planning, market evaluation for the large civil works contract to expand the PMH.

80. **The Selection and Use of United Nations' Agencies.** The MoH may select UN Agencies directly in situations where their expertise or rapid mobilization on the ground is critical. This may be the case in circumstances of urgent need of assistance, because of the capacity constraints and the limited market conditions. The Government has had positive previous experience in contracting with the United Nations Office for Project Services (UNOPS) for the procurement and delivery of necessary medical equipment and supplies as part of the COVID-19 response.

81. **Use of Hands-on Expanded Implementation Support (HEIS) was requested by the GoTv given the MoH's limited experience in managing World Bank-financed projects and has been agreed to.** HEIS is adopted for the Project pursuant to section III para 3.10 of the Procurement Regulations for the period of the first 18 months of the Project and, thereafter, will be reviewed. The HEIS will include, among other activities: (a) drafting Procurement Documents; (b) identifying strengths and weaknesses of bids/proposals; (c) observing dialogue and negotiations with bidders/consultants; and (d) drafting procurement reports and contract award documentation. The HEIS does not substitute for the Government's decision-making authority. In every situation, the procurement decisions at key stages will always remain the responsibility of the MoH (supported by the CPMO or the MoH PMU). The World Bank's provision of HEIS does not constitute decision-making on behalf of the MoH.

82. **The World Bank's oversight of procurement will be carried out through Project supervision, implementation support/HEIS, World Bank's prior review and ex-post review.** The MoH (initially supported by the CPMO until the MoH PMU is established) will ensure timely uploading all the procurement related documents into the STEP. The details of the implementation support and post-review arrangements will be elaborated in the PPSD.

83. **The major risks to procurement include:** (a) the remoteness of Tuvalu has a significant and often unpredictable impact on market interest and the financial proposals submitted; (b) the procurement activities include fairly large works in the expanded capacity of PMH and a large technical assistance package to do the detailed functional planning and design; (c) there is no experience at the MoH with World Bank's Procurement Regulations; (d) delays in procurement are expected with processing and approval of planned procurement activities; and (e) there are multiple stakeholders (NISC, MoH, MoF/CPMO, DPW) and coordination may be challenging. The procurement risk will be mitigated by (a) orientation on World Bank Procurement Regulations and the use of the STEP system; (b) specific/targeted training on procurement procedures and contract management; (c) procurement technical support from CPMO; (d) refresher training on the Procurement Regulations and contract management; (e) contracting of hospital planning and engineering expertise to provide procurement planning, market research, procurement, and supervision advisory services; and (f) and HEIS by the World Bank for the initial 18 months of implementation.

C. Legal Operational Policies

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

D. Environmental and Social

Gender

84. **Disparate health needs of women reflect the broader socio-economic context of gender equality in Tuvalu.** Tuvalu has nondiscriminatory laws in place to provide equal opportunities and its constitution upholds the fundamental human rights and freedoms of every person regardless of their sex, political opinions, and place of origin, color, and religious beliefs.[59] However, women still face social and cultural barriers, whereby women normally stay at home and care for children while men tend the subsistence farm or other types of work outside of the home. Violence against women is recognized as a significant problem. According to the 2016 HIES, 55.4 percent (4,400) of Tuvaluans aged 15 and over were in the labor force, with a significant gap between men and women: 71.2 percent of men and only 38.3 percent of women took part in the labor force. Government statistical reports and policy documents are not consistent in analyzing gender differences in outcomes or access to services and, therefore, there are no explicit strategies for responding to gender-based differences. This is also the case in the health sector.

[59] United Nations Committee on the Elimination of Discrimination against Women, Combined third and fourth periodic reports of States parties: Tuvalu, 2012.

85. **The Project will reduce the existing gender gaps in the screening, detection, and management of NCDs.** Globally, gender disparities exist in the prevalence, treatment, and outcome of NCDs with females disproportionately affected. NCDs in Tuvalu have increased by 12 percent from 2009 to 2019[60] and account for the top 4 causes of deaths as well as the top 3 causes of disability for the same period, influencing the country's strategic planning and prioritization of resources.[61] There is some disparity in the gender distribution of risk factors as reported from the STEPwise Approach to NCD Risk Factor Surveillance (STEPS) Survey 2015, revealing that adult obesity has a prevalence of 55 percent in males and 71 percent in females for the adult population. With almost three in four women classified as obese, this poses other health risks such as increased chances for complicated pregnancies and childbirth which include among others, pre-eclampsia, gestational diabetes, and gestational hypertension. These conditions are linked to unfavorable maternal, neonatal and child health outcomes. There are some other gender-related gaps for NCDs identified from the STEPS 2015 survey[62] and Annual Health Reports.[63] The first gap is the lack of sex-disaggregated data for routine reporting in terms of NCD screening, risk factor identification, clinic attendance, disease specific diagnosis, treatment compliance and mapping disease complications. While the NCD Strategic Plan 2017-2021 recognizes the disaggregated data collected from the STEPS Survey 2015 and has set gender specific outcome targets, this is not reflected in the strategic components and key priority areas which guide annual reporting. This identified gap affects gender targeted risk communication, screening methodologies, interventions, and policies.

86. **Addressing this observed gender gap is in line with the actions identified in the Consolidated Gender Action Plan (CGAP) for FY2017–21,[64] which was developed to support the implementation of the World Bank's RPF.** The Action Plan supports actions to address the disproportionately high percentage of women affected by NCDs as one of the five priority areas of gender inequality. The proposed Project, through Component 1, aims to narrow the gender gap in NCD continuum of care in both Funafuti and the outer islands. The chain of care - from screening to management of NCDs - will be routinely measured and reported through appropriately disaggregated data including sex. As a result, the MoH will have supporting data to further target the health promotion messaging and interventions (supported under Component 1c).

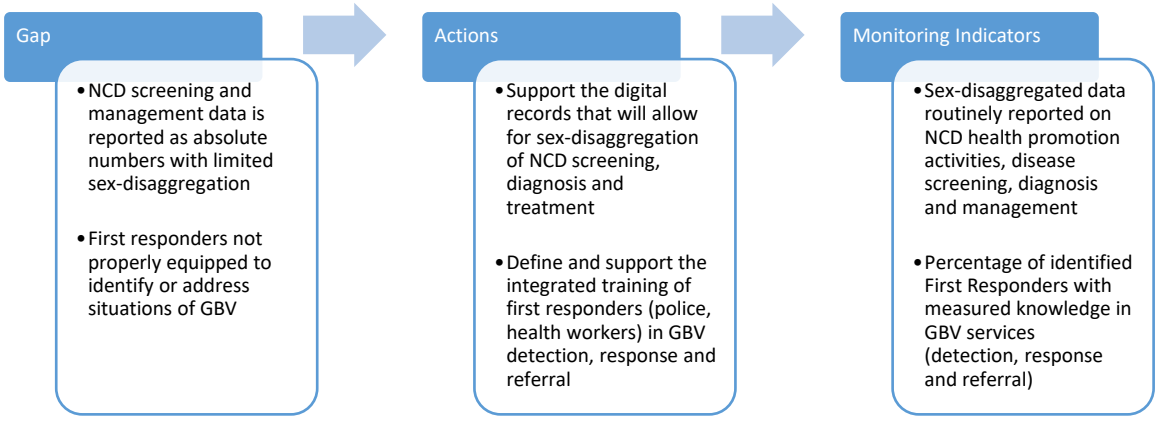
87. **Violence against women is recognized as a significant problem in Tuvalu.** The 2019–2020 Tuvalu MICS reported that 44 percent of women reported having experienced some type of physical or sexual violence in their life, 38 percent reported having been subjected to physical violence, 16 percent reported having been subjected to sexual violence, and 10 percent reported having been exposed to both forms of violence. The survey results indicate that almost all violence is committed by a person the woman knows, with their current or former partners being main perpetrators; moreover, in nearly 30 percent of instances, women suffered sexual violence by non-immediate relatives. Intimate partner violence is widespread, with 37 percent of ever-married women experiencing physical or sexual violence by a partner in their lifetime and 27 percent reporting experiences of such violence in the past 12 months. The 2019–2020 MICS also shows that rates of domestic violence against women are not linked to the place of residence (Funafuti or outer islands), employment status, educational level, or the woman's number of children. According to the findings of the Survey, women in Tuvalu were brought up to accept, tolerate, and even

[60] IHME
[61] NCD recognized as a priority in the National Strategy for Sustainable Development Plan 2021 – 2030 as National Outcome 10 and in the MoH NHSP 2020 -2024 as Key Result Area 2.
[62] Mini STEPS survey scheduled for 2021but postponed.
[63] Annual Reports 2018 -2019.
[64] CGAP for FY17–FY21. The action plan was developed in line with the framework laid out in the East Asia and Pacific Region's Companion Report to the World Development Report 2012 (World Bank 2011).

rationalize domestic violence and remain silent about such experiences. The MICS documents that only 34 percent of women experiencing physical or sexual violence sought any help. The majority of them sought help from informal sources (own family, friends, and neighbors). About 14 percent sought formal assistance from the police and 1 percent sought help from a lawyer. In discussion with local officials, it was also explained that women also have difficulty in leaving abusive situations because of severe housing shortages not allowing for any options for women to go. There are efforts of addressing GBV and the Government's health, social and legal services available, yet there are significant gaps in capacities to respond.

