Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 10/27/2023 | Report No: ESRSA02896

I. BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Tuvalu	EAST ASIA AND PACIFIC	P179599	
Project Name	Pacific Islands Regional Oceanscape Program - Second Phase For Economic Resilience: Tuvalu		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Environment, Natural Resources & the Blue Economy	Investment Project Financing	10/27/2023	12/8/2023
Borrower(s)	Implementing Agency(ies)		
Ministry of Finance and Economic Development	Tuvalu Fisheries Department		

Proposed Development Objective

For Tuvalu's second phase's project ("Tuvalu PROPER"), the proposed Project Development Objective (PDO) is to strengthen regional collaboration and national capacity for the management and the sustainable development of the oceanic and coastal fisheries sector in Tuvalu.

Financing (in USD Million)	Amount
Total Project Cost	13.05

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

No

C. Summary Description of Proposed Project Activities

The proposed PROPER project comprises three technical components aligned with the conceptional framework for project design under the PROP series of projects (SOP), as well as project management and monitoring.
Component 1: Strengthening Policy and Institutions
Component 2: Strengthening Regional Collaboration and National Capacity for Oceanic Fisheries
Component 3: Strengthening Regional Collaboration and National Capacity for Coastal Fisheries and Conservation of Critical Coastal Habitats

Component 4: Project management

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

Tuvalu is a volcanic archipelago and consists of three reef islands: Nanumanga, Niutao, Niulakita and six true atolls: Funafuti, Nanumea, Nui, Nukufetau, Nukulaelae and Vaitupu. At 2020 Tuvalu had a population of approximately 11,800 with an economy highly dependent on external aid with limited employment opportunities. Tuvalu has an exclusive economic zone (EEZ) of about 750,000 m2 making it the 38th largest EEZ in the world. The islands are low lying, some only 2m above sea level, and are geologically young, with most having poorly developed sandy or gravel coastline soils.

Tuvalu is in the Western and Central Pacific Ocean (WCPO) region, which covers 11 percent of the world's ocean area and is home to 22 small island countries and territories. The WCPO tuna fisheries account for more than half of global catch, representing a major source of revenue and foreign exchange, while coastal fisheries are essential for population wellbeing, therefore fisheries management is key to maintain those benefits.

Coastal fisheries in the region play a crucial role in supporting local livelihoods, national food sovereignty and security, nutrition and dietary health. Women are particularly dependent on coastal fisheries for economic opportunities, and the recently published Pacific Handbook for Gender and Social Inclusion in Coastal Fisheries and Aquaculture quotes research that found women's participation in fisheries in the Pacific is often over 50 percent. Traditionally, fish and seafood are primary sources of animal protein in Pacific Islanders' diets, although reef and lagoon fisheries are highly susceptible to over-exploitation. The WCPO, Tuvalu included, has rich marine biodiversity and ecosystems. Coral reefs, seagrass beds, mangroves and coastal wetland habitats provide vital protection from increasing threats from sea level rise, floods and storm events and help mitigate climate change through carbon sequestration. Although Pacific Island Countries (PIC's) coastal ecosystems produce some of the world's most significant marine biodiversity, the 2020 State of the Environment in the Pacific Islands report published by the Secretariat of the Pacific Regional Environment Program (SPREP) shows how ecosystem health and extent are diminishing under increasing pressure.

Tuvalu is facing increasing exposure and extreme vulnerability to the impacts of climate-change induced natural hazards. Other challenges include extreme geography and limited economic viability, lean institutional capacity, and unemployment, poor governance, and gender-based violence. Marine resources are one of the most precious natural resources of Tuvalu and fisheries is one of Tuvalu's priority sectors to stimulate economic growth and development. This is in the context of recent negative economic impacts due to COVID following Tuvalu's borders being closed from Mar 2020 to Dec 2022.

United Nations Pacific reports that Tuvalu has few exports and depends on revenues from fishing license fees, overseas remittances, dividends from the Tuvalu Trust Fund, and income from rent of the "dot tv" Internet extension. Poverty has increased in the last decade, particularly in urban areas. The World Bank Climate Knowledge Portal reports that in 2010 around 26% of Tuvalu's population lives below the national poverty line. The 2023 Global Multidimensional Poverty Index (MPI) shows that the main contributors to poverty are school attendance, nutrition

and housing. Tuvalu is classified as a Least Developed Country (LDC). Around three quarters of the labour force works in the informal economy, primarily subsistence farming and fishing. Most of the islands are built on coral and are not suitable for crop production beyond household needs. Underemployment, particularly of young people, is fuelling urbanisation of the capital, Funafuti. On outer islands, the reliance on natural resource-based livelihoods, namely fishing and agriculture is higher. With climate shocks to ecosystems, exposure to food insecurity increases and reliance on imported food (and associated weather induced supply chain delays), also increases, with consequent income security and health impacts. However, UNICEF (2017) in their Situation Analysis of Children in Tuvalu reports that the prevalence of food poverty is currently very low at around 3 per cent.

