



# Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 05-Mar-2019 | Report No: PIDISDSA24255



**BASIC INFORMATION**

**A. Basic Project Data**

Country Tonga	Project ID P164941	Project Name Tonga: Pathway to Sustainable Oceans	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 07-Mar-2019	Estimated Board Date 17-Apr-2019	Practice Area (Lead) Environment & Natural Resources
Financing Instrument Investment Project Financing	Borrower(s) Kingdom of Tonga	Implementing Agency Ministry of Fisheries	

Proposed Development Objective(s)

To improve management of selected fisheries and aquaculture in the Recipient's territory.

Components

- Strengthening Fisheries Governance
- Strengthening the Knowledge Base for Fisheries and Aquaculture
- Investing in Sustainable Fisheries Management and Development
- Supporting Effective Project Management

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

**SUMMARY**

<b>Total Project Cost</b>	10.00
<b>Total Financing</b>	10.00
<b>of which IBRD/IDA</b>	10.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**

International Development Association (IDA)	10.00
IDA Grant	10.00



Environmental Assessment Category

B-Partial Assessment

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

## B. Introduction and Context

### Country Context

- 1. The Kingdom of Tonga is an archipelagic nation in the southern Pacific Ocean distinguished by its diminutive land area and vulnerability to natural disasters.** With an Exclusive Economic Zone of 700,000 km<sup>2</sup>, Tonga's land comprises only 0.001% of its territory. Despite the paucity of land, the 177 islands offer a varied topography of limestone mountains, low-lying coral atolls, and volcanos (active and dormant) resulting from the adjacent Tongan Trench subduction zone. These geographic features result in Tonga possessing the world's second highest natural disaster vulnerability ranking with significant exposure to cyclones, floods and storm surges, earthquakes, volcanic eruptions, tsunamis, and droughts. Climate change may further exacerbate many of these vulnerabilities with increasing average temperatures, inshore erosion, and intensity of tropical cyclones. Over the past 20 years, Tonga has experienced 15 major natural disasters with the 2017 cyclone causing US\$ 164 million in damages and losses, equivalent to 38% of the 2017 GDP. In any given year, it is likely that Tonga is either hit by a major natural disaster or recovering from a prior one.
- 2. The last decade has seen rapid governance changes that have led to strengthened institutions and positive development outcomes.** Governed as an absolute monarchy from 1845 to 2010, Tonga has transitioned to a constitutional monarchy with a legislative assembly. The nation's three elections (2010, 2014, 2017) have steadily increased the number of elected people's representatives and decreased the noble classes' representation. The World Bank Group's Country Policy and Institutional Assessment found that Tonga's institutions and policies have improved rapidly owing to concerted government effort over the past 10 years and were conducive to development in most areas, although institutional impediments to women's economic participation remain. Other weaknesses identified were related to the fact that small countries such as Tonga generally have limited capacity to maintain the level of public services and governance needed for a developing nation state.
- 3. Tonga's economic growth continues to be hindered by innately high cost structures and exposure to external shocks, common to many small and remote Pacific Island Countries (PICs).** With a population of 108,000 (2017) and Gross Domestic Product (GDP) per capita of US\$5,230 (Purchasing Power Parity), GDP per capita growth over the last twenty years has averaged 1.1%, but with inflation considered, there has been virtually no real GDP growth per capita. Smallness means cost advantages from economies of scale and/or agglomeration are unavailable, weakening competitiveness of exports. Tonga's economic remoteness is



exceptional; it has the largest distance to markets of any country in the world (when weighted by size of market). A high dependence on imports and insufficient size for meaningful diversification make Tonga highly vulnerable to external economic shocks (in addition to natural disasters). These factors combine to make growth elusive.

4. **Economic hardship and unemployment, particularly amongst youth, is widespread across Tonga. There are 36 inhabited islands, but 76% of Tongans live on the main island of Tongatapu of which 25% live in Nuku'alofa, the capital.** Extreme poverty across Tonga is negligible (1.1%), but “hardship” or lack of cash for basic goods, is widespread. The Basic Needs Poverty Line, which is a summation of the food and non-food poverty lines, estimates a poverty rate of 35%. Across all poverty and hardship indicators, rural populations are at a disadvantage. Furthermore, 56% of Tongans are 24 years old or younger and face poor labor prospects. Only 45% of male and 32% of female youth (aged 15-24) participate in the labor market. Although Tonga’s exceptional dependence on remittance inflows and foreign aid have been a critical driver of increased living standards, remittances have also inflated wage rates for Tongans’ willingness to work.<sup>1</sup> Combined with weak demand for domestic labor, outmigration (seasonal or permanent) will likely continue to be the primary opportunity for a large portion of the population. However, Tonga also needs to fully exploit other economic opportunities where it could be competitive: tourism, knowledge services and fisheries.

#### Sectoral and Institutional Context

5. **All of Tonga’s fisheries sector activities are conducted in accordance with agreed regional approaches to fisheries management.** Whilst the level of interconnectivity within and between Central Pacific marine ecosystems is not yet fully understood, it is known that migratory pelagic species (e.g., tuna) move extensively between Central Pacific states. The homogenous nature of PIC fish populations at the species level also suggests connectivity for most species of importance to inshore fisheries. Management of Tonga’s tuna longline, deepwater snapper and inshore commercial fisheries affects neighboring PICs’ fisheries.<sup>2</sup> Effective management of these stocks in Tonga will therefore contribute to the sustainability of regional stocks. In accordance with Tonga’s international agreements and commitments, the Project will provide targeted support for improved fisheries management across selected priority fisheries, utilizing improved scientific methods to ensure the long-term sustainable use of offshore and inshore fish stocks.