88. **The Project will provide support to the Gender Affairs Department (GAD) to develop capacities for responding to the needs of GBV victims**. Current support for GBV from development partners such as DFAT and New Zealand's Ministry of Foreign Affairs and Trade includes the provision of human resource support, staff capacity building and technical assistance. There are gaps in the (a) capacities of all potential first responders (police, health workers) to recognize signs of gender-based or domestic violence, sensitively interview the victims, take the necessary care, and provide necessary referrals; (b) there is no space to provide private and secure counseling at a place of convenience to the population, with counseling currently provided in social workers' vehicles; (c) there are currently insufficient numbers of trained counselors; (d) there is a house set up as a temporary shelter for victims of household/partner violence in Funafuti that caters to women and their children, but it is not welcoming and needs minor repair and security investments to make it more of a safe environment; and (e) victims often have to relocate with little of their possessions and require some minor assistance to make the transition from their household. The Project will provide GAD with technical and financial support necessary to address these gaps. The assessed gender gap, proposed interventions and potential monitoring indicators are represented in Figure 9.

Figure 9. Key Gender Assessment, Actions, and Indicators



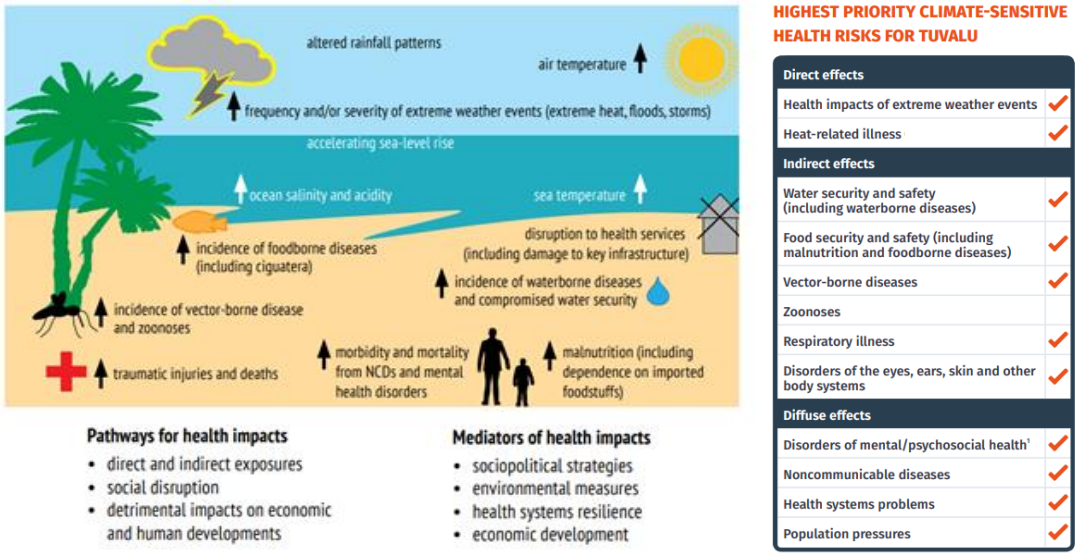
Climate Change

89. **Climate and disaster risk screening.** Overall, climate and disaster risk -- extreme precipitation and flooding, sea level rise, storm surge, and strong winds – is high for Tuvalu and therefore, will have a possible impact on the Project implementation and achievement of its objectives. Tuvalu's minimum air temperatures have risen 0.24 degrees Celsius (°C) per decade and maximum air temperature by 0.21°C per decade since 1950, while sea surface temperatures have risen 0.13°C per decade since 1970. The annual average air temperature and sea surface temperature will continue to increase in the future. No statistically significant changes in annual and seasonal

precipitation rates have been measured. Tuvalu has a high mean annual precipitation between 2,500 millimeter (mm) and 3,000 mm. Precipitation variability is high, with wet years receiving twice as much rainfall as dry years. Projections indicate that Tuvalu faces a potential long-term threat from permanent inundation and wave-driven flooding, and some studies have suggested that many of its low-lying islands will become uninhabitable within the twenty-first century. Mean annual precipitation rates have tended to be around 500–600 mm lower in Tuvalu's northern-most atoll, Nanumea, than in the capital Funafuti. Nanumea also experiences greater interannual variability with annual rates ranging from 1,000 mm to 4,000 mm between 2000 and 2010. On average, one TC passes within 400 km of Tuvalu's islands per year and exposes Tuvalu to high wind speeds, extreme precipitation, and storm surges, all of which cause significant economic and social damage. National infrastructure, including Government buildings, utility infrastructure, and the airport, lies in an area exposed to storm surge and tidal flooding and has experienced significant damage caused by previous disasters, in addition to numerous experiences with strong winds in the Project location.

90. **Severe weather events and climate change pose a threat to the health of the Tuvalu population.** Frequent tropical cyclones in the Pacific bring damaging winds, rains, and storm surges to Tuvalu. The impact of these cyclones can generate moderate to severe damage to buildings, infrastructure, and crops with significant economic and social losses. On average, 1 tropical cyclone passes within 400 km of Tuvalu's islands per year. The frequency and intensity of cyclones have increased and are expected to continue this trend due to climate change. Cyclones expose Tuvalu to high wind speeds, extreme precipitation, and storm surges, all of which cause significant economic and social damage. Tropical Cyclone (TC) Pam, which struck Tuvalu's northern islands in 2015, caused damages that resulted in more than 25 percent of national GDP. There is growing body evidence of climate changes impact on a population's health which are quite serious and will affect the most vulnerable segments of the population. Figure 10 illustrates pathways by which climate change is affecting health outcomes in the PICs. Of the potential impacts, all but the risk zoonoses (diseases transmitted from animals to humans) are of priority for Tuvalu do its severe vulnerability.

Figure 10. Pathways by Which Climate Change is Affecting Health Outcomes in the PICs and Priorities for Tuvalu[65]



91. **The Project will include activities to address the health sector's vulnerability to identified geophysical and climate related hazards through specific adaptation measures (see Annex 4 for a detailed activity description and financing allocations).** Despite producing very little greenhouse gas emissions that cause climate change, people living in the PICs such as Tuvalu are at the front line of climate change impacts. Since climate and geophysical hazards pose a significant risk to Tuvalu generally and since the Project is national in scope, the hazards are a significant risk to the Project outcomes in the near term as well as in the sustainability of the Project to contribute to the long-term socio-economic objectives of the country**.** The Project has been screened following the World Bank's Climate and Disaster Risk Screening Tool. The following is a summary of that assessment:

(a) **The main risks that have been identified are immediate extreme weather events including flooding, periodic drought and limited fresh water sources, and cyclones.** These risks are of such frequency and Tuvalu's infrastructure and population are so vulnerable that they are of moderate to high risk to the Project**.** In addition to the more immediate risks, there is also the risk of higher-than-average air and sea-water temperature, and rising sea levels. Under the different modeling scenarios, these are also considered as high risk given the magnitude and Tuvalu's general vulnerability.

(b) **The activities of the proposed Project are likely to be affected by these current and growing climate-related hazards**. First, these hazards will have a direct and indirect effect on the health of the population. There is the direct effect on the death and injury due to extreme weather events. As temperatures increase and there is projected to be prolonged periods of high temperature, this will cause heat-related illnesses such as heat stroke particularly for vulnerable people, such as the elderly. There will also be indirect effects on health, due to lack of` availability and safety of clean water for drinking and sanitation; food insecurity affecting immediate risks of malnutrition and long-term risk factors of NCDs, vector-borne diseases such as dengue, and other conditions. There will also be other general socio-economic pressures on the population which can impact mental health, GBV, alcohol, and other substance abuse. Table 3 below outlines the impacts that climate

[65] Adapted from the WHO report on "Human health and climate change in Pacific Island countries" (2015) and the Tuvalu Country Health & Climate Change Country Profile (2020)

change will have on NCD outcomes and risk factors. The Project, which will be attempting to make more services of better quality available to the population in Tuvalu and, therefore, will be under pressure due to the increased need to address these issues. Health service delivery has been and can be disrupted due to these events with travel disruption, damage to infrastructure and the impact of these events on the limited number of health workers and their families. The exchange of information and communications necessary to respond to these events can be disrupted. Therefore, the potential impact of these hazards on Project related activities is also considered to be either of moderate or high risk.

92. **The adaptive capacity and actions by the GoTv provide some mitigation of the above risks**. Tuvalu's voice as one of the most vulnerable small island nations, has become a force on the global stage in raising the alarm for urgent global action to safeguard populations everywhere, particularly given its extreme vulnerability. In a broader context, some of Tuvalu's adaptation projects include the development of a disaster plan and disaster response committees at the national and local areas; a plant-a-tree program, community water tank projects, investing in climate resilient infrastructure and seawall constructions. There are early warning systems in place for cyclones and droughts. Tuvalu also participates in the WHO Special Initiative on Climate Change and Health in Small Island Developing States (SIDS), launched in 2017 with the United Nations Convention on Climate Change with the vision that by 2030 all health systems in the SIDS would be resilient to climate change and variability. The initiative does provide several indicators to benchmark the situation and progress of the resilience of the health system. Tuvalu is receiving support through United Nations Development Programme and WHO with support from the Global Environment Facility towards making progress as well discrete assistance from bilateral partners such as Japan and Korea, to improve the resiliency of its health infrastructure.

Table 3. The Direct and Indirect Pathways from Climate Change to NCDs[66]

Climate change impacts	Pathway from climate change to NCDs	NCD outcome	Direction of health risk
Direct Pathways			
More frequent and increased intensity of heat extremes	Heat stress	CVD Respiratory Disease	Increased risk
Increased temperatures and less rainfall	Higher ground-level ozone and other air pollutants	CVD Respiratory Disease (e.g., bronchitis, asthma)	Increased risk
Changes in stratospheric ozone and in precipitation and cloud coverage	Increased exposure to solar UVR	Autoimmune diseases (multiple sclerosis)	Reduced risk
Extreme weather event (floods, storms)	Structural damage	Injuries	Increased risk
Indirect Pathways			
Drought, flooding	Impaired agriculture, reduced food yields, and nutrition insecurity	Poor general health	Increased risk

[66] Modified by the author from https://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-071910-140612

Climate change impacts	Pathway from climate change to NCDs	NCD outcome	Direction of health risk
Extreme weather event (flooding, storms)	Trauma	Mental health (posttraumatic stress disorder)	Increased risk
Extreme weather event (flooding, storms)	Impaired livelihood, impoverishment	Mental health (anxiety/depression)	Increased risk

Environmental and Social Risk Assessment

93. **The environmental risk rating for the Project is assessed as *Moderate.*** The Project aims to deliver significant environmental benefits through the financing of MWM and IPC improvements. The environmental risks and impacts are not expected to be significant and will be easily mitigated in a predictable manor through the implementation of the Project's E&S instruments. Various project activities such as equipping of the PMH and modernization of laboratory and radiology diagnostic services result in the downstream production of healthcare waste such as liquid contaminated waste (e.g., blood, other body fluids and contaminated fluids), infected materials (water used, laboratory solutions and reagents, syringes, bed sheets etc.), radioactive waste and expired pharmaceuticals.