The PROP Second Phase for Economic Resilience (PROPER) will build on the first Phase. The proposed PROPER project comprises four components aligned with the conceptional framework for project design under the PROP Series of Projects, as well as project management and monitoring. Project activities will be located on Funafuti and the outer islands, in modified habitats and developed land. This project, focuses on strengthening fisheries in Tuvalu by improving institutional strengthening of the national fisheries program, with activities including transitioning the TFD into the Tuvalu Fisheries Authority (TFA), meeting flag and port state responsibilities, and strengthening seafood health monitoring. Component 2 aims to consolidate oceanic fisheries management, focusing on the harnessing of fisheries to the regional economy, enhancing domestic value-added, economic diversification, and employment. Component 3 will target regional collaboration and national capacity for coastal fisheries, through monitoring and management, alongside the development of research and problem-solving capacity for challenges like climate change and food security. Lastly, Component 4 will fund the project's day-to-day management and implementation, covering areas like E&S risk management, procurement, monitoring and evaluation, and coordination.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

TFD will be the implementing agency for the Project. TFD has established knowledge of WB policies and procedures , having implemented PROP first phase project under the Safeguard Policies, with a PMU consisting of a project management staff and a consultant E&S risk management specialist. The PMU will be responsible for the day-to-day project management, including FM, procurement, environmental and social (E&S) risk management, consolidation of workplan and budget, financial audit, compliance with WB ESF, (M&E) and learning system. As a small state, Tuvalu has limited access to E&S specialists thus are subject to capacity risks in the event that E&S risk management consultants are not available. Reflecting this, there were significant delays in recruiting consultants and delivering E&S instruments during the PROP 1st phase. While the existing PMU has experience implementing World Bank funded projects including E&S risk management, they have limited experience with the ESF and will require training and capacity development in this area. The PMU national E&S specialist for the PROP 1st Phase Project is retained, who has supported the preparation of the 2nd phase project. The Project will require a national E&S Specialist during implementation and will retain the hired national E&S specialist (subject to their availability). Environmental and social performance on the PROP 1st phase has been moderately satisfactory with some implementation challenges including: delays in recruitment of E&S specialist due to capacity constraints including limited availability of qualified E&S staff in country; limited E&S monitoring capacity due to travel restrictions during the COVID19 pandemic and the lack of a local E&S specialist.

Lessons learned will be carried across to the new project PMU such as the continued use of the support from the international E&S specialists where qualified local applicants are not available. A Central Project Management Office

(CPMO) was established in 2021 within the Government of Tuvalu Ministry of Finance (MOF) and will provide project management support and backstopping for the ESF. CPMO has an experienced local Environmental and Social Specialist and the recruitment of an international Environmental and Social Specialist is in process. The CPMO is providing support across the portfolio and will also provide support to PMU for this project. This will include support to appoint E&S consultants, review of documentation and ongoing support during project implementation. An international specialist E&S consultant was engaged during the preparation phase, to assist in the preparation of E&S risk assessments and instruments before appraisal. The consultant worked closely with the CPMO's E&S Specialist and the PMU's national E&S Specialist to prepare the E&S instruments.

At the national level, the Borrower is familiar with the ESF from the preparation and partial implementation of previous projects, including the Tuvalu Learning Project (P171681), Health System Strengthening Project (P175170), Maritime Investment in Climate Resilient Operations II (P177100) & Tuvalu Safe And Resilient Aviation Project (P180674).

This Borrower capacity and capability is considered adequate to support the integration of environmental and social risk management into the PROPER Project. Ongoing direct support including formal ESF training will be provided to the CPMO and TFD by WB to ensure the requirements of the ESF are satisfied.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — Moderate

A.1 Environmental Risk Rating — Moderate

The Environmental risk rating is Moderate, with mostly temporary impacts which will be managed through conventional E&S risk management approaches. The project is designed to have a primary positive environmental influence through improved fisheries management and sustainability. The potential risks associated with coral restoration initiatives may exert an impact on the reefs from which coral is sourced, if the planting materials are not harvested sustainably. Coral rehabilitation sub-projects that demonstrate the highest probability of success will be prioritized to strike a balance between potential negative and positive influences. This selection process will involve a thorough assessment and ranking of grant applicants, including the choice of locations with a high likelihood of successful restoration and regeneration. Potential environmental impacts could arise from upgrades to existing aquaculture facilities. These impacts will be evaluated, and specific mitigation strategies will be formulated during project implementation. An expert consultant will be engaged to conduct an E&S assessment of the proposed upgrades, in accordance with the Environment, Health and Safety (EHS) Guidelines for Aquaculture. These efficiency improvements may result in a slight rise in power and water consumption. Moreover, the procurement of exploratory fishing vessel and patrol vessel could generate waste or spill risks associated with their operation and maintenance. Activities tied to these vessels might engender Occupational Health and Safety (OHS) risks during training, equipment testing, maintenance, or performance of duties. Similarly, the testing and replacement of electronic equipment, alongside the deployment of office and ICT equipment, may result in minor, ongoing waste. However, these potential issues will be mitigated through the implementation of industry-standard Standard Operating Procedures (SOPs) for vessel operation and efficient electronic waste management practices for end-of-life electronics procurement within

the project. The construction of a watchtower may result in typical construction-related impacts, such as erosion the runoff of suspended solids; pollution and spills resulting from construction activities; need for solid waste management; noise and dust during construction, etc. Additional site-specific risk/impacts may also be applicable depending on the final site chosen for the watchtower. The possibility of future environmental and social risks and impacts, resulting from Technical Assistance (TA) for legislative and policy amendments, cannot be excluded. These will be evaluated for downstream risks and will identify a comprehensive list of suggested mitigation measures during the project implementation. These evaluations will be incorporated into the Terms of Reference (ToR) for each respective work scope. Positive environmental effects will result from capacity building within institutions, an outcome of the development of a National Fleet Management Policy which is expected to bring about a positive shift towards the sustainable management of fisheries. Additionally, TA efforts directed towards the drafting of legislation to curb illegal and unregulated fishing will yield favorable impacts on the environment and ecosystems. Furthermore, TFD training activities, encompassing topics like safety at sea, monitoring, control and surveillance, inspections, and product testing in the Sanitary Competent Authority (CA), are anticipated to exert positive effects. These activities are poised to enhance compliance within the private sector and strengthen local government monitoring of external fishing activities in coastal waters. Occupational health and safety and construction risks will be managed via the Environmental and Social Management Plan (ESMP) and Labor Management Plan (LMP), aligned with Good International Industry Practice (GIIP) and Environmental Health and Safety (EHS) Guidelines.