6. **The need to sustainably manage Tonga’s marine wealth has been enshrined in its legal and regulatory frameworks, including the Tongan Constitution, but implementation remains to be strengthened.** The legal instruments for management and development of Tonga’s fisheries are the Fisheries Management Act (2002) and Aquaculture Management Act (2003). The critical importance of robust fisheries management in Tonga was demonstrated by establishment of the Ministry of Fisheries (MOF) as a stand-alone ministry in July 2016. Tonga’s MOF is mandated to control, manage, and develop the country’s fisheries sector, including aquaculture. Although this is a positive step, it also means that MOF is still in the process of establishing adequate staffing levels (approximately 60 staff as of November 2018) to successfully deliver on its mandate. Tonga has developed a range of fishery-specific management plans (e.g., aquarium fish, tuna, deepwater snapper and sea cucumbers)

<sup>1</sup> Tonga has one of the highest remittances flows in the world relative to the country’s GDP (26%). Also, development assistance grants financed 33% of government expenditure in FY2014.

<sup>2</sup> The terms fishery and fisheries are used in different forms with respect to the nomenclature of specific legislation.



that form an important cornerstone of the regulatory framework. All plans are based on agreed regional approaches supported by regional agencies such as the Pacific Islands Forum Fisheries Agency (FFA) and the Secretariat of the Pacific Community (SPC). However, implementation remains compromised by a lack of measurable targets, financing plans, and monitoring; all gaps this Project will address.

7. **The Tonga Fisheries Sector Plan<sup>3</sup> (TFSP) for 2016 - 2024 presents the strategic direction and guides investment planning for Tonga's priority fisheries.** The TFSP has strong Government ownership and was approved by Cabinet in 2017. It is a tool to organize, coordinate and implement priority fisheries activities within Tonga's Strategic Development Framework. The TFSP provides a consensus vision for the future of the fisheries sector and a process for realizing that future. It provides a set of objectives consistent with national policies and plans, a prioritization of activities with steps and milestones and a description of the resources required to implement the plan.

8. **The Tongan fisheries sector is one of the potential avenues for economic growth and increased household resilience.** Although prone to large annual fluctuations, from 2005 to 2014 fisheries contributed approximately 3% annually to the overall economy. Total annual fisheries volume (of all types) is estimated at 10,155 metric tons (mt) valued at approximately US\$30.7 million. Fisheries products are one of Tonga's largest exports, with exports in 2013 and 2014 accounting US\$3.0 million and US\$5.5 million (equaling approximately 31% to 44% of total exports). Overall commercial fisheries jobs represent a modest 2% of national employment, however like other PICs, subsistence fishing is critical for large portions of the population. SPC's Inshore Fisheries Development Programme (ProcFish, 2009) surveyed four Tongan rural communities and found that, on average, 82.8% of all households were involved in reef fisheries and fisheries were the most important source of income for 39% of households (as high as 70% for an outer island community). Fisheries, marine biodiversity, and coral reefs are also intimately connected with the growing tourism industry, estimated at 7.7% of annual GDP and a significant source of jobs.<sup>4</sup>

9. **While Tongan women have traditionally held high status in local culture, legislative, economic and social changes over the years have entrenched exclusion of women from certain realms, including aspects of the fisheries sector.** While cultural norms and historical experience have contributed to voice and agency of Tongan women being at higher levels than other Pacific countries, in general, the proportion of women in formal governance roles remains low.<sup>5</sup> And, although participation of women in the labor force has increased over the past two decades, in 2017, the Labor Force Participation Rate (LFPR) for men in Tonga was 74.2% while for women LFPR was 45.2%.<sup>6</sup> Women's harvesting and fishing is often not counted in official statistics, but available data show that in 2013, women comprised 41% of those employed in the fisheries sector, but only 4% of the skilled agricultural and fishery workers.<sup>7</sup>

10. **Further details on Tonga's fisheries sector are presented herein according to four functional**

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<sup>3</sup> Developed with support from the World Bank and the International Fund for Agriculture Development.

<sup>4</sup> Tongan Ministry of Commerce, Tourism, and Labor (2014)

<sup>5</sup> Following the 2016 elections there were only 2 local government officers, 1 female district officer and one female town officer and 354 males occupying these positions for example<sup>5</sup>

<sup>6</sup> UNDP (2018) Human Development Indicators and Indices 2018 Statistical Update.

<sup>7</sup> Tonga National Marine Ecosystem Service Valuation, SPREP/IUCN/GiZ (2015)



subdivisions: a) community subsistence, b) inshore commercial, c) offshore commercial, and d) aquaculture.

a) **Community subsistence.** Community subsistence fisheries provide livelihoods for most Tongan fisherfolk and are a vital source of protein for local consumption. Community fisheries are characterized by utilization of basic fishing gear (such as lines, hooks, nets, spears and small boats) predominately along reefs and lagoons for subsistence needs. There are a wide range of species captured, including herbivorous finfish (e.g., parrotfish, rabbitfish, and surgeonfish), clams, crabs, octopus, and sea cucumbers. Although precise data on community fisheries' total catch are lacking, best estimates indicate that harvesting is on the order of 3,000 mt annually worth US\$ 8.26 million. The TFSP states that in some areas of the country women fishers account for over 75% of invertebrate harvests.<sup>8</sup> Tongans consume significantly more fish per capita than the global average of 16 kg/person/year (average fish consumption across four Tongan study sites was 68.6 kg/person/year of finfish and 11.6 kg/person/year of invertebrates).<sup>9</sup>