94. **The Environmental and Social Management Plan (ESMP) has noted that medical waste is hazardous and has the potential to be infectious to humans, or cause injury and may contaminate the environment (land, groundwater, water courses and lagoon/ocean environments).** The MWM is challenging in small atoll environments, however this is somewhat mitigated by the relatively small volumes that will be produced by a population of less than 11,000 people and ongoing infrastructure investments (e.g., a MWM incinerator for Funafuti) and technical assistance activities (e.g., training and the development of IPC policies and procedures) that are being supported by partners such as the Asian Development Bank; UNICEF; Taiwan, China; SPC and WHO. Some equipment procured by the Project will also have associated occupational and community safety risks requiring specific training and procedures. Project activities will result in resource consumption during construction of the additional wing of PMH, and minor construction/renovation works in the outer island health clinics. Examples include the use of construction materials, aggregates, water, and energy.

95. **The ESMP has identified potential risks and impacts** associated with demolition, renovation, construction, and equipping/furnishing activities including increased dust and noise, sedimentation, minor hydrocarbon spills and waste disposal (potentially including hazardous materials such as asbestos and e-waste) and occupational health and safety risks. Operational risks and impacts, particularly for the PMH, relate to ongoing waste generation (general, healthcare, pharmaceutical etc.), grey water and sewage management and the equipping/furnishing of the PMH and other health facilities which will generate e-waste. As noted in the preliminary ESMP, the implementation of the Project will cause downstream risks and impacts such as inter-island travel and worker and community health and safety and waste disposal when working in remote locations. **A Labor Management Procedures (LMP) has been developed which identifies a range of risks** including: Possible non-observance of basic workers' rights (i.e., clear terms of employment, working hours, and prompt payment of wages); Workers' organizations freedom of assembly and collective bargaining; Possible discrimination in hiring and benefits (i.e., based on gender, religion or ethnicity); Possible engagement of child and/or forced labor by contractor or in the supply chain; Risk of Occupational Health and Safety (OSH)-related injuries to construction workers including manual handling slips and falls associated with poor housekeeping and risk of falls from elevation.

96. **A CERC-specific Environmental and Social Management Framework (ESMF) and CERC Operations Manual (including eligible CERC activities) will be prepared, disclosed, consulted, and adopted by the Borrower by the Project effectiveness or before activating the CERC component.** Technical assistance activities will lead to both environmental benefits (e.g., improved IPC practices from the development of Standard Operating Procedures (SOPs) and capacity building activities) and environmental risks and impacts (e.g., generation of medical waste and IPC risks from the health screening process). Technical assistance activities will also help mitigate other Project risks and impacts.

97. **The social risk rating for the Project has been assessed to be *Moderate***. The Project aims to deliver a range of social benefits in the form of improved medical services and facilities including in remote and vulnerable outer islands communities. This will benefit all citizens of the country through improved access to healthcare, facilities, diagnostic and treatment equipment, and drugs supply. There are generally low to moderate level risks related to construction phase and labor influx and sexual exploitation and abuse/sexual harassment (SEA/SH) risks, along with equity in access to Project benefits. The implementing agency is new to the Worlds Bank's E&S Framework and has limited exposure to E&S risk management, but an E&S specialist has been engaged by the CPMO. The Project includes the procurement of materials and equipment and providing associated training. The ESMP has assessed that there are human health risks to workers and communities that may result from misuse of, poor quality, and/or poorly managed medical equipment, materials and services arising from potential constrained ability to use the equipment and materials.

98. **The ESMP has assessed that there is a potential social risk related to equity in access for marginalized, vulnerable, or remote social groups to health screening services, and/or that screening programs are not administered in accordance with good international industry practice.** The Project has been assessed to have low labor influx risks for construction works for the new wing of the PMH and outer island health center upgrades. Tuvalu has high rates of GBV and SEA/SH. The Project's SEA/SH rating has been reassessed during preparation and remains 'low' for civil works due to a moderate scale of construction activities, limited labor influx in Funafuti, and location of civil works in an urban area in the instance of the new wing of the PMH, and small scale and limited labor influx for the outer island health center upgrades. The Project's preliminary ESMP has assessed SEA/SH risks and proposed appropriate mitigation measures.

99. **The Environmental and Social Commitment Plan (ESCP) commits the MoH to the implementation of a Code of Conduct for MoH staff and contracted workers including provisions for SEA/SH prevention e.g., via training curricula, SOPs for identification and services referral.** While there are functional GBV and SEA/SH services operating in Funafuti (the Tuvalu Family Health Association), the preliminary ESMP has assessed that the availability and capacity of outer island services is low. Resettlement impacts have been assessed to be unlikely, but will be managed through preparation of resettlement plans, if necessary, during the Project implementation.

100. **Disclosure of Environmental and Social documents.** The Project's ESCP and SEP were disclosed on the World Bank's website on May 22, 2022, and in-country on May 24, 2022.

Citizen Engagement

101. The Project recognizes that citizen engagement in the design and implementation of the Project are important to the achievement of the PDO as the delivery of quality essential health services must consider feedback from citizens on whether the availability and quality are in line with their needs, provide an appropriate environment for seeking care, is respectful and inclusive. A SEP was prepared as part of Project preparation. Key stakeholders

will include the health workers across the country from community-level to Princess Margaret Hospital and the general public. Project information will be shared in the most accessible platforms, which tends to be through Facebook and other social media platforms. Additionally, MoH will communicate with health workers through their routine supervision visits and health workers have primary contact with the public on health. To inform the public on screening and outreach, there will be community events, radio announcements and Facebook posts. The health system currently has no formal system for receiving or responding to public or patient feedback on the direction of the health system or quality of the health services. Therefore, the Project will support the design and operation of a public feedback system appropriate for the country context that would allow for broader public feedback, have SOPs for reviewing and responding to the feedback provided. The operation of the system would include making sure that any comments or complaints received are responded to in a timely and substantive manner following the SOPs (with a target of at least 80% of feedback are addressed). This information will also provide important feedback for monitoring the NHSP and, therefore, the feedback will be analyzed and summarized as part of the MoH's Annual Health Report. The Results Framework includes the following beneficiary feedback indicator: Public (Patient) Feedback Mechanism Informs Health Sector Performance and an intermediate indicator measuring the design and operation of the Feedback Mechanism.

V. GRIEVANCE REDRESS SERVICES

102. Communities and individuals who believe that they are adversely affected by a World Bank (WB) financed 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 http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

103. **The overall Project risk rating is assessed as substantial after taking into consideration mitigation measures incorporated as part of the Project design and planned for during implementation.** The key substantial risks identified are: (a) institutional capacity for implementation and sustainability; and (b) fiduciary. The ongoing COVID-19 pandemic remains a risk which is further described below. The substantial risks and mitigation associated mitigation efforts are further described below.

104. **The Institutional Capacity for Implementation and Sustainability risk is assessed as *Substantial* after mitigation efforts.** The Project would be the first World Bank financed project in the Tuvalu health sector. The Tuvalu MoH does not have any experience in directly implementing externally financed projects, given that support has largely been provided as direct technical and bi-lateral assistance from other partners. Given the very small country context, human resource capacity is understandably constrained. Even when available, most of the qualified

individuals would already be engaged in the public sector. One mitigation effort is already in place; the GoTv has established a professionally staffed CPMO in the MoF to provide direct support and advisory services in core Project management functions of coordination, procurement, FM, E&S standard compliance, and M&E. The HSSP will begin implementation with the CPMO providing initial Project management services to the MoH; once the MoH PMU has been established with minimum necessary staff and systems, the CPMO would shift to a more advisory and back-up role. DFAT has had, and is planning to continue to provide, an embedded technical advisor that will help with coordination and technical input. The design of the Project includes technical assistance that is expected to help ensure the sustainability of the investments such as the careful design of the expanded facility, which will include an assessment of their viability for provision in Tuvalu context. Additionally, the Project supports the development of routine maintenance plans supported by an Asset Management System. With the cost pressure of overseas medical referrals, any investment that requires an increase in recurrent cost financing from the budget is a concern. The Project design supports the building of service delivery capacity that should reduce the need for some overseas referrals and should also reduce the risk of developing severe NCD complications. In parallel to the Project, the World Bank has mobilized trust funds resources that will go towards analytical work and advisory services that will complement the Project objectives, such as analyzing the health service delivery models in remote communities, budget analysis to identify efficiency improvements, supporting the design of the digital tools and generally inform the design of the Project-financed technical assistance. The World Bank will provide intensive technical and operational implementation support, particularly in the early phase of the Project, as detailed in Annex 1.