A.2 Social Risk Rating Moderate

The social rating is moderate. The project is a continuation of the previous PROP Phase 1. Component 1 activities largely include OHS risks and risks in the equitable distribution of project benefits. The social risk rating has been revisited during the preparation stage and remains at moderate. The project is of a moderate scale, not of high complexity, in locations of moderate sensitivity, but with a relatively large number of small scale, distributed activities. Impacts are largely reversible and able to be mitigated and managed through known and predictable methods. There is a low probability of serious adverse effects to human health with . Occupational health and safety risks are to be managed through the ESMP and LMP which are aligned to the Good International Industry Practice (GIIP) and Environmental Health and Safety (EHS) Guidelines. There are a range of activity -specific OHS activities Implementation of natural resource management plans (i.e. marine protected areas for coastal fisheries) may result in the loss of access to natural resources that support subsistence and customary livelihoods, and local food and income security. This is balanced against the project's positive livelihood and food security impacts as a result of sustainably and effectively managed natural resources and coastal fisheries. These risks will be managed through specific stakeholder engagement mechanisms including an education and awareness campaign.

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

B.1 Relevance of Environmental and Social Standards

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

The E&S impacts of project activities are mostly positive, strengthening the management of selected oceanic and coastal fisheries in Tuvalu will result in improved productivity and sustainability in fisheries resources. To address potential impacts, an Environment and Social Commitment Plan (ESCP), Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP) and Labor Management Procedures (LMP) have been prepared.

Consultation with key stakeholders were undertaken to inform these environmental and social risk management documents. Draft documents have been disclosed on 10 August 2023 on the Tuvalu Fisheries Department website.

These ESF instruments include component-specific environmental and social risk management mechanisms including: Environmental and Social Code of Practice, Code of Conduct for project workers, ineligible activity screening procedures assessment processes for specific sub-components with further design definition to come, Chance Find Procedure, training and procedures to be developed with technical assistance for OHS and equipment operations and maintenance.

General activities, which encompass various aspects of the project, may pose several potential impacts and risks, including: OHS risks for workers during equipment use, such as vessels and safety gear procurement; health and safety risks, especially related to vessel use, remote work, and COVID-19 transmission during fisheries and environmental surveys; Inadequate consultation during project activities, potentially resulting in missing key information and stakeholder concerns; Generation of waste, including electronic waste, packaging, and old safety equipment, requiring proper disposal and management; Site selection challenges for roll-up ramps and floating jetties, which may not meet community needs or cause land disputes and environmental damage; Downstream environmental and social risks associated with technical assistance for legislative and policy changes, which will be assessed during project implementation; Risk of underutilized project investments due to inadequate training and equipment maintenance. Most impacts have been rated as low risk, while safety risks associated with vessel use and certain surveys have been categorized as medium risk.

To manage these risks effectively, a screening and risk management process has been established, which includes: Screening activities against an Ineligible Activity List to identify and exclude unsuitable activities; Developing TORs for each activity, including detailed mitigation measures; Reviewing TORs by the PMU E&S Officer and WB E&S specialists before procurement notification; Addressing E&S concerns during the selection process for project procurement; Reviewing all deliverables to ensure adequate attention to E&S risks.

The purchase and operation of exploratory fishing vessel and patrol vessel could create OHS risks. These mainly consist of marine OHS risks, including risk of becoming lost/drown at sea, poor vessel construction, overloading, prolonged trips, limited safety, training or knowledge. Risks associated with operation include water quality impacts due to fuel spills or poor wastewater management. For fleet maintenance, risks include inappropriate disposal of lubricants and spare parts. Procurement of equipment to upgrade TFD IT infrastructure will require end of life management of e-waste. Management measures include, adding safety standards for equipment in bidding documents, review /inspection by suitability qualified person (e.g., naval architect) of procurement packages, responses to tender and received goods. During operational phase, the project will prepare and implement SOPs for Vessel Use (which includes mitigations for refueling and safety at sea) and Vessel Maintenance (which includes spill prevention and response; and disposal of hydrocarbon waste).

Mariculture activities such as milkfish farming have a potential to put additional pressure from fry harvesting and to pollute water systems with excess nutrients and fecal matter associated with increased concentrations. Furthermore, unsustainable sourcing of marine life for manufacture of milkfish feed pellets can negatively impact the sensitive ecosystems. The risks will be managed by ensuring that all mariculture activities to be aligned with IFC's EHS

Guidelines for Aquaculture. During implementation an international TA expert consultant will be tasked with carrying out an E&S assessment of the farming activities. The consultant's output will be reviewed by the PMU's E&S Officer and the WB E&S specialist to determine the level of risk and the need for further measures.