b) **Inshore commercial**

- i. **Inshore commercial fisheries have the potential to produce a wide variety of popular seafood items, but some important fish populations are already over-exploited.** Inshore commercial fisheries are defined as fishing along inshore environments with the primary motive to sell the catch. An open access fisheries management regime coupled with an increasing human population, improved fishing gear, and destructive fishing practices have resulted in most reef and lagoon fisheries being moderately to seriously over-exploited. Over 800 inshore commercial fishers are estimated to be operating in Tonga, producing around 3,900 mt of fish destined for local markets, and small amounts for export of aquarium fish and coral and sea cucumber (bêche-de-mer). While in total, this annual harvest is estimated to be worth around US\$14.8 million to the commercial fishers, the commercialization of certain species has led to over-exploitation. For example, mullet was one of the most important commercial fish in the 1970 but is now virtually extinct on Tongatapu. Sea cucumber exports peaked in 2009 at US\$2 million, before experiencing a population crash in 2010. Despite a lucrative international market, exports have only recovered to less than US\$400,000.
- ii. **Tonga's main tools to protect inshore fisheries are regulatory provisions, Special Management Areas (SMAs) and the forthcoming inshore commercial fishery management plan.** Under the Fisheries Management Act (2002), coastal communities can establish SMAs to control fishing activities and create resource management rights for areas adjacent to their village. An SMA grants management control to a community of its inshore resources. Key features of SMAs include: (i) only registered persons and fishing vessels are authorized to fish in an SMA; (ii) no harvesting of any marine organisms for the aquarium industry (e.g. coral, small invertebrates, fish); (iii) no-take zones; and, (iv) prohibition of destructive fishing methods. SMAs are run by local committees, and there is

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<sup>8</sup> One study in 2002 of villages in Ha'apai and Vava'u found women did 72% to 92% of gleaning fish from reefs and in Ha'apai 50% of women also fin fished. 80% of women in more urbanized areas gleaned, mostly for shellfish, and significant numbers in some villages used cast nets and spears to fish. Participation of children, boys and girls, was also high with 0% of boys and 4% of girls reporting they "never" fished.

<sup>9</sup> Pacific Regional Oceanic and Inshore Fisheries Development Programme, Secretariat of the Pacific (2009)



considerable enthusiasm and support amongst government and coastal communities for the program. The Government's goal is to implement SMAs for all 110 coastal communities by 2025.

iii. **While SMAs are sound in principle, there is a need for strengthening the model and enhancing institutional capacity to achieve improved inshore fisheries outcomes.** A 2017 Food and Agriculture Organization (FAO) review of the SMA program found that interest in adopting the SMA model had far exceeded resources available for management, and the effectiveness of SMAs had suffered as a result. In some cases, SMA fishing rules were inadequate for recovering fish populations and in other cases, enforcement was insufficient, as a result, illegal fishing continued. Although all SMA management plans include regular monitoring by MOF, available resources are insufficient to support the required level of monitoring and enforcement. This Project is designed to address these critical gaps.

c) **Offshore commercial fisheries.** Offshore commercial fisheries are characterized by sophisticated fishing fleets that dominate Tonga's fish product exports and are generally considered to be sustainably managed. Offshore fishing has only been sustained for two groups of species: tuna and deepwater snapper. Tonga's major target species are South Pacific albacore, yellowfin and bigeye tuna. Due to its southern latitude, Tongan offshore waters naturally contain reduced abundance of yellowfin and bigeye tuna, with very few skipjack present. Tonga does not have a purse seine fishing industry. However, the South Pacific albacore tuna fishery provides government revenue through license fees of US\$500,000 annually as well as supports 45 Tongan jobs at landing sites and processing facilities.<sup>10</sup> Tonga's tuna fishery catch rates are more variable than those of other Pacific countries. Catch rates vary significantly between years due to fish migration - not overfishing. In 2014, there were four domestic and five foreign longline vessels that caught US\$3.4 million and US\$4.2 million worth of tuna (including by-catch), respectively. However, no advanced processing facilities exist in Tonga, so the value-added benefit for Tonga is limited. For deepwater snapper, the fishery management plan allows up to 30 licenses to be issued for domestic deepwater snapper vessels; this fishery contributes around US\$600,000 of foreign earnings to the Tongan economy through export sales. Further details on both priority fisheries are described below:

- i. **Tuna Longline Fishery:** There are currently six domestic and seven foreign licensed longline vessels. The maximum number that can be licensed is 20 (10 domestic and 10 foreign). Domestic license fees are dependent on vessel size but vary between around US\$ 537 for a 10-meter vessel to US\$ 2,238 for a 20-meter vessel. Foreign license fees are US\$ 14,000 plus 5% resource rent (based on the value of fish caught). Each vessel must also unload at least 3 mt of fish per trip for domestic consumption, to be sold at affordable prices set by Government. In the near term, it is possible that charter vessels may be used to introduce more domestic vessels into the fleet. In the long term, Tonga aspires to have a larger domestic longline fleet, with fewer foreign vessels.
- ii. **Deepwater snapper fishery:** This fishery operates on Tonga's continental slopes and seamounts, harvesting about 14 snapper and grouper species and some jacks. Historical catches exceeded 400

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<sup>10</sup> The Tongan National Tuna Fisheries Management and Development Plan states that "all licensed fishing vessels shall offload all catch in authorized ports of Tonga".



mt/year and declined to a low point of 88 mt in 1996. Current catches have remained relatively stable at an average of 190 mt/year with a fleet of 14-25 vessels. While the maximum sustainable yield is 250 mt/year, a key indicator is the maximum economic yield and the number of vessels that can profitably fish. While additional bioeconomic data on cost and earning per catch value are needed, the maximum economic yield is 200 mt with a fleet of 7-16 vessels, based on current literature. The current management plan calls for introduction of an enforceable scheme to address the persistent gap in implementation of robust fishery management recommendations. The fishery can generate significant rents and foreign exchange, but only if strict limits are placed on fishing capacity. This Project is designed to address this gap.