105. **The Fiduciary risk is assessed as *Substantial,* following proposed mitigation efforts.** The FM risk is assessed as Substantial, and the procurement risk is assessed as Substantial. There is limited institutional capacity within MoH, and there is only a small pool of Tuvalu-based fiduciary experts, especially those with experience in FM and procurement processes of the World Bank, Asian Development Bank or similar. In recognizing that the lack of fiduciary capacity affects all World Bank-financed projects, GoTv has established a CPMO, within the MoF, with the necessary expertise to support procurement and FM functions to proactively mitigate the fiduciary risks. The limited experience challenges will be addressed by the advisory and training support to be provided by CPMO at the beginning of the project to ensure that sufficient FM arrangement, procedures and systems are established to that are acceptable to the WB. The CPMO will also monitor FM compliance throughout the project life and where necessary support the MoH PMU to address any gaps, including through periodic reviews of the assets procured under the Project and the process of registering those assets. The POM will include a section providing the guidelines for the asset verification process and reporting procedures for the items procured through UN Agencies (including UNOPS) by involving an independent verification process. The Tuvalu portfolio performance indicates that procurement and technical capacity shortages are the leading cause of delays in procurement processes and often contribute to poor contract management practices. The remoteness of Tuvalu has a significant and often unpredictable impact on market interest and the financial proposals submitted, and, for this reason, it is essential that thorough market analysis and supplier outreach are done by the MoH with support from the CPMO for each procurement activity. The Project will also allow for selection and use of UN Agencies for services and for procurement; this approach was successfully used to execute the procurement for medical equipment and other items under the CERC mobilized to support the COVID response. The use UN agencies or Force Account may be considered for minor works to upgrade the water, sanitation, and hygiene facilities in the outer islands given that these are small value procurements in remote and hard to reach locations. The procurement activities include fairly large works in the expanded capacity of PMH and large technical assistance package to do the detailed functional planning and design. As a mitigation measure, the Project includes the recruitment of technical assistance that will assist with the hospital design works but will also provide technical

assistance to assess the market and advise on the procurement and contracting strategy and will remain through contract supervision. The CPMO will undertake the initial procurement activities for recruitment of PMU staff. While many positions will initially target the national market, the Project will remain flexible to include the option of international selection. Once the MoH PMU is established, the CPMO will continue to provide support for the implementation of the Project. The Government requested additional dedicated procurement and technical support using HEIS during the first 18 months of the Project, and the Bank has agreed to the request. The continuation of the HEIS may be considered beyond the first 18 months of the Project as well. However, despite these mitigation efforts and due to the difficulty in institutional capacity and due to the market environment, the residual risk remains as Substantial. These ratings will be reassessed during Project implementation depending on the results of the mitigation measures.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Tuvalu
Health System Strengthening Project

Project Development Objectives(s)

The Project Development Objectives (PDOs) are to improve delivery of select health services, strengthen health management systems, and in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets			End Target
			1	2	3	
Improve Delivery of Select Health Services						
Increase in the availability of essential hospital services at Princess Magraret Hospital (Text)		No service improvement	Functional Design of Hospital Completed based on Agreed Service Delivery Plan	Physical expansion and Human Resource Development Plan in Progress (refer to IR Indicators)	Physical expansion and Human Resource Development Plan in Progress (refer to IR Indicators)	Availability of services increased at PMH in at least four service areas
Increase in the Diagnostic (radiological and laboratory) Capacity (Text)		No increase in capacity	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Availability of Tracer Services Defined as part of agreed Service Plan
Increase in the General Surgery Capacity (Text)		No increase in capacity	Physical expansion and Human Resource Development Plan in Progress (refer to IR	Physical expansion and Human Resource Development Plan in Progress (refer to IR	Physical expansion and Human Resource Development Plan in Progress (refer to IR	Availability of Tracer Services Defined as part of agreed Service Plan

Indicator Name	PBC	Baseline	Intermediate Targets			End Target
			1	2	3	
			indicators)	indicators)	indicators)	
Increase in the mental health and counseling capacity (Text)		No increase in capacity	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Availability of Tracer Services Defined as part of agreed Service Plan
Increase in the Integrated NCD Management Capacity (Text)		No increase in capacity	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Physical expansion and Human Resource Development Plan in Progress (refer to IR indicators)	Availability of Tracer Services Defined as part of agreed Service Plan
Increase in the percentage of screened adults with a 10-year cardiovascular disease (CVD) risk ≥30% or with existing hypertension or diabetes that are being managed for their condition (Percentage)		0.00	25.00	30.00	45.00	50.00
Percentage of Managed NCD Patients - Female (Percentage)		0.00	50.00	50.00	50.00	50.00
Percentage of Managed NCD Patients - Male (Percentage)		0.00	50.00	50.00	50.00	50.00
Strengthen Health Management Systems						
Public feedback mechanism operational, feedback analyzed and published in Ministry of Health, Social Welfare and Gender Affairs' Annual Report (Text)		No established system for receiving or responding to public or patient feedback (complaints, feedback, suggestions, comments)	Design of the Public Feedback System Agreed	Analysis from Public Feedback System included in Annual Health Report	Analysis from Public Feedback System included in Annual Health Report	Analysis from Public Feedback System included in Annual Health Report

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Improve the Availability of Essential Public Health and Health Care Services Provided at PMH								
PMH Physical Capacity Increased (Text)		No extension of PMH	Service Delivery Plan Agreed	Functional Design of the Hospital Agreed	Construction Commencing	Handover of constructed and equipped facility	Needs Assessment Underway	New PMH Wing Constructed, Equipped and Put into Operation
PMH Human Resource Capacity Increased (Text)		No Plan	Human Resource Development Plan Defined in Accordance with Agreed Service Plan	HR Development Under Implementation in Accordance with Plan	HR Development Under Implementation in Accordance with Plan	HR Development Under Implementation in Accordance with Plan	Human Resource Development Plan under preparation	HR Development Plan Implemented including (i) contractual human resources through teleconsultation or in-country assignments; (ii) short-term training of PMH health professionals; (iii) short-term stays of visiting medical teams
Strengthen the Delivery of Primary Health Care and Primary Prevention, with a Focus on NCDs								
People who have received essential health, nutrition, and population (HNP) services (CRI, Number)		0.00	34,233.00	68,466.00	102,699.00	136,932.00	171,165.00	239,631.00
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)		0.00	17,288.00	34,575.00	51,863.00	69,151.00	86,438.00	121,014.00
Number of children		0.00	250.00	500.00	750.00	1,000.00	1,250.00	1,500.00

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
immunized (CRI, Number)								
Number of women and children who have received basic nutrition services (CRI, Number)		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of deliveries attended by skilled health personnel (CRI, Number)		0.00	250.00	500.00	750.00	1,000.00	1,250.00	1,500.00
Adult Population Screened for Non-Communicable Disease (Percentage)		0.00	0.00	5.00	10.00	20.00	35.00	40.00
Percentage of Adult Population Screened that are Female (Percentage)		0.00	0.00	50.00	50.00	50.00	50.00	50.00
Percentage of Adult Population Screened that are Male (Percentage)		0.00	0.00	50.00	50.00	50.00	50.00	50.00
Number of health facilities maintaining service readiness according to guidelines (Number)		0.00	9.00	9.00	9.00	10.00	10.00	11.00
Progress Against MANA Framework for NCD Primary Prevention (Number)		42.00	42.00	45.00	45.00	47.00	47.00	50.00
Percent of identified First Responders with knowledge to provide appropriate GBV services (detection,		0.00	0.00	25.00	40.00	60.00	70.00	70.00

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
response and referral) (Percentage)								
System established for collecting sex-disaggregated data on screening and management of NCD patients (Yes/No)		No	No	No	Yes	Yes	Yes	Yes
Supporting the Development of Management Systems								
Asset Management System Established and Maintained (Text)		No Asset Management System exists	No Asset Management System exists	Terms of Reference for Asset Management System Agreed	Asset Management System Under Development	Asset Management System Established	Asset Management System Operational	Asset Management System with an inventory of all major medical equipment and physical building assets established and maintained
Strategy determined for having functional and fit for purpose Hospital Management Information System (Text)		Current Hospital Management Information does not fully work across hospital departments, is designed for a large tertiary facility, includes text in foreign characters, and is not sufficiently maintained.	Same as baseline	Design of HMIS Review Agreed	Assessment of HMIS Review Initiated	A thorough review of the current HMIS and a replacement options paper would be completed.	A strategy would be agreed for adapting or replacing HMIS with a costed and specific action plan	A strategy would be agreed for adapting or replacing HMIS with a costed and specific action plan
Public Feedback System Designed and Established for the Health System (Text)		No System in Place	Terms of reference for the design of the public feedback system agreed	The detailed design of the public feedback system initiated	A public feedback system designed and operation initiated	A public feedback system is operational	A public feedback system is operational	A public feedback system is operational

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Increase in the availability of essential hospital services at Princess Magraret Hospital	A service delivery assessment would be conducted in Year 1 and from that assessment agreement would be reached on a specific enhanced service delivery capacity at PMH. It is expected that tracer services would be agreed in four categories: (i) diagnostic, including radiological and public health; (ii) general surgery; (iii) mental health; and (iii) integrated approach to NCD management. The PDO indictor will measure the process of developing the PMH and ultimately the final target would be that the defined tracer services are in place and functional.	Semi-Annual following the mid-term review	Project Progress Reporting	Project Monitoring by MoH	MoH and MoH PMU
Increase in the Diagnostic (radiological and laboratory) Capacity	Tracer Services to be Defined as part of Agreed Service Plan	Semi-annually, following	Project Monitoring System	As reported by the MoH/PMH	MoH and MoH PMU

		mid-term review			
Increase in the General Surgery Capacity	Tracer services to be defined in Service Plan	Semi-annual, after mid-term review	Project Monitoring System	As reported by MoH	MoH and MoH PMU
Increase in the mental health and counseling capacity	Tracer Services to be defined as part of agreed service plan	Semi-annual, after mid-term review	Project Monitoring System	As reported by MoH/PMH	MoH and MoH PMU
Increase in the Integrated NCD Management Capacity	Tracer services defined as part of the agreed service plan	Semi-annual, after mid-term review	Project Monitoring System	Reported by MoH/PMH	MoH and MoH PMU
Increase in the percentage of screened adults with a 10-year cardiovascular disease (CVD) risk ≥30% or with existing hypertension or diabetes that are being managed for their condition	Numerator: NCD Patients who have had a follow-up visit in the last six months Denominator: Total Number of Screened adults with a 10-year CVD risk ≥30% or with existing CVD	Semi-Annually	System designed to monitor screening and management of chronic disease patients	Summary information from the different health clinics and outpatient department at PMH	MoH and MoH PMU
Percentage of Managed NCD Patients - Female	Sex-Disaggregation of the parent indicator (Female)	Same as parent indicator	Same as parent indicator		Same as parent indicator
Percentage of Managed NCD Patients - Male	Sex-disaggregation of parent indicator (male)	Same as parent indicator	Same as parent indicator	Same as parent indicator	Same as parent indicator