Unsuitable depth / site selection for Coral planting pilot has a potential to disturb the genetic biodiversity of the reef and can result in very low coral survival rate. Underwater surveys with collection of specimens with inadequate equipment etc. could have downstream OHS and environmental impacts and can incur damage to habitats or non-target species. In order to mitigate these risks, every rehabilitation project will need to prepare a RFP outlining specific requirements such as work plans, NGO experience, and safety risk management. This proposal will be reviewed by the PMU & WB E&S Specialists aligning with the E&S management guidelines.

TA, training and capacity development activities could potentially have downstream environmental impacts as a result of broader policy changes which aim to adopt regional conservation management measures and improve fisheries management. Environmental impacts are expected to be largely positive via development of a National Fleet Management Policy and drafting of improved regulations which should result in improved fisheries management, improving the sustainability of fisheries, and improved capacity in local institutions which may contribute to better compliance.

There are health and safety risks as a result of misapplication of sanitary, hygiene and product testing protocols associated with the establishment of a CA for monitoring seafood and fisheries products. These are managed through requirements in technical assistance TOR to develop detailed SOPs and establish an ongoing training program on seafood product hygiene.

Construction of a watchtower on Fuafatu islet in the Funafuti Conservation Area may result in risks including: erosion control and the runoff of suspended solids and pollutants resulting from earthworks, and the development of the exposed areas; pollution and spills resulting from construction activities, including the storage of fuels and vehicle plant refueling and handling of cement; solid waste management; minor site-specific environmental impacts including limited and offset vegetation clearance and minor disturbance of migratory nesting birds and other biodiversity during construction, and fire management. Designs for the watchtower and hut have not been finalised, thus the ESMP includes an assessment process and TOR for the preparation of a comprehensive of a C-ESMP to manage risks.

EHS concerns associated with the project are expected to be temporary, site specific/localized, and readily managed through detailed and differentiated management measures within the ESMP. The ESMP includes:

- Project description and characteristics of sites for the project.

- A breakdown of project sub-components and risks according to: general activities, coral rehabilitation, mariculture and watchtower design and construction.

- Detailed sub-component-specific management measures within the ESMP and LMP, including definition of risk mitigation measures including: including requirements in technical assistance TOR for E&S assessment, development of SOPs. Subcomponent E&S risk management measures include:

- an ineligible activity screening procedure,

- an ESCoPs for small infrastructure projects that include OHS measures,
- training program,
- specific measures for the construction and demolition activities associated with upgrade of the aquaculture farming area on Vaitupu and the Funafuti watchtower,
- operation of the Aquaculture in accordance with IFC's EHS guidelines on Aquaculture
- operations and maintenance of vessels; and
- code of Practice for Volunteer Workers.

The ESCP sets out the substantive measures and actions that are required for the Project to meet E&S requirements over the Project's lifetime. This includes requirements of the ESF and relevant local legal and good international industry practice (GIIP) in consultancy TOR and bidding documents; operational procedures and management plans and requirement for E&S specialists to review consultancy TORs and outputs to provide a 'No Objection' prior to finalization.

The project LMP sets out the ways in which project workers will be managed, including consultants, contractors, sub-contractors, community workers and primary suppliers. The project LMP establishes labor guidelines for all categories of workers and includes a Workers Code of Conduct, including for SEA/SH, and functional grievance mechanism for labor grievances, drawing on national laws and regulations and international best practices, as well as ESS2 to manage employment-related complaints. The LMP includes measures to minimize the risk of COVID transmission based on national COVID safety regulations and guidelines and the World Bank COVID-19 guidance for construction and civil works.

A SEP has been prepared to ensure effective, meaningful, inclusive and culturally appropriate stakeholder engagement during project preparation and implementation. The SEP identifies groups at risk of exclusion during project preparation and effective stakeholder engagement processes during implementation, with a focus on removing barriers to access for all (especially vulnerable groups) and developing tailored processes for the participation of remote communities. The SEP includes an accessible GRM.

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

ESS10 Stakeholder Engagement and Information Disclosure

ESS10 is relevant. The project recognizes the need for effective and inclusive engagement with all the relevant stakeholders, including those who will benefit from project activities. A Stakeholder Engagement Plan (SEP) has been prepared to reflect engagement to date and engage with stakeholders on the E&S risks of the project. The SEP has been disclosed on the TFD's official website. The SEP identifies and analyses key stakeholders (i.e., affected parties, other interested parties and disadvantaged and vulnerable groups), describes the process and modalities for sharing information on the project activities, incorporating stakeholder feedback into the Project, and define procedures for reporting on and disclosure of project documents. The key stakeholders will include but will not be limited to: local fishers and fishing communities – including beneficiary communities; local governments (kaupules and falekaupules);

owners and crew of Tuvalu-flagged fishing vessels; Vaitupu aquaculture operator and staff; fishing industry organizations and stakeholders; contractors, suppliers and and community and civil society organizations and representatives for fisheries, natural resource management including the beneficiary NGOs of the coral replanting activity, Fuligafou; regional agencies such as the Forum Fisheries Agency and Western & Central Pacific Fisheries Commission (WCPFC); vulnerable groups and NGOs representing vulnerable groups, including women's groups, disability advocates and youth representatives. Institutional stakeholders include: the Tuvalu Ministry of Finance, Tuvalu Fisheries Department, and the Tuvalu Central Project Management Office.