- d) **Aquaculture.** To date, Tongan aquaculture production has been limited due to difficulties in achieving economies of scale, regular natural disasters, and a challenging business environment. Consequently, aquaculture development has been limited in scope and species, with nascent success in mabé pearl and giant clam production. Both are priority species for further development as identified in the TFSP and will be supported by this Project. Further details on both are indicated below:
- i. **Mabé pearl** farms (half pearls grown in oyster species *Pteria penguin*, common name "penguin's wing oyster") have been established in Tonga in the last eight years, with 12 license holders in Vava'u producing pearls. The mabé pearl sector is well structured, with support from an ongoing research program funded by the Australian Centre for International Agricultural Research (ACIAR), regular seed supply from Government's Sopu hatchery and technical support from a Pearl Farmers Association. Although current sales are restricted to the tourism industry, there is room for expansion in the domestic market and unexplored potential for export. This Project will support MOF to increase the size of the industry and its commercialization, particularly in post-harvest activities (e.g., artisan skills, jewelry making and marketing).
  - ii. **Giant clams** have been exported for the aquarium industry (valued at US\$24,000 over 10 years) but have had their greatest utility in contributing to fisheries enhancement in SMAs, via stocking of spat produced by Government's Sopu hatchery. In this regard, the clams are a culturally iconic species facilitating an ethos of marine stewardship within communities, while also being valued as a food item for ceremonial occasions or family and community obligations. Another aspect of giant clam production in Tonga is aquarium sales. Currently, a local company purchases giant clams from the Sopu hatchery, and exports these to aquarium suppliers overseas. Project partners will investigate the possibility of expanding the business, by, establishing supply chains involving hatcheries for spat production, communities for on-growing spat and subsequently harvesting them, and commercial operators for selling juvenile clams into the international aquarium trade.
11. **Based on these four functional subdivisions, the Project will invest in the following selected fisheries**





and aquaculture shellfish species in order to: (i) support implementation of key TFSP priorities, (ii) address fundamental gaps hampering improved fisheries management in high priority fisheries and high potential aquaculture, (iii) close essential gender gaps in the sector, and, (iv) improve food security and climate resilience:

a) **Fisheries**

- 1) Offshore Fisheries: i) Tuna Longline; and ii) Deepwater Snapper
- 2) Inshore Commercial Fisheries

b) **Aquaculture shellfish species**

- 1) Mabé Pearl (*Pteria penguin*)
- 2) Giant Clam (*Tridacna spp*)

12. **The original Pacific Islands Regional Oceanscape Program (PROP) was developed in 2013 as a Series of Projects (SOP) to be implemented in three phases, each six-years in duration.** Phase 1 began in 2014 and is under implementation in four countries (Federated States of Micronesia, Republic of Marshall Islands, Solomon Islands, Tuvalu) and one regional institution, FFA. Phase I national Projects share the same Project Development Objective (PDO) and Results Framework and reflect the same component design drawing on a pre-set menu of agreed investment activities. All four countries are members of the Parties of the Nauru Agreement (PNA) and operate the Vessel Day Scheme for their tuna purse seine fisheries and two longline fisheries. The main tuna species targeted in the Phase I cohort are skipjack, bigeye and yellowfin.

13. **The Phase I (2014-2020) cohort are midway through their Project cycle and are all undergoing moderate to comprehensive restructuring to adjust design issues related to:** (i) the original Disbursement Linked Indicator (DLI) modality; and, (ii) incorporate strategic opportunities in both oceanic and inshore fisheries given advancements made during the first stage of these Projects.

14. **Phase II (2019 – 2024/5) includes this Project in Tonga along with parallel Investment Project Financing (IPF) in Samoa and Kiribati.** The new Projects will diverge in key design features from the PROP SOP, applying lessons learned during implementation of the Phase I cohort. The Phase II projects place a more prominent emphasis on the regional role of inshore fisheries than was evident with the Phase I cohort. And, the Phase II cohort will permit incorporation of key members of the Tokelau Arrangement (TKA) for the South Pacific albacore tuna into the PROP family with inclusion of the Samoa and Tonga IPFs, thereby complementing the PNA cohort supported under Phase I.

## Higher Level Objectives to which the Project Contributes

15. **The Project directly contributes to the priorities of the Government of Tonga (GoT) by supporting the TFSP** The TFSP presents the strategic direction and guides investment planning for Tonga’s fisheries sector and identifies three long-term goals for the sector: (i) sustainable community fisheries and use of inshore marine ecosystems; (ii) profitable, sustainable and responsible commercial fisheries and aquaculture; and (iii) efficient, knowledge-based government services that collaborate effectively with industry and civil society. This Project supports achievement of the long-term goals of the TFSP.



16. **The Project is designed to support Tonga’s fisheries sector activities conducted in accordance with agreed regional approaches to fisheries management,** including: (i) Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, (ii) Western and Central Pacific Fisheries Commission (WCPFC); (iii) FFA, (iv) SPC; (v) TKA; and (vi) the Noumea Strategy.

17. **The operation is aligned with the World Bank’s Regional Partnership Framework FY17-21 for PICs.** The Project will contribute to Focus Area 1: Fully Exploiting the Available Economic Opportunities. Specifically, under this Focus Area, it supports “improved management of oceanic and inshore fisheries” (Objective 1.1.). The Project will also support “expanded tourism opportunities” (Objective 1.3) through improving reef fisheries health critical to snorkeling and scuba diving, supporting the Mabé pearl handicraft sector, supporting provision of a continuous supply of fresh fish to hotels and resorts, and providing sport and game fishing opportunities for tourists.

18. **The proposed Project directly contributes to the World Bank Group's twin goals of ending extreme poverty and boosting shared prosperity.** Tonga’s Basic Needs Poverty Line is at 35 percent, and large parts of the population rely on coastal and marine ecosystems for employment, nutrition, and livelihoods. This Project recognizes the importance of fisheries in terms of employment generation, food security, rural development, and livelihoods in Tonga. The Project aims to enhance the social, economic and environmental benefits gleaned from the fisheries sector, and thus is aligned with the twin goals of ending extreme poverty and boosting shared prosperity.