Public feedback mechanism operational, feedback analyzed and published in Ministry of Health, Social Welfare and Gender Affairs' Annual Report	The definition of the operational public (patient) feedback system indicates that the system would have at least following four elements: (i) highly accessible to the population; (ii) would be receiving feedback (complaints, comments, suggestions); (iii) would respond to most of the feedback providers, i.e. more than 80%, through a process defined by standard operating procedures; and (iv) would analyze the feedback provided for informing the health sector performance.	Semi-Annual	Project Monitoring System and the Annual Health Report	Monitor progress according to Intermediate Indicator and monitoring the Annual Health Report	MoH and MoH PMU

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
PMH Physical Capacity Increased	Indicator measures intermediate steps towards the design and construction of the PMH Wing/Building	Semi-Annual	Project Monitoring System	As reported by the MoH PMU	MoH (PMH) and MoH PMU

PMH Human Resource Capacity Increased	The Human Resource Development plan will include plans and support for: (i) contractual human resources through teleconsultation or in-country assignments; (ii) short-term training of PMH health professionals; (iii) short-term stays of visiting medical teams.	Semi-Annual starting in 2025	Project Monitoring System	As reported from Contractor to PMU	PMU
People who have received essential health, nutrition, and population (HNP) services		Annually	Health Information / Service Delivery Reporting from the MoH. Baseline defined from 2019 MoH Annual Report (most recent available) showing 1171 inpatient cases and 33062 outpatient visits. Refers	Data reported from health facilities to the MoH on a routine basis	MoH (Statistical Department) and MoH PMU

			to cases/visits but not individual people. Targets estimated at least maintaining 2019 levels of health utilization. Number reported is cumulative from beginning of Project.		
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement)		Annually	Estimated as at least 50.5% of the total of the parent indicator	Estimated as at least 50.5% of the total of the parent indicator	World Bank estimates from reported Data
Number of children immunized		Annually	Immunization Register	Total number of children seen in child health clinic in the country and receive immunization following National schedule for	MoH Statistical Department to the PMU

				routine immunization schedule. Baseline in 2020 - 346 Baseline in 2021 - 286 Consequently provision estimated at 250 per year Value of data is cumulative from the year assessed and previous years	
Number of women and children who have received basic nutrition services		Assess Measurement	Currently not measured in Tuvalu	Discuss measurement - currently not measured	MoH Statistical Department report to PMU
Number of deliveries attended by skilled health personnel		Annually	Delivery register	Total number of deliveries in the country - deliveries are all attended Baseline data in 2020 327 Baseline data in 2021 282 Therefore, deliveries estimated at 250 annually Figure reported is cumulative from the beginning of the year	MoH Statistical Unit to the MoH

Adult Population Screened for Non-Communicable Disease	Numerator: Defined as adult population (age over 30), disaggregated by male and female, screened for having or the risk of developing hypertension and/or diabetes mellitus; Denominator: Estimate of Adult Population over the age of 30	Semi-Annually	System established to track screening and management of NCD patients	To be tracked as part of a digital electronic medical record system	MoH and MoH PMU
Percentage of Adult Population Screened that are Female	Sex-disaggregation of parent indicator (female)	Same as parent indicator	Same as parent indicator	Same as parent indicator	Same as parent indicator
Percentage of Adult Population Screened that are Male	Sex-disaggregation of parent indicator (male)	Same as parent indicator	Same as parent indicator	Same as parent indicator	Same as parent indicator
Number of health facilities maintaining service readiness according to guidelines	A routine system for measuring and monitor the service readiness of health clinics will be established and routinely measured	Semi-annually	System to be established with Tupaia Platform for providing a routine check on service readiness (including human resources with defined training, medical	As measured	MoH and MoH PMU

			equipment, essential medicines and supplies), including dashboard for easy comparison.		
Progress Against MANA Framework for NCD Primary Prevention	The MANA Framework refers to the Dashboard for Noncommunicable Disease (NCD) Action, developed by the Pacific Monitoring Alliance for NCD Action (MANA). An area in green means that it is in progress. The number of stars assess the degree of implementation. 105 stars total possible across 8 domains.	Annually	https://pacificdata.org/health-dashboard	National monitoring and self-reporting with justification for improvement	MoH with peer review from technical agency such as WHO or SPC
Percent of identified First Responders with knowledge to provide appropriate GBV services (detection, response and referral)	First responders would include counselors, police cadre and specified health workforce. Numerator = those who have been trained according to the guidelines and who demonstrate increased knowledge (i.e. through pre-	Semi-annual	Project Monitoring System	Ensuring the counting of trained first responders, disaggregated by gender	MoH PMU and the Social Welfare and Gender Affairs Department

	test and post-test analysis). Denominator will be defined as part of the program development.				
System established for collecting sex-disaggregated data on screening and management of NCD patients	This will measure the availability of a digital tool to track individuals who have been (i) screened; (ii) risk ratings identified; and (iii) are being managed for hypertension or diabetes or at high risk of developing the diseases. The system would be able to disaggregate the data by sex.	Semi-annually from 2024	MoH Project Monitoring System	Reported by MoH to the PMU	MoH and MoH PMU
Asset Management System Established and Maintained	The Asset Management System is system with an inventory of all significant assets (medical equipment, information systems, information communication technologies, physical buildings) that would improve the life-cycle approach to managing those assets.	Semi-annually	Project Monitoring System	As reviewed and confirmed between the MoH and World Bank during implementation supervision visits	MoH and MoH PMU
Strategy determined for having functional and fit for purpose Hospital Management Information System	The strategy will include an assessment of the existing system and the health information echo-system; definition of the	Semi-annually from the mid-term review	Project Monitoring System	Project Monitoring System	MoH and MoH PMU

	functionality (clinical, administrative, technical) required; definition of the context in terms of human resources, technical capabilities, etc.; analysis of options to replace or update of the HMIS based on cost and feasibility; and detailed plan based on the preferred option.				
Public Feedback System Designed and Established for the Health System	A public feedback will be designed and put into operation that will include: (i) highly accessible to the public; (ii) receives feedback on a regular basis; (iii) response is provided to the feedback provider (i.e. at least 80%), according to standard operating procedures; and (iv) informs health sector performance.	Semi-Annual starting in 2024	Public Feedback Monitoring System	Reported by MoH to PMU	MoH and PMU

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Tuvalu
Health System Strengthening Project

1.1. The Implementation Support Plan for the Project has been developed based on the specific nature of the Project activities, lessons learned from past operations in the country and sector, and the Project's risk profile in accordance with the Systematic Operations Risk-Rating Tool. The plan will be reviewed once a year to ensure that it continues to meet the implementation support needs of the Project.

1.2. Strategy and approach for implementation support. The implementation support strategy is based on the combination of several mechanisms that will enable enhanced implementation support to the GoTv and timely and effective monitoring. The mechanisms to be employed comprise (a) intensive supervision and handholding, especially during the first year or two of implementation; (b) regular technical meetings between the MoH, CPMO and the World Bank; (c) provide virtual support even when travel to Tuvalu becomes available; (d) field visits to Tuvalu and selective outer islands when possible; (d) regular monitoring by the CPMO and then MoH PMU particularly on procurement progress; (e) stakeholder engagement discussions during field visits; and (f) mobilization of support from partners for technical engagement.

1.3. The World Bank FM, procurement, social, and environmental specialists who are based in the country office will play a vital role in successful Project implementation support, given that the Project includes capacity building in these areas for the department/directorate, hospitals, and/or communities. These World Bank specialists, in collaboration with the task team leader and team, are expected to provide timely, effective, and intensive support to the client.

1.4. Implementation support missions. During the first year, the Project will have semiannual formal implementation support missions, with more frequent implementation support. The formal implementation support visits will be virtual or in-person depending on whether travel resumes. The semiannual missions will focus on review of the Project performance against the Results Framework, procurement progress, agreement on planned actions, as well as progress made on the E&S commitments. The scope of the implementation support mission will also include monitoring the GoTv's compliance with stipulated FM, procurement, ESMF, SEP and ESCP. One month before the formal review mission, the CPMO/PMU will provide to the World Bank a comprehensive progress report/presentation on Project activities. To ensure high quality and comprehensiveness of support considering the Project design, the World Bank team will comprise health specialists, economists, operations specialists, FM, procurement, safeguards, with the specific team composition for each mission determined based on the requirements at that time.

1.5. The first implementation support mission will take place shortly after Board approval, if the GoTV agrees, with a midterm review in April 2023, and the Project closure will be June 30, 2028. The focus of implementation support is described in Table 4. Considering the Project design, the estimated annual resources required for effective implementation support will be substantial, though it will be discussed and agreed with the sector unit and country management unit.