Consultation undertaken during the preparation phase has included a comprehensive and diverse range of community and fisheries sector level consultation, often over several years, both dedicated consultations for preparation of project components and as part of the TFD's business as usual community and stakeholder engagement. These have included against the following sub-components. Subcomponent 1.1a Establishment of a TFA: A national consultation comprising meetings in each island with the community (open meeting) and the island council was carried out from 16 May to 2 June 2023. More than 370 persons attended consultations across 8 islands. Subcomponent 1.3, Strengthening seafood health monitoring: The main stakeholders in this work are the operators of six purse seine vessels registered in Tuvalu. Annual meetings with these operators since 2019 – normally in September and/or October to discuss arrangements for the next fishing year - and have confirmed their strong interest and support. Subcomponent 2.2b Assessment and procurement of fisheries infrastructure: This included face-to-face meetings with kaupule and an open meeting for interested fishers arranged through the Fishers' Associations on each island between March and May 2021 to address vulnerabilities around fishing during hazardous weather. Subcomponent 2.2e Feasibility, assessing and developing of pilot low-carbon cold chains in outer islands: TFD Fisheries Advisers completing a tour of all islands in 2021 evaluating the condition of community fishing centres (CFCs) and undertaking face to face consultation with communities and fishers. CFCs are important methods for (more vulnerable) households who cannot fish themselves to purchase local fresh fish. Subcomponent 3.1b Progressing fisheries monitoring and management in outer islands: Key issues have been discussed and developed with communities during the TFD Metronome trips to outer islands through key informant and group consultations including with women and youth, and many trips include socio-economic surveys. Reports on 24 Metronome trips, which normally cover 2-3 islands, have occurred from June 2016 to August 2022 can be found on the TFD website .. Subcomponent 3.1c Strengthening the MCS of coastal fisheries in Funafuti: The establishment of the Funafuti Reef Fisheries Stewardship Plan has occurred through a series of five community meetings including women and young people between February and September 2017 (see also discussion in ESS5 below), in addition since 2018 there has been a strong desire to establish a watchman's hut to monitor and safeguard the conservation area. Subcomponent 3.2b Coral rehabilitation: Island-level face-to-face consultation has occurred with kaupule representatives from all islands during a visit to Funafuti for disaster training in March 2022. Subcomponent 3.2c Support to aquaculture: Consultation occurred on Vaitupu on the 21-25 September 2021, with more than 50 community members including all kaupule members, women, and youth groups. Subcomponent 3.2d Promoting giant clam production: Island-level consultation has occurred on Funafuti and Nukufetau, which are the islands with most suitable habitat for the two endemic species of giant clam, and where concern over depletion of giant clam in Tuvalu has been raised to the TFD since the mid-1980s by communities, kaupule, Government Ministers and MPs. The project also includes draft Terms of Reference to establish island-level Fisheries Steering Groups. These groups will be responsible for being a community voice on local fisheries matters, including project design and implementation. These groups are proposed to have diverse membership, including with representatives of island women's groups and island youth groups, and

will have an explicit responsibility to consider, understand the needs of vulnerable groups on the island, and to integrate these needs into the advice they provide.

Consultations have not identified specific issues relating to SEA/SH in relation to sub-component activities. Consultation methods to date, and those planned, have been designed with attention to different social groups and sociocultural norms that can impede participation and input into decision-making from socially disadvantaged people in a community. Consultations have been and will be carried out in English and Tuvaluan and in culturally appropriate formats. Future engagement modalities include virtual meetings, face-to face meetings, focus group discussions, newspaper, radio, local television, community noticeboards, website, social media (e.g., Facebook), messaging apps (e.g., Facebook messenger; WhatsApp). Strategies outlined in the SEP minimise close contact and follow recommended hygiene procedures as outlined in WHO guidance as part of COVID awareness. Further, the SEP outlines the Project's Grievance Mechanism (GM) which will enable stakeholders to raise project related concerns and grievances, including with respect to SEA/SH.

ESS2 Labor and Working Conditions

Workers likely to be involved in the project include direct and contracted workers and community workers. Primary supply workers are not expected to be involved in this project. Direct workers will include employees and consultants of the Project management Unit (PMU) and CPMO. Contracted workers will likely include selected private providers and construction workers. The use of forced labor or conscripted labor in the project is prohibited in any category of worker. Community workers have the potential to be present in the operations phase of the coral replanting components, milkfish farming and operation of the Funafuti Conservation Area watchtower and hut. Risks are primarily related to occupational health and safety (OHS).

Labour and working conditions risks include: risks of workplace accidents, or emergencies (OHS); Terms of employment not secured by contractual agreements; Workers may suffer discrimination and lack of equal opportunity in employment; SEA/SH, Gender Based Violence (GBV) in the workplace; and Use of child labour. The LMP and ESMP include measures to ensure that there are appropriate: terms and conditions of employment, nondiscrimination and equal opportunity (which includes a safe work environment free from violence and sexual harassment), freedom of association workers' organizations, restrictions on child and forced labor, and detailed and differentiated measures for occupational health and safety for the range of sub-components.