19. **The Project addresses climate change risks in a holistic manner through embedding responses to the threat of climate change throughout its components.** The Project considers the Government of Tonga’s Joint National Action Plan 2 on Climate Change and Disaster Risk Management 2018 – 2028 and recognizes that climate change will impact fisheries and aquaculture, including individuals and communities that depend on these for their livelihoods. The Project includes actions for adaptation that emphasize the need for ensuring compliance (national, regional and international levels), improving knowledge and data of potential impacts, enabling opportunities for diverse livelihoods, and empowering stakeholders to participate effectively in improved and more resilient resource management arrangements.

### C. Proposed Development Objective(s)

20. **The Project Development Objective (PDO) is to improve management of selected fisheries and aquaculture in the Recipient’s territory.**

#### Project Beneficiaries

21. Direct Project beneficiaries are the communities in the 46 strengthened and/or newly established SMAs (41 established and five new) by the Project and the 30 mabé pearl producers. Indirectly, the 10,000+ people directly engaged in fishing will benefit from improved management and recovery of the selected fisheries stocks. If managed correctly, it is estimated that maximum sustainable yields will likely be larger than current harvests. Key Government stakeholders including Ministry of Finance and National Planning (MFNP) and MoF will benefit from the development of relevant knowledge and skills, leading to enhanced institutional capacity. Ultimately,



given Tonga’s reliance on fish products for nutritional purposes and export earnings, all Tongans will benefit from strengthened fisheries management. Regional beneficiaries include member states of the WCPFC, FFA and SPC.

**PDO-Level Results Indicators**

22. Achievement of the PDO will be measured by the following indicators:

Indicator	Baseline	End of Project Target
Inshore commercial fishery compliance rate (Percentage)	0	30
Selected SMAs effectively implementing compliance measures (Number)	0	15
Mabé pearl producers operational (Number)	12	30
Female mabé pearl producers operational (Number)	0	8
<b>Regional Indicator:</b> Tuna Longline, Deepwater Snapper and Inshore Commercial Fishery management plans implemented by the Ministry of Fisheries (Number)	0	3
<b>Regional Indicator:</b> Tonga’s annual reporting to WCPFC based on data gathering during implementation of the tuna longline fishery management plan (YES/NO)	Yes	Yes

**D. Project Description**

23. This Project is designed to complement and build on the PROP SOP, and reflects lessons learned from PROP Phase I. Specifically, the Project supports priority activities of the TFSP. The operation is intended to mark the beginning of a longer-term partnership between Tonga and the Bank in the fisheries sector. The Project is structured with an implementation period of six years, which may be followed by a second project of six years depending on the success of this Project, government priorities, and the availability of financing. The two-phased program design is expected to provide sustained investment in Tonga’s fisheries sector needed to comprehensively support fisheries management policy and legislation, capacity building, strategic resource management and development efforts as well as inclusive stakeholder collaboration across the selected fisheries. The Project is organized in four components described below reflecting MOF’s organizational structure.

**Project Components**

24. **Component 1: Strengthening Fisheries Governance (National IDA US\$0.7 m; Regional IDA US\$1.41 m).** The objective of this component is to improve fisheries governance in Tonga’s tuna longline, deepwater snapper and inshore commercial fisheries through priority interventions, including licensing and registration, and implementing fishing rights frameworks. This will ensure that Tonga meets its regional and international obligations and commitments as well as improves compliance with Tonga’s domestic legislation.



25. Currently, the tuna longline and deepwater snapper fisheries have relatively few vessels and are largely compliant with national and regional requirements. One compliance activity targeted for these fisheries, to be implemented under this Project, is the Food and Agriculture Organization's (FAO) Port State Measures Agreement (PSMA) that prevents vessels engaged in Illegal, Unreported and Unregulated Fishing (IUU) fishing from using ports to land their catches. Levels of compliance activity in the inshore commercial fishery is low, despite the limited number of regulations (e.g. size limits, gear controls). This Project will help strengthen capacity and the institutional and regulatory framework to better manage these fisheries and increase the level of enforcement, including through small vessel patrols. Although compliance rates for the inshore commercial fishery are not systematically tracked at this time, by the end of implementation, the Project is expected to show a 30% compliance averaged across all inspections conducted. A key strategy will be building awareness amongst fishers and explaining the purpose and benefits of the regulatory program. During the Project, this is expected to result in increased regulatory awareness and compliance.

26. The component focuses on achievement of two strategic priorities for the three selected fisheries: (i) improving fisheries compliance, and (ii) strengthening licensing and rights-based management.

27. This component is organized into two sub-components to support the two strategic priorities, as follows:

1.1 **Sub-component 1.1: Strengthening Fisheries Compliance Capacity (National IDA US\$ 0.7 m; Regional IDA US \$1.39 m)** This sub-component will support MOF to improve fisheries compliance and strengthen licensing and rights-based management for inshore fisheries and fisheries in the Recipient's territorial sea, by: (a) reviewing and updating the Recipient's Operational Compliance Strategy; (b) reviewing and updating the Recipient's national plan of action for illegal, unreported and unregulated fishing; (c) undertaking a scoping study into the use of electronic monitoring and electronic reporting in fisheries; (d) undertaking a review of the Recipient's fisheries observer program including updating the Recipient's observer manual; (e) undertaking an assessment of options for community engagement in Special Management Areas compliance activities; (f) establishing a program to identify and register commercial fishers; (g) developing a rights-based fisheries management framework to support the aforementioned commercial fisher registration program; and (h) providing equipment and facilities to the Ministry of Fisheries to undertake inshore fisheries compliance activities.

1.2 **Sub-component 1.2: Monitoring, Control and Surveillance in Tonga's Exclusive Economic Zone (Regional IDA US\$ 0.02 m)** This sub-component will support fisheries monitoring, control and surveillance activities in the Recipient's exclusive economic zone through the provision of fuel for joint patrols by MOF.