Table 4. Estimated Staff Time and Skills Needed for Effective Implementation Support

Focus	Skills Needed	Resource Estimate (SWs)	
		First 12 months	12– 48 months (Per year)
Team leadership and coordination	Task team leader	9	6
Technical reviews and support, including NCD management, hospital service planning, data systems, biomedical engineering	Health specialists and economist	12	9
Institutional arrangements and risk assessment	Operations specialist	8	4
FM and audit review	FM specialist	4	4
Procurement review	Procurement specialist	2	2
Social development	Social specialist	4	4
Environmental management	Environmental specialist	6	6

Note: SW = Staff week.

ANNEX 2: Tuvalu – MANA Dashboard for NCD Prevention

Domain		2019-2020
Leadership and Governance		
L1.	Multi-Sectoral NCD Taskforce	* *
L2.	National Strategy addressing NCDs and risk factors	* * *
L3.	Explicit NCD indicators and targets	* *
Tobacco – Preventive Policy		
T1.	Tobacco excise taxes	*
T2.	Smoke-free environments	* *
T3.	Tobacco health warnings	
T4.	Tobacco advertising, promotion and sponsorship	* *
T5.	Tobacco sales and licensing	* * *
T6.	Tobacco industry interference	
Alcohol – Preventive Policy		
A1.	Alcohol licensing to restrict access	* * *
A2.	Alcohol advertising	
A3.	Alcohol taxation	* *
A4.	Drunk driving	*
Food – Preventive Policy		
F1.	Reducing Salt Consumption	*
F2.	Trans-fat	*
F3.	Unhealthy food marketing to children	
F4.	Food fiscal policies	
F5.	Healthy food policies in schools	
F6.	Food-based dietary guidelines	* * *
Physical Activity – Preventive Policy		
P1.	Compulsory physical education in school curriculum	
Enforcement – Preventive Policy		
E1.	Enforcement of laws and regulations related to NCD risk factors	* *
Health Systems Response Programs		
H1.	National guidelines for care of main NCDs	* *
H2.	Essential drugs	* *
H3.	Smoking cessation	
H4.	Marketing of breast milk substitutes	
H5.	Baby friend hospitals	
H6.	Maternity leave and breastfeeding	
Monitoring		
M1.	Population risk factors prevalence surveys - adults	* * *
M2.	Population risk factors prevalence surveys - youth	* *
M3.	Child growth monitoring	* *
M4.	Routine cause specific mortality	* * *
Key Red: not present; Amber: under development; Green: present (*) low (**) medium (***) high strength of action		

ANNEX 3: Detailed Financial Management and Disbursement Arrangements

3.1. **Executive summary.** An FM assessment was carried out in accordance with the *Principles-Based Financial Management Practice Manual* issued by the World Bank on February 4, 2015, and further revised on February 10, 2017, and as further elaborated in the World Bank Guidance *Financial Management in World Bank-financed Investment Operations* issued by the World Bank on February 24, 2015. Under the World Bank's Directive: Investment Project Financing for projects financed by the World Bank, the borrower and the project implementing agency are required to maintain adequate FM arrangements—including planning and budgeting, accounting, internal controls, funds flow, financial reporting, and auditing arrangements—acceptable to the World Bank to provide reasonable assurance that the proceeds are used for the purpose for which they were granted in an efficient, economical, and transparent way. Overall, the proposed project FM arrangements meet the minimum requirement of the World Bank subject to the incorporation and implementation of the mitigating measures. The PMU within the implementing agency will be used to carry out the FM and disbursement functions for the project. The overall project risk is rated ***Substantial***.

3.2. **FM arrangements.** The MOH, through the PMU, will be responsible for coordinating the overall Project implementation including the fiduciary aspects of this project. The MOH lacks experience with WB projects' financial management (FM), budgeting, and disbursements. The CPMO[67] will provide initial support to the project to i) recruit the PMU staff, including the project accountant, ii) set up the project Designated Account (DA), iii) procure and set up the project accounting software system, iv) set the project charts of accounts (COA), and v) develop/adapt the FM section of the POM for the project. The CPMO FM specialist will provide support, guidance, and training to PMU and maintain close monitoring and advisory role throughout the project to ensure that FM controls and procedures are adhered to. The government counterparts in MOH have the mandate to monitor the project's financial and physical progress.

3.3. **Staffing.** The PMU project manager is responsible for overall project implementation including FM. A national project accountant and an administrative and disbursement assistant will be recruited in the PMU and will be responsible for the project's FM roles and responsibilities. The PMU Project accountant should be on board within three months of project effectiveness. Orientation and training of the PMU staff on fiduciary aspects of the project will be conducted by the CPMO. The CPMO will also monitor compliance with the FM processes of the project. The World Bank fiduciary team will continuously monitor project progress and guide as required.

3.4. **The Project Operations Manual (POM)** will included sections on budgeting, disbursement, funds flow and FM arrangements, M&E, internal controls, internal audits, and independent external audits. The CPMO has developed a World Bank Project's FM manual which will be tailored to the HSSP specific activities and requirements and incorporated as part of the POM. The POM will be developed and adopted within three months of the project's effective date.

3.5. **Budgeting.** The MOH and PMU are responsible for project budget preparation and monitoring. A detailed project budget (the 'Original budget') will be prepared at the start of the proposed project to cover the total

[67] The CPMO was established in 2021, within the Ministry of Finance (MoF) to strengthen the capacity of the Government of Tuvalu to implement World Bank-financed or co-financed operations. The CPMO oversees and provide hands-on support in the project coordination, preparation and implementation and provides capacity building for the government ministries implementing.

expenditure over the life of the project, including separate totals for each financial year of the project. The PMU will prepare a detailed implementation plan in line with the detailed project budget to specify the funding requirement for each component and activity. The PMU will prepare a project annual work plan and budget which must be approved by the MOH before submission to WB. The budget will have appropriate levels of details (for example, component or subcomponent) and submit periodic financial reports, including monthly reconciliation statements to MOH. The Project Accountant will be responsible for monitoring the project budget throughout the year. The budget should be reviewed and amended as required and should be consistent with the Procurement Plan for procurable items. The CPMO will provide guidance and support in the budget preparation process. A detailed annual budget will be prepared at least three months in advance of the start of each fiscal year (by September 31).

3.6. **Accounting.** The Project accounting is stand-alone, managed outside of the government accounting systems (Tech One accounting software). The Project will acquire and use a small business accounting software, generally QuickBooks to maintain project accounts, which is the responsibility of the project accountant with guidance from CPMO. Project charts of accounts will be developed to align with project sources and uses and ensure that the system developed can maintain accounting records that meet the World Bank's reporting requirements for this project. The project's financial statements will be prepared on a cash basis (IPSAS) and the POM should detail the process and procedures to be followed. The project accounting and reporting policies and procedures will also be adhered for all activities conducted by the UN Agencies, such as UNOPS, used or selected by the Project.

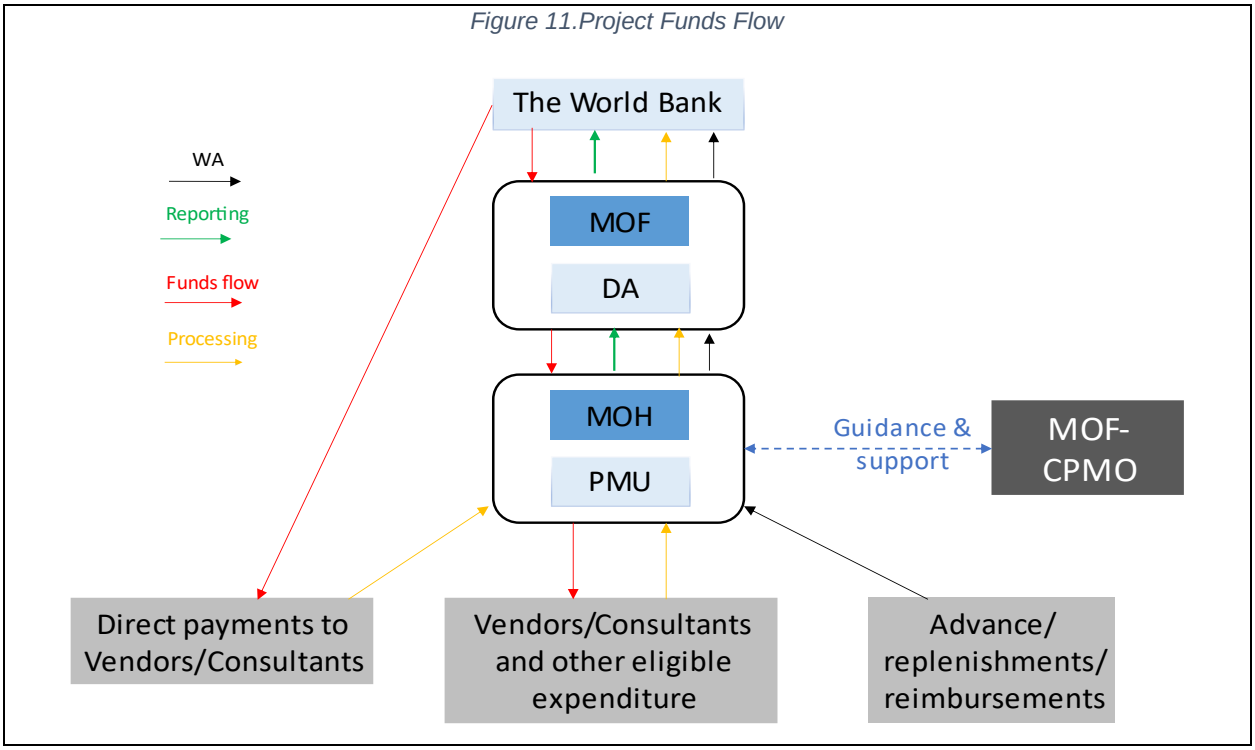
3.7. **Internal control.** The GoTV Financial Management Regulations (FMR) dictate the overall internal control framework. The CPMO manual outlines the internal controls and procedures that each project must comply with. However, compliance across the portfolio has been moderate. The risk should be mitigated by ensuring that the PMU is aware of the provisions and the CPMO should ensure that the PMU complies as it fulfills its oversight mandate. The POM will provide clear processes and guidelines for adequate segregation of duties, asset controls, and approval and authorization controls. The POM will include FM arrangement details on budgeting, disbursement, funds flow, and other related FM arrangements for HSSP. CPMO will closely monitor and provide the necessary support to PMU to ensure that adequate internal controls are in place and their compliance. The project implementing agencies will have mechanisms in place to monitor project implementation progress and quality assurance, including those conducted by the UNOPS.