Occupational health and safety risks
The relatively large number of small and diverse activities requires a differentiated and sub-component-specific approach to OHS risk identification and mitigation. OHS risks associated with IT and communications upgrades are addressed in the LMP and ESMP and align with the OHS section of the IFC EHS Guidelines on Construction and Decommissioning, including multi-level risk assessment, site specific OHS and emergency response procedures, appointment of a health and safety officer at site, ensuring all personnel have appropriate licenses, as well as a functioning workers GRM. OHS risks associated with fisheries data collection and field surveys, which include boat handling; snorkeling; fauna interaction, will be managed through TORs for these activities including requirements for preparation of SOPs and/or Job Hazard Analyses (JHAs), and emergency preparedness and response procedures. OHS risks associated with the procurement and operations of the patrol vessel, exploratory fishing vessel, and vessel to

support operation of watchtower will be managed through the preparation and implementation SOPs for vessel use (which includes mitigations for refueling and safety at sea) and vessel maintenance (which includes spill prevention and response; and disposal of hydrocarbon waste). OHS risks of coral rehabilitation have been detailed in the partner NGO's proposal document and are assessed to be appropriate, with OHS risks for volunteer workers to be further detailed in their Code of Practice for Volunteer Workers. OHS risks associated with the construction of the watchtower will be managed through the preparation of a sub-component specific C-ESMP which will be prepared in line with the LMP requirements. OHS risks of the aquaculture facility upgrade to be addressed through the international technical assistance TOR requirement to undertake a further E&S assessment including OHS risks and set out mitigation measures. Identification and mitigation of general construction related OHS risks/impacts associated with the watchtower design and construction and milkfish farm upgrade are also addressed through the ESMP's Environmental and Social Code of Practice (ESCoP) for Small Infrastructure.

Risks associated with terms of employment not secured by contractual agreements are differentiated according to category of worker. All direct TFD workers fall under TFD's internal HR policies which are in line with Tuvaluan labour law, namely Labour and Employment Relations Act 2017. These cover employment period, remuneration, tax and insurance payments, and equal opportunity employment which align with ESS2. The terms and conditions for 'direct workers -other', e.g., under consultancy agreements will be governed by the terms of Standard Consultancy contracts, which provide details on pay and working conditions in line with Tuvalu labour law and ESS2 requirements. Contracts for contracted workers are to include details on pay and working conditions in line with Tuvalu law and ESS2 requirements. Terms of engagement for community workers will be set out in the Code of Practice for Volunteer Workers.

Risks of discrimination and lack of equal opportunity in employment for direct TFD workers are addressed through TFD's internal HR policies and Tuvaluan labour law. Risks for consultant direct workers will be managed through the requirements of the LMP and Tuvaluan labour law. Procurement processes for contracted workers are to be transparent and reflect equal opportunity employment and align with the Tuvaluan labour law and Fishing Crew Regulation 2020 (as applicable). Selection of volunteer community workers to be undertaken on a transparent basis, with work offered to any person who meets necessary experience pre-requisites.

The IA has confirmed it will not engage any workers younger than 18 years of age on the Project. Risks of the use of child labour for contract workers will be managed through a condition of contract for contractors/consulting firms banning engagement of any workers younger than 18 years old. No person under the age of 18 will be used as a volunteer community workers and will be included in the Code of Practice for Volunteer Workers.

Risks of SEA/SH, gender based violence (GBV) will be managed through prohibitions in Tuvaluan labour law for direct TFD workers. Direct consultant workers and community workers will be required to sign a Code of Conduct (CoC) within the LMP which covers SEA/SH. The Code of Practice for Volunteer Workers will include requirements for community workers to sign the CoC. CoC awareness training will also be provided prior to undertaking project activities. The Project GRM includes provisions to address concerns raised concerning SEA/SH and GBV in regard to the Project.

The LMP's Workers GRM covers procedures, responsibilities and resolution processes to including procedures for dealing with workplace matters involving SEA/SH.

Emergency preparedness and response procedures are addressed in the ESMP and in OHS procedures noted above. These address events such as spillage, occupational exposure to hazardous materials, failure of solid waste and wastewater treatment facilities, power outages, and fire in project funded facilities.

ESS3 Resource Efficiency and Pollution Prevention and Management

The project will finance construction of a watchmans hut that will result in the consumption of energy, water, and construction materials. There are currently three locations being investigated for the watchtower. These are Fuafatu Islet, Fualopa and Tepuka Islet. The construction of the proposed watchtower may pose minor risks and impacts, including potential erosion and pollutant runoff from earthworks, pollution and spills from construction activities, solid waste management concerns, construction noise and dust management issues, traffic management challenges, and fire management risks. A detailed assessment of sites with the pros and cons of each potential site is assessed in the ESMP. A Construction Environmental and Social Management Plan (C-ESMP) will be required once the design is finalised.

Sourcing of construction materials from unsustainable sources could create resource efficiency impacts. Coral rock and coastal sand mining will not be allowed and construction materials such as sand, gravel and timber will be imported due to limited supply of materials within Tuvalu. Construction materials have downstream impacts such as dust pollution, noise pollution, fuel, chemical and hazardous material contamination in the country of origin.

The borrower will adopt measures specified in IFC's EHS guidelines on Aquaculture. The extent of upgrade is limited to the deployment of the new sea cages (4 x 4 m), however, the operation will still be very small scale with only four sea cages planned. The milkfish will be fed imported feed when available (locally produced when not) with most of the product sold domestically to residents of Vaitupu. To manage the environmental and social risks associated with this small upgrade, an expert consultant will be engaged to conduct an E&S assessment of the proposed upgrades during implementation, in accordance with the Environment, Health and Safety (EHS) Guidelines for Aquaculture.

Greenhouse gas emissions (GHG) are expected to increase slightly because of this project due to upgraded facilities and operation of the exploratory fishing vessel and patrol vessel. However, the increase in emissions will not be significant and therefore an assessment of GHG emissions under ESS3 will not be required.