28. **Component 2: Strengthening the Knowledge Base for Fisheries and Aquaculture (National IDA US\$1.52 m; Regional IDA US\$3.03 m)** The objective of this component is to improve fisheries science for informed management decision-making to underpin the three selected fisheries and two aquaculture species supported by the Project. The component is organized in three sub-components:

a) **Sub-Component 2.1: Improving Fisheries Science for Decision-making of the Selected Fisheries (National IDA US\$0.3 m; Regional IDA US\$2.01 m).** This sub-component will support MOF to improve fulfillment of its obligations in fisheries monitoring and stock assessment to FFA, SPC and WCPFC. Specific work includes conducting monitoring and assessment studies for improving fisheries



science for decision making in offshore and inshore commercial fisheries. It is expected that by the end of the Project, the tuna longline, deepwater snapper and inshore commercial fisheries will have their catch and effort data systematically recorded annually.

- b) **Sub-Component 2.2: Developing High Potential Aquaculture Technologies (National IDA US\$0.39 m).** This sub-component will support Tonga's small aquaculture industry, prioritizing two well established aquaculture products - mabé pearls and giant clams - to expand their positive economic impacts. Specific activities will include developing high potential aquaculture technology for mabé pearls and giant clams, by: (a) reviewing and updating the mabé pearl industry development plan; (b) supporting development of the Mabé Pearl Industry Association including strengthening governance, and providing operational support, training, and tools and equipment; (c) upgrading equipment and facilities at the Sopa Mariculture Centre; and (d) providing training and capacity building of Ministry of Fisheries staff. The Project will specifically target women for extension services. The Project will support MOF and the Mabé Pearl Industry Association to recruit and support at least eight new women-owned mabé pearl businesses (out of 30 total producers). Increasing women owned portion of this sector from 0% to 25% will be a considerable contribution of the Project.
- c) **Sub-Component 2.3: Strengthening Tonga's Special Management Area Program (National IDA US\$0.83 m; Regional IDA US\$1.02 m).** The objective of this sub-component is to support MOF in strengthening and expanding the SMA program. The Project will specifically support the Ministry of Fisheries in strengthening its SMA program, by: (a) reviewing and updating SMA management plans; (b) providing training and capacity building activities to Ministry of Fisheries staff to support improved SMA management and compliance with SMA management plans; (c) providing training and equipment to Coastal Community SMA Management Committees to strengthen SMA management; (d) providing training and support to Ministry of Fisheries staff to improve SMA monitoring and evaluation developing a community based SMA monitoring program; and (e) reviewing and strengthening SMA establishment procedures. It is important to note that although there are significant benefits generated for Tonga from SMAs, the potential adverse impacts on landlocked and/or neighboring non-SMA communities are an important consideration and several options for mitigation are included in the project to ensure that the effects of SMAs on the food supply and livelihoods of landlocked and/or non-SMA communities are adequately addressed.

29. **Component 3: Investing in Sustainable Fisheries Management and Development (National IDA US\$1 m; Regional IDA US\$0.72 m).** The objective of this component is to strengthen sustainable fisheries management and development of the selected fisheries. Currently, there is strong legislation for management of the tuna longline and deepwater snapper fisheries. However, an effective policy and regulatory framework to support aquaculture development, specifically for mabé pearl and giant clam, does not yet exist nor is there an inshore commercial fishery management plan. The latter is identified as a priority activity in the TFSP, and acknowledged at the highest levels of government, with Cabinet recently approving development of an inshore commercial fishery management plan which the Project will finance.

30. This component will support sustainable commercial fishery and aquaculture management and



development, by:

- a) Fisheries Management: (i) reviewing and updating existing commercial fisheries management plans; (ii) developing and implementing an inshore commercial fishery management plan; (iii) developing a code of conduct for responsible fisheries;
- b) Aquaculture Development: To advance on priority work in aquaculture development identified in the TFSP, the Project will support the following key activities for mabé pearl and giant clam: (i) undertaking a review of aquaculture development plans; (ii) developing aquaculture biosecurity measures; and, (iii) conducting aquaculture market analysis to understand requirements and opportunities for growth.
- c) Fisheries Development: (i) developing marketing strategies for domestic operators for offshore tuna longline and deep water snapper fisheries; and (ii) developing a master plan and conducting a feasibility study to identify specific fisheries infrastructure needs.<sup>11</sup> The prioritized public infrastructure identified would not be financed under this Project, rather the Project would seek to crowd in private sector financing to develop these assets in tandem to implementation of phase I of the Project as well as consider key infrastructure to be financed under the proposed second phase of the Project to further complement private sector support.

31. **Component 4: Supporting Effective Project Management (National IDA US\$1.13 m; Regional IDA US\$0.49 m).** This component will ensure effective and efficient Project management through supporting the Project Management Unit (PMU). These funds will provide needed resources for Project management, financial management, procurement, monitoring and evaluation, and safeguards. Specifically, this component will provide technical and operational assistance to: (a) the PMU on Project management and implementation; and (b) MFNP and MOF to facilitate inter-agency engagement and cooperation, development partner coordination, and coordination of training and capacity development activities under components 1, 2 and 3 of the Project.

32. In parallel, a Central Services Unit (CSU), overseen by the MFNP, will provide additional Project management and fiduciary support services to this Project and other World Bank financed projects in Tonga. For implementation, the CSU will provide both implementation support and advisory services in procurement, financial management, safeguards, M&E, and contract management. The CSU will also review Project reports prepared by the PMU and submit such reports to the World Bank in accordance with the Financing Agreement. For capacity building, the CSU will play a central role in capacity building of staff in MOF and other ministries engaged in World Bank financed operations.

## E. Implementation

### Institutional and Implementation Arrangements

33. **A Project Steering Committee (PSC) will be established for strategic oversight and coordination of the Project across government.** Functions will include providing overall policy guidance, facilitating coordination

<sup>11</sup> As outlined in the TFSP, Tonga has not yet detailed its fisheries infrastructure needs (e.g., quays, port facilities, cold storage).



among relevant agencies, reviewing and endorsing the annual work plan, budget and end of year reports. The PSC will meet once annually or more frequently if necessary. The PSC shall be chaired by its Minister responsible for fisheries, and composed of, *inter alia*, representatives of MOF, MFNP, the Ministry of Internal Affairs' Local Government Division, and the head of the CSU.