3.8. **Government public fixed asset register and verification processes and procedure.** This project involves acquisition of various assets and therefore a better understanding of government public fixed asset register systems is essential for effective, efficient, and transparent management of public assets acquired. The project will conduct a review of the public sector accounting and asset management systems in MOH and support interventions to improve the public asset management processes and procedures in the MoH, as part of component 3a. This would lead to improved governance structure in the ministry. Moreover, CPMO will also conduct periodic verification of goods procured. The project will also engage verification agent for goods procured under the project, where and as needed.

3.9. **Funds flow.** Funds will flow from the World Bank directly into the Designated Account (DA) opened in Australian dollars (AUD) in the National Bank of Tuvalu. As soon as the project becomes effective, funding can be withdrawn up to the ceiling limit (AUD1M). Withdrawal Applications (WAs) will be prepared by PMU, but MoF staff will be the authorized signatories for approving the WA. The Project Accountant will be responsible for submitting the WA. The WA for replenishment of the DA will be based on the actual funds expended. The PMU

will maintain and submit an adequate project statement of expenditures (SOEs) as required. Direct payment from IDA will be used for large contracts (Figure 1.1). Special Commitment may be needed if goods are purchased from overseas. The specific requirements on UN advance and UN commitment for UNOPS contracts is stipulated in the Disbursement and Financial Information Letter (DFIL).

Figure 11.Project Funds Flow



3.10. **Periodic financial reporting.** The PMU in consultation with MOH, will prepare and submit in an agreed standard format Unaudited interim financial reports (IFRs) of the project at the end of each quarter, together with bank reconciliation, bank statement, contract commitment register, and fixed asset register. The financial reports will include an analysis of actual expenditure for the current period, year to date, and the cumulative to date, plus outstanding commitments, compared against the total project budget. The IFRs will need to be submitted no later than 45 days after the end of the fiscal year quarter. The PMU in consultation with MOH, and guidance from CPMO, will prepare the annual project financial statements (PFS) three months after the end of the fiscal year for submission to the Auditor general's office. The PMU will prepare annual PFS following the established accounting and reporting standards. All IFRs will be publicly disclosed.

3.11. **Auditing.**

a) **External audit:** The PMU will prepare the annual PFS and submit them to the Auditor general's office. The audited PFS with the accompanying audit report and Management Letter submission to the WB is due six months after the end of the fiscal year. There have been challenges with the quality of some project PFS in the portfolio and some delays in the submission of audited PFS. The PMU will coordinate closely with the CPMO to ensure the quality and timely submission of audited PFS. The

WB can request for in-depth value for money audit of the project if deemed necessary. The audited PFS will be made publicly available on the Office of the Auditor General's website.

b) **Internal audit**. Given the diverse and innovative project activities and the low in-country capacity, it is recommended that the project would undergo an internal audit to evaluate the adequacy and effectiveness of governance, controls, and risk management of the project. The CPMO has been performing a compliance role for the WB portfolio, however, it would be important to integrate this with government systems. There is an internal audit unit in the MoF but with capacity and human resource limitations. The project will explore opportunities to collaborate with the internal audit unit, how it can support project implementation, and the support this would require from the project. The specific roles and responsibilities of the IA will be described in the POM.

3.12. **Disbursement.** IDA financing of the project will be at 100 percent, inclusive of taxes; project expenditures eligible for IDA financing are in table 1.2 (Financing Agreement Disbursement Categories and Amounts). The disbursement method used under this project will be i) advance, ii) Special Commitment, iii) reimbursement and iv) direct payment. The DA ceiling will be AUD1M and the minimum application size for direct payment, reimbursement, special commitment (including United Nations commitments) would be set at AUD100,000. The DA will be segregated and opened in Australia Dollars in National Bank of Tuvalu. The DFIL and POM will further detail the disbursement aspects of the project. For larger project payments, the direct payment method can be used by the project, through MoF, and the withdrawal application enables funds to flow directly from the World Bank to the vendor/supplier. Supporting documentation for disbursements will be outlined in the DFIL.

Table 5. Financing Agreement Disbursement Categories and Amounts

Category	Amount of the Financing Allocated (Expressed in SDR)	Amount of the Financing Allocated (Expressed in US$ equivalent)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, consulting services, Training, and Operating Costs, for the parts 1, 2 and 3 of Project	11,200,000	**15,000,000**	100%
(2) Emergency expenditure under part 4 of the project	0	0	0
TOTAL AMOUNT	**11,200,000**	**15,000,000**	

3.13. **Use and Selection of UNOPS.** The project includes the option for use and selection of UN Agencies and specifically flags the potential use of UNOPS. In response to allegations of misconduct surrounding UNOPS nascent S3i sustainable infrastructure initiative, OPCS UN Program held corporate-level consultations with senior FM corporate officials. It was confirmed that the S3i governance system functioned completely separately from that that governs UNOPS regular operational service line, under which all World Bank projects. The UNOPS governance and internal system of controls for their regular operational service programming are based on the core principle that makes up UNOPS's Governance Risk and Compliance framework. UNOPS Delegation of Authority and Accountability Framework over financial matters covers HQ, regional offices, country offices, and individual projects. UNOPS's internal control framework consists of the five COSO components of (i) Control Environment, (ii) Risk Assessment, (iii) Control Activities, (iv) Information and Communications, and (v) Monitoring, which are

embedded in UNOPS's policies and procedures. A second line of control function is provided at regional and corporate levels. Lastly, third-line internal control mechanisms are covered by internal and external audits, as well as investigations. UNOPS's audits are publicly available and the Bank UN Program team reviews audit reports on a regular basis and makes reviews available to World Bank management for decision support services related to implementation of projects working with UNOPS.

3.14. **Eligible expenditure** means the reasonable cost of goods, works, and services required for the project to be financed out of the proceeds of the grant and procured, all in accordance with legal agreement and incurred prior to the Closing Date of the project.

3.15. **Disbursement conditions.** As noted in the Financing Agreement, no disbursement can take place under categories (2) subject to the disbursement condition detailed in Schedule 2, Section III.B.1.(b) of the Financing Agreement. This requires the following conditions to be met: (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; (b) the Association has agreed with such determination, accepted the said request, and notified the recipient thereof; and (c) the recipient has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association.

Table 6. FM Risks and Mitigation Measures

Description of Risk	Mitigation Measure	Responsible Party	By Date
PMU staffing and relevant qualifications in MOH	The project accountant is to be recruited within three months of project effectiveness and CPMO to provide onboarding and training services to ensure that the sufficient systems are set to support project implementation	PMU/CPMO	3 months after project effectiveness
MOH's lack of experience in implementing WB projects	The CPMO will provide adequate advisory and supervisory support to MOH and PMU to ensure understanding and compliance with required policies and procedures.	PMU/CPMO	After project effectiveness and throughout the project
Submission of Annual audit	PMU to inform the SAI on time for the Project audit to be included in the SAI work plan. To ensure timely and quality preparation of PFS and audit	PMU/CPMO	June of the next FY
Innovative and diverse project activities	The PMU to work closely with MOH to ensure project ownership. The MOH's focal point is to collaborate with PMU and CPMO to ensure adequate monitoring and oversight	MOH/PMU/CPMO	After project effectiveness and throughout the project

Description of Risk	Mitigation Measure	Responsible Party	By Date
UN Agency (UNOPS) procurement contract – adequate verification of goods delivered	The POM will include a section providing the guidelines for the verification process and reporting procedures for the items procured through UN Agencies (including UNOPS) by involving an independent verification process. In addition, CPMO will undertake periodic reviews of the goods procured and delivered and provide the status report to the Bank.	MOH/PMU/CPMO	After project effectiveness and throughout the project

3.16. **Implementation Support Plan.** The World Bank will maintain a core task team of dedicated specialists:

a. **Financial Management Specialist**. the World Bank will conduct regular financial management assessments to monitor compliance with fiduciary controls including budgeting and financial planning arrangements; disbursement status, management, and financial flows; internal controls (including quarterly financial reports, annual audited financial statements, and remedial actions, if any); accounting and financial reporting; and financial management facilitation.

b. **Formal supervision of financial management** will be undertaken as part of each formal implementation support mission. The specialists will complement the training and orientation given to the PMU by the CPMO if needed. The supervision strategy of this project is based on its FM risk rating, which will be evaluated on regular basis by the FMS and in consultation with relevant task team leader.

3.17. **Dated covenants.**

a. Appointment of Finance accountant as part of the PMU establishment three months after project effectiveness.