Operational phase risks include: the consumption of water and energy; contamination from poorly managed runoff; waste generation; sewage and greywater generation including contaminated groundwater from poorly managed septic systems; discharges and emissions; chemical and biohazardous waste; and contamination of ground and surface water with hydrocarbons (fuels and oils) from leaks or spills from hydrocarbon storage. Operational risks and appropriate mitigation measures will be considered in the design phase, and residual impacts addressed in accordance with the ESMP, ESCoPs, and operations manuals.

Operation, refueling and maintenance of the exploratory fishing vessel and patrol vessel may also generate pollution via fuel/oil leaks/spills and/or discharge of untreated wastewater in oceans and lagoons. Potential impacts are addressed in the ESMP based on GIIP in relation to vessel operation and maintenance.

The project will also support further development of a pilot coral planting program. To mitigate the E&S risks, the activity will only funded after reviewing the specified proposal requirements like work plan details, relevant NGO experience, proposed rehabilitation sites, and reporting criteria to be reviewed by the PMU's E&S Officer and the WB E&S specialist.

The project will include procurement of MCS and ICT equipment. This equipment will require end-of-life management of e-waste, which poses a waste management risk that are addressed in the ESMP.

ESS4 Community Health and Safety

The Project will finance procurement of an exploratory fishing vessel for fishing and bait trials and a patrol vessel. Accidents at sea are a common occurrence across the Pacific given that 98 percent of the sub-region is ocean. This is often exacerbated by bad weather, engine failure, poor vessel construction, overloading, prolonged trips, and limited safety equipment, training or knowledge. The establishment of the exploratory fishing vessel will likely be established in a context of low levels of knowledge of, compliance with, and monitoring or enforcement of maritime safety regulations. Similarly, maintenance skills and regimes, and availability of spare parts for vessels, particularly in remote areas, is unknown but is unlikely to be at an international standard. To mitigate against such incidents, the vessels will be compliant with the relevant Tuvaluan legislation and approved by the Tuvaluan authorities. Additionally, the vessel specifications will be reviewed by a suitably qualified person (such as a naval architect) and operational procedures or management plans developed and implemented in line with GIIP to cover training, including that provided under the relevant Project sub-component, ongoing maintenance and safety at sea requirements and emergency management protocols.

There are health and safety risks as a result of misapplication of sanitary, hygiene and product testing protocols associated with the establishment of a CA for monitoring seafood and fisheries products. The reality of frequent staff changes also means training needs to be re-delivered periodically to maintain the skills amongst project workers and users of project equipment. Component 3 includes a sustained training program to manage these risks, and SOPs will be prepared and implemented to ensure continuity of the skills and knowledge relating to the CA responsibilities. The ESMP details the training programs for each of the sub-components including the CA responsibilities.

Project general activities also pose several potential impacts and risks relating to community health and safety, such as, OHS risks from activities associated with the use of vessels and equipment, spillage and waste generation from the replacement of safety-at-sea equipment and deployment of office equipment, and potential environment damage from the roll-up ramps and floating jetties. These will be mitigated through applying and having in place industry sSOP for vessel operation, and effective electronic waste management for end-of-life electronics procured under the project. OHS risks will be managed in accordance with the ESMP and LMP which will be aligned to the Good International Industry Practice (GIIP) and Environmental Health and Safety (EHS) Guidelines.
The project's SEA/SH risk is rated at 'moderate'. The project is of a medium size with a low labour influx, no military or paid security forces will be used. SEA/SH risks will be managed through specific measures in the ESMP, workers codes of conduct, and SEA/SH procedures with the GM including referral to counselling services. To manage these risks, a Code of Conduct (CoC) for project workers which covers SEA/SH and GBV will be included in contracts of direct workers – consultants and contract workers. The Code of Conduct for Voluntary Workers will include

requirements for community workers to sign the CoC. CoC awareness training will also be provided prior to undertaking project activities.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is not considered relevant.

Implementation of natural resource management plans (i.e. marine protected areas for coastal fisheries) may result in the loss of access to natural resources that support subsistence and customary livelihoods, and local food and income security. However, as per the exclusion from ESS 5 under Footnote 9, the Project's support is for MCS of a community-based natural resource management project, i.e. where the community using the resources has collectively decided to restrict access to these resources. With respect to Sub-component 3.1 iii) strengthening the MCS of coastal fisheries in Funafuti, the Bank has made an assessment that the community decision-making process to establish and implement the Funafuti Reef Stewardship Plan is adequate and reflects voluntary, informed consensus. This Plan is accompanied by detailed evidence of inclusive consultation and decision making, including with women and young people, in the design of this Plan as per the consultation report, "Tuvalu Fisheries Department: Coastal Section (2017) FMMC1. 1st Fisheries Monitoring & Management Consultation in Funafuti". Via this consultation, suitable measures to mitigate adverse impacts on vulnerable members of the community have been considered and, as a communal resource, benefits to households will also benefit vulnerable members of these beneficiary households. Thus there are not considered differentiated adverse impacts on vulnerable people as a result of the Project's support. Measures to mitigate food security and livelihood impacts that emerged from the consultation are captured in the FRSP, project activities and discussed in the ESMP and include measures to support fishers to target pelagic, i.e.nearshore but outside the FCA, and develop offshore fisheries. For component 3.1 ii) the Project will support to outer islands to design and implement fisheries management plans. To oversee the preparation and implementation of these plans, the TFD are to establish Island Fisheries Steering Committees which will have representation of women, young people and civil society organisations representing vulnerable people. The Terms of Reference for these Steering Groups also explicitly require consideration of adverse impacts on vulnerable groups, and accord a responsibility to Steering Group members to consult with vulnerable members of their communities. Similarly, the Bank assesses the proposed structure of these Steering Groups to be able to achieve inclusive consultation and decision making and adequately consider possible adverse impacts on vulnerable people.