34. The Executing Agency for the Project is MFNP, entrusted with overall responsibility for execution of the Financing Agreement. MFNP also hosts the CSU, which will provide support to the PMU for procurement, safeguards, finance, and M&E through the employment of technical consultants, on an as needed basis.

35. MOF is the Implementing Agency and is responsible for coordination and implementation of the Project. While the Minister for Fisheries chairs the PSC, the CEO of MOF is the Project Director. The MOF structure, including the PMU is outlined below (Figure 1).

36. The Project has been designed so that each of the MOF's divisions will have responsibility for the Project component that directly correlates with their division's responsibilities:

- a) Component 1 (Strengthening Fisheries Governance) - Fisheries Compliance Division.
- b) Component 2 (Strengthening the Knowledge Base for Fisheries and Aquaculture) - Fisheries Science Division.
- c) Component 3 (Investing in Sustainable Fisheries Management and Development) – Fisheries Management Division.
- d) Component 4 (Supporting Effective Project Management) – PMU





### Ministry of Fisheries Organizational Chart

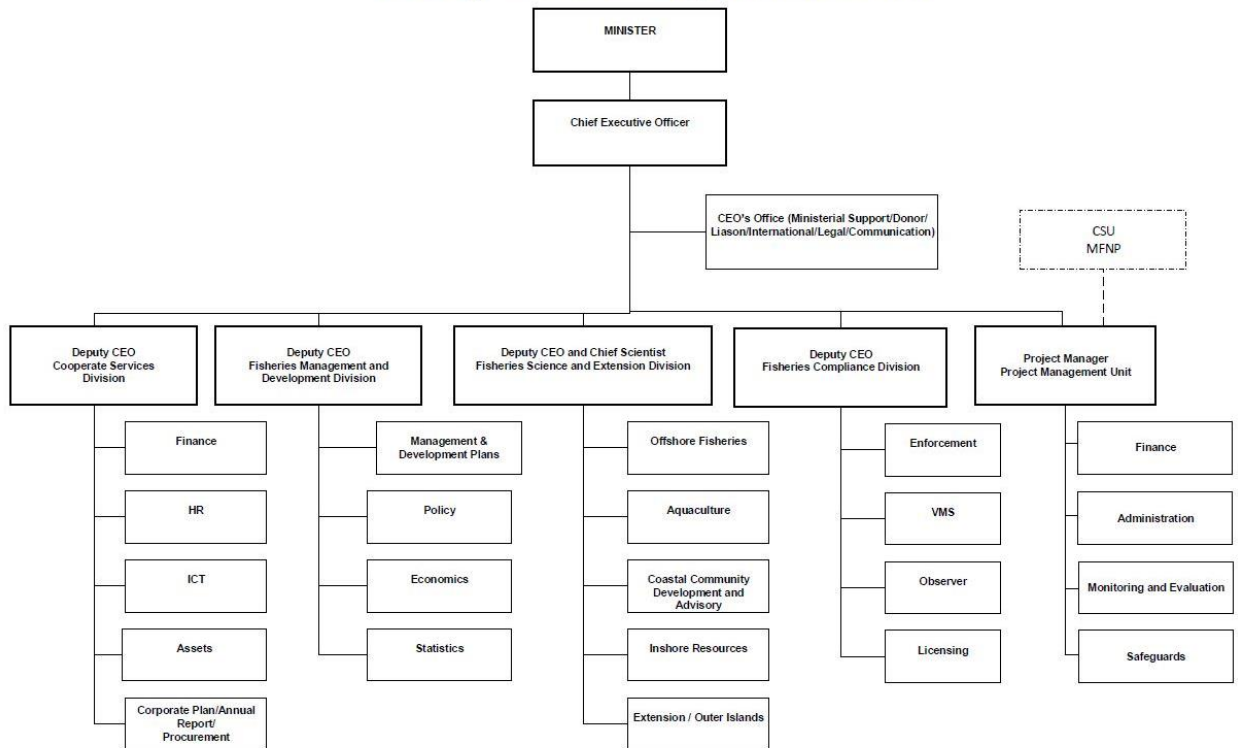


Figure 1: Ministry of Fisheries Organizational Chart including CSU

37. This Project involves a wide range of issues relevant to other ministries that are neither directly involved in Project delivery nor receiving Project funding. These Ministries may collaborate with and support Project activities, including: i) Ministry of Environment and Climate Change; ii) Ministry of Lands, Survey and Natural Resources; and iii) Tonga Navy (Ministry of Defense).

#### F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The project will operate over the entire Exclusive Economic Zone and coastal zone of Tonga. In common with many other Pacific Island Countries (PICs), Tonga is heavily dependent on its fisheries and ocean resources for food, transport, economic development and culture. Like other PICs, Tonga’s economy is characterised by a lack of economies of scale due to its small size, costly market access due to its distance from markets, a weak manufacturing base and limited labour pool. Rural communities are particularly dependent on agriculture and fisheries and many are highly vulnerable to extreme weather events and market changes. Isolation and scale also means that Tonga and rural communities face challenges in access to markets, high costs of transport and energy. About 25% of households in Tonga are estimated to currently live below the basic needs poverty line and poverty is most prevalent in the more isolated island communities heavily reliant on subsistence and cash fishing and farming. Agriculture remains the mainstay of the economy employing various technologies for subsistence and commercial farming. Fisheries





development has increasingly become important given the need for foreign earnings and development of the local economy. Tourism is a rising sector utilizing the pristine nature of the local environment as its main attraction.