ANNEX 4: Climate Adaption and Mitigation Measures Under the Project

Project Subcomponents	Adaptation measures	Mitigation measures
Subcomponent 1a US$9.91 million equivalent	This includes a needs assessment, functional design, detailed design and construction of a building / wing of the Princess Margaret Hospital, the design of which would include adaptation measures to resist flooding, high winds, back-up energy systems, energy efficient temperature management for cooling, water collection and retention, and appropriate liquid and solid waste management systems. To respond to these risks, adaptation measures would comprise of building with weather resistant materials, passive ventilation for cooling, flood protection measures such as wider drains, roof and wall insulation, etc. It would provide improved health services in need due to extreme weather events and health conditions exacerbated by the climate change, such as non-communicable diseases. It would house an expanded public health lab that would improve the monitoring for vector- and water-borne diseases affected by the change in climate. It will include the purchase of digital-enabled medical equipment allowing for distant tele-health consultations. This equipment will help ensure climate vulnerable populations or communities can access to healthcare when disasters occur, as weather-related events and climate hazards can disrupt physical access to hospitals. It would support the relocation of the current waste disposal site to a higher ground to avoid medical waste washed to sea in flooding.	The design and construction of the PMH building/wing will include features such as cooling, lighting, back-up energy features (likely option is solar-powered, with accompanying social risk management measures in the ESMP and Labor Management Procedures (LMP) associated with forced labor in the supply chain[68]) and medical and laboratory equipment, which will consider energy efficiency measures (LED lighting and start certified equipment). With the increased capacity for service delivery in Tuvalu, the Project will reduce the need for overseas medical referrals and, thus, reduce the travel emissions for the patients and their caregivers.
Subcomponent 1b US$0.81 million equivalent	It would support the development and implementation of a health human resource development plan that would include options for enhancing the teleconsultation services with international health provides, which provide routine as well as back-up service capability in case of disasters.	
Subcomponent 2a US$2.35 million equivalent	Includes the support for building the service delivery capacity for delivery of essential primary health care services, focusing but not exclusively on NCDs. As shown in the sector	Within the activity to ensure the availability of NCD services at health clinics, the Project will ensure the availability of services close to home and thus reduce the need for referrals and

[68] In the Bank's assessment of the project design the solar component is not 'core'. i.e., it is not essential to the project or a specific project component, and without the solar panels/components the project or project component is still possible.

	context, the rising incidence of NCDs is in part due to the changing weather patterns. Essential PHC services include disaster response and injury treatment in case of severe weather-related events. The Project will develop a system and dashboard to routinely assess the service readiness of projects including pre-positioning of emergency supplies. Training of the PHC providers on NCD management would also integrate other areas of concern including emergency management and injury, prevention and management of heat-related illnesses which are directly related to the increased risk due to climate hazards. The component includes the digital health record for NCD patients that will improve the chance for telehealth consultation as opposed to in person referrals. The component includes the upgrade of the water, sanitation, and hand-hygiene facilities in the outer island health clinics, i.e., through improving and expanding the rainwater collection and storage facilities, functioning hand-washing stations with appropriate soaps, and functioning and environmentally appropriate latrines. The upgrade of the waste, water, sanitation, and hand-hygiene facilities is necessary as a result of needing to adapt to changing weather patterns. The Project will include climate resilience measures incorporated into waste and water facilities and would include risk assessment of waste and water facilities to flooding, cyclones, etc. Adaptation measures would include improving upgrading pipes to reduce leakage and reduce water loss or provide maintenance to infrastructure to reduce blockages as waste along with flooding could generate pipe obstruction.	transportation. With the support for training through teleconsultation, the Project reduces the need for travel to increase the skills and knowledge of health workers.
Subcomponent 2b US$0.67 million equivalent	The Project will finance activities in support of progress on the MANA Prevention of NCDs framework which includes preventive policies associated with Tobacco, Alcohol, Physical Activity and Food. The environmental context for access to healthy food and ability to do exercise is directly related to the changing climatic conditions which will mean that will then have to influence the options for nutritional guidelines and exercise. The Project will support the training of first responders for identification, care, and referral of GBV victims and GBV is	

	exacerbated, in part, due to the socioeconomic pressures related to climate change.	
Subcomponent 3a US$0.62 million equivalent	Includes improve the availability of quality health information including the availability and routine updating of information on health facility readiness, in case of hazardous event. It would also support coordination and integration of health information that is useful for routine and emergency health situations. The Project will review if support is necessary for the integration of heat-related illnesses in the public health reporting information as recommended by the Health & Climate Change country profile. Includes support for asset planning and management that would ensure routine maintenance of major medical equipment items preventing a deterioration due to increasing temperature, elevation against flooding, and other climate related risks.	The Project will provide technical assistance in support of planning priority rehabilitation, maintenance and asset management would also support the prolonged life span of the facilities and equipment and, therefore, be energy saving.
Subcomponent 3b US$1.45 million equivalent	The Project supports the hiring of engineering and environmental expertise providing support to ensure above referenced activities are undertaken.	

ANNEX 5: Development Partner and Technical Agency Support to Tuvalu's Health Sector

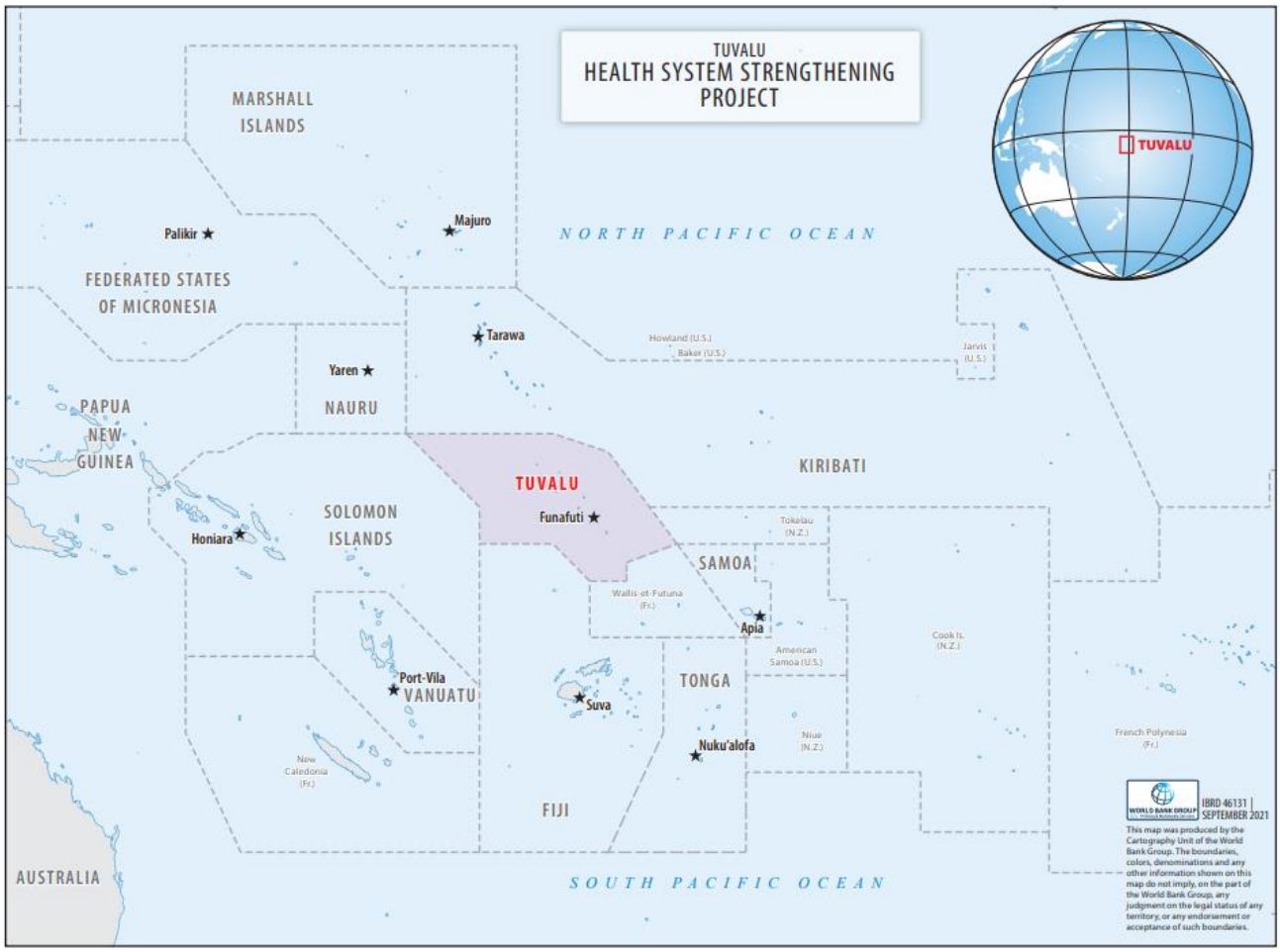
5.1 The following table illustrates the development partners who support Tuvalu's health sector, the focus of that support and indicative amounts. While the support has shifted since 2020 due to COVID (towards COVID response, surveillance, testing and COVID19 vaccination), it is expected that the development partner assistance will slowly shift back towards the pre-COVID19 priorities as the pandemic moves towards a more endemic phase.

Development and Technical Partner	2019*[69]
Australian Visiting Medical Team	100,000
Cuban Doctors (2018)	200,000
Global Fund for HIV/TB	150,000
Asian Development Bank Immunization Program - Introduction of new vaccines	2,500,000
New Zealand Medical Transfer Scheme	230,000
Japan Outer Island Facility Upgrades (2018)	200,000
Taiwan, China Medical Team	100,000
United Nations Population Fund Support on Reproductive Health	50,000
WHO - Public Health Functions and Health Systems Strengthening, including NCD prevention and PEN Package	130,000
Australian (DFAT) Advisor to the Health Department	120,000
Fiji National University (FNU) - Improved Specialized Clinical Services (2018)	15,775
Korean International Cooperation Agency (KOICA) Building climate resilient health systems	230,000
*indicates 2019 unless otherwise noted that the value is from 2018. This table does not capture non-budgeted technical support from regional organizations like SPC, UNICEF and others.	

[69] *Source:* Annual Report 2019. Tuvalu Ministry of Health.

ANNEX 6: Maps

Maps cleared as of May 25, 2022
Map no. IBRD 46131



Map no. IBRD 46132