The Project will fund the installation of semi-permanent fishery infrastructure (floating jetties and roll up ramps) with land access requirements. The location and possible land access needs of all facilities has not not been determined for all sites. All land access for these components will be on existing government leased land with no access to non-government land required or involuntary resettlement envisaged.. The ESMP requires only government leased land to be used for this purpose. The ESMP includes a defined Rapid Site and Options Assessment procedure to verify that installation sites and ancillary uses, e.g. boat storage, accessways, do not fall on or adversely affect land that is not leased by the Government.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS 6 is relevant. Coastal ecosystems in the PIC produce some of the world's most significant marine biodiversity, yet ecosystem health is diminishing with decreased water quality from erosion, runoff, and marine pollution, as monitored and reported by the 2020 State of the Environment in the Pacific Islands Regional Report. Degradation of lagoon, reef and essential coastal fish and shellfish habitats, all contribute to reduce the natural productivity of aquatic living resources and the safety of seafood products. Therefore, areas that potentially qualify as critical habitat will be avoided.

Tuvalu is a volcanic archipelago and consists of 9 islands with an exclusive economic zone (EEZ) of about 750,000 m2 making it the 38th largest EEZ in the world. Coastal fisheries are dependent on the health of marine ecosystems for the provision of food and ecosystem services. The oceanic tuna fishery is an important source of revenue for Government of Tuvalu (GoT) and also an important source of employment, and therefore food security for its citizens.

TA activities such as legislation reforms and development of a National Fleet Management Policy under the project aim to strengthen governance and ecological sustainability of Tuvalu's coastal resources. These activities should have an overall positive impact via improved management of the country's marine ecosystems through improved compliance and enforcement of legislative requirements and strengthening of management processes.

A small grant scheme to undertake coral planting pilot will increase the resilience of coral reefs to climate change, particularly against the rapid warming of the oceans. This will have a positive impact on the ecosystem and biodiversity by rehabilitation of the pilot site(s). Unsuitable depth / site selection for Coral planting pilot has a potential to disturb the genetic biodiversity fo the reef and can result in very low coral survival rate. Underwater surveys with collection of specimens with inadequate equipment etc. could have downstream OHS and environmental impacts and can incur damage to habitats or non-target species. Operational impacts could include minor aquatic ecology and marine water pollution impacts. These rehabilitation works will focus on shallow and lagoon areas to the south and east of islands/atolls, targeting consersation areas. The coral harvesting and rehabilitation areas will be shallow, the use of SCUBA will not be permitted, thus reducing the OHS risks. To mitigate the E&S risks, each rehabilitation project will prepare a RFP, specifying proposal requirements like work plan details, relevant NGO experience, safety risk management, proposed rehabilitation sites, and reporting criteria to be reviewed by the PMU's E&S Officer and the WB E&S specialist. After the proposal's acceptance, necessary OHS documents are included in the procurement package, overseen by the PMU E&S Officer who also ensures compliance with the 'Code of Practice for Volunteer Workers'. Monitoring and reporting of compliance with OHS processes is handled by the NGO and relayed to the WB via the PMU's E&S Officer.

TA activities into the domestic market and export market study and the feasibility studies for climate resilient boating infrastructure has a potential to increase fishing in the lagoon. Similarly, the procurement of a exploratory fishing vessel, including fishing and bait trials and training to divert pressures from overfished areas to the open ocean can also increase fishing in the ocean. An ESMP has been prepared to mitigate these risks which requires the Terms of reference for these TA activities to include a requirement for consultants to assess these risks and provide recommendations to reduce / manage the above risks.

Small scale, mariculture support projects for milkfish farming may result in marine water quality impacts leading to degradation of ecosystems or ecosystem services. Providing assistance to projects farming milkfish may have a

positive impact on natural stocks by reducing exploitation, and therefore improve the sustainability of the fishery in Tuvalu. Potential risks and impacts have been addressed in the ESMP by ensuring that all mariculture activities to be aligned with IFC's EHS Guidelines for Aquaculture. During implementation an international TA expert consultant will be tasked with carrying out an E&S assessment of the farming activities. The consultant's output will be reviewed by the PMU's E&S Officer and the WB E&S specialist to determine the level of risk and the need for further measures.

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

This standard is not considered relevant . There are no known groups that meet the criteria in ESS7 as the majority of people in Tuvalu, 96% belong to the Polynesian ethnic group, who will be the overwhelming beneficiaries for the project.

ESS8 Cultural Heritage

The standard is currently not relevant. However, screening for potential ESS8 risks has been included in the ESMP which also includes a "chance find" procedures. Attention will be given to potential risks and impacts on intangible cultural heritage.

ESS9 Financial Intermediaries

The standard does not apply as the Project does not proposed to include financial intermediaries.

C. Legal Operational Policies that Apply

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

B.3 Reliance on Borrower's policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework?	No

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

Use of Borrower E&S Framework does not apply to this project.

IV. CONTACT POINTS

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