**G. Environmental and Social Safeguards Specialists on the Team**

Penelope Ruth Ferguson, Environmental Specialist  
Rachelle Therese Marburg, Social Specialist

**SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The aim of the project is to help improve environmental and resource quality in Tonga in order to increase the economic benefits generated by the goods and services from healthy coastal and ocean ecosystems. The project has been screened as Category B as the environmental and social outcomes are mostly beneficial and the residual risks are low to moderate and readily mitigatable. None of the proposed physical investments or technical advisory include activities that would generate significant risk or irreversible impacts. Some moderate risks are anticipated, as project activities may generate site-specific and time bound adverse impacts though these can be readily managed through standard mitigation measures, if screened and managed properly.
Performance Standards for Private Sector Activities OP/BP 4.03	No	
Natural Habitats OP/BP 4.04	Yes	The project aims to strengthen the shared management of oceanic and coastal fisheries and the habitats upon which they depend. Most of the program activities will be in the marine areas (coastal and ocean) of Tonga, with variable states of modification and exploitation, but overall will have



		high biodiversity. The ESMF contains measures to properly screen and manage the risk of any unforeseen adverse environmental impact on natural habitats, including critical natural habitats, as well as measures to enhance positive environmental impacts.
Forests OP/BP 4.36	Yes	For Tonga, communities who engage in the SMA programme may choose to conserve or manage mangroves as part of their resource management plan. Specific sites and activities in Tonga, if any, will be identified during the project implementation. The ESMF includes a screening form to ensure that the negative impacts on mangrove forests of any downstream activities are addressed, and any positive impacts are enhanced. TOR for the studies proposed will integrate policy requirements of OP 4.36.
Pest Management OP 4.09	No	The project will not purchase, distribute, apply or dispose of pesticides, including bactericides. The policy is not triggered.
Physical Cultural Resources OP/BP 4.11	No	The ESMF confirms that the project will not involve any major civil works and physical works will generally be in areas that are already occupied by buildings or infrastructure. Impacts to physical cultural resources is not anticipated.
Indigenous Peoples OP/BP 4.10	Yes	In Tonga, the population is almost entirely homogenous and indigenous. The policy is triggered but a separate instrument will not be required. The key elements of an Indigenous Peoples' Plan will be integrated into project design as the beneficiaries are overwhelmingly Tongan. Key for this project is the consultation processes and integration of community level knowledge and cultural norms into the design process.
Involuntary Resettlement OP/BP 4.12	Yes	The ESMF considered the impacts of the Project on land, which concluded that OP4.12 should be triggered as a precautionary measures to ensure that to ensure land issues are addressed in all future studies under Component 1. Land ownership rights are clear under Tongan Law and land boundaries are well-documented. While land cannot be bought or sold, land leasing is well-regulated and common-place. No land will be involuntarily acquired for the project; crown land will be allocated for Project use where possible; and where this is not possible, a



voluntary lease arrangement will be sought with the land owner, or, for community asset purposes (such as community halls or jetties), land may be voluntarily donated by the owner. Because of the requirement for voluntary land agreements between land owners and community groups, and because of the consideration of land issues as part of technical advisory, the policy is triggered. To manage this issue, the ESMF includes an RPF including a process for screening land impacts at each site, in consultation with all affected parties. Any livelihood impacts not related to land acquisition will be managed through the existing SMA implementation process which includes consultation within the community and with neighboring communities. A process framework is not required for SMA management areas since they are community-based and will be developed under the cultural norms of collective decisions making. Under OP4.01 the ESMF includes screening and mitigation measures to protect the livelihoods of vulnerable people that may be adversely affected by the SMA programme.

Safety of Dams OP/BP 4.37	No	Neither this project nor the possible downstream investments from project’s TA will involve building dams nor depend on an existing dam.
Projects on International Waterways OP/BP 7.50	No	There will be no impacts from this project or its possible downstream investments on international waterways as described under OP 7.50.
Projects in Disputed Areas OP/BP 7.60	No	Not applicable to this project.

## KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The overall impact of the Tonga: Pathway to Sustainable Oceans Project is expected to be positive and none of the eligible investment options include activities that would generate significant risk or irreversible adverse environmental or social impacts. The project is assessed to result moderate social and environmental risks. An environmental and social management framework (ESMF) has been prepared which describes possible impacts including those resulting from short term construction activities (noise, dust, pollution, health and safety); discharge and other impacts associated with aquaculture facilities; change in foreshore environment; water pollution; possible livelihood impacts associated with a change in access to fish resources; community conflict; and health and safety issues associated with fishing and vessel use. The ESMF also outlines actions to mitigate impacts including the use of a screening checklist for



subprojects. There are no sensitive receptors which will be significantly affected by works. Project activities will mostly take place on Government land though some subproject may require access to private land, in which case voluntary arrangements will be made in the form of a land lease or voluntary land donation. Involuntary land acquisition is not anticipated though the ESMF contains a process for assessment and managing land access which is in line with the Bank's requirements.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area: The project is not expected to cause any indirect or long term negative impacts. There is potential for cumulative issues to arise in future, particularly in relation to the expansion of the SMA program. Ongoing monitoring of biological resources and fishing practices will provide insights into medium/longer term impacts and will inform any necessary management measures as they emerge, and will be based on consultation with affected communities. The Project will not involve significant changes to existing land use, and construction-related impacts can be managed through implementation of the ESMF. The project is expected to result in positive environmental impacts through improved marine management practices, and engagement with local community on sustainable fishing.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts. N/A.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described. The implementing agency (Ministry of Fisheries) does not have experience applying World Bank safeguards policies. However, a safeguard officer is in the process of being appointed who will be responsible for implementation of the ESMF. The centralized support unit for all Bank projects, to be established in the Ministry of Finance, will provide safeguards compliance oversight and expertise to the Project, along with additional support from the Bank's safeguards team.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people. A range of stakeholders have been consulted as part of the development of the Project and in the preparation of the ESMF. Consultation sessions with stakeholders were held in November 2018 for the ESMF, and included discussions with relevant Government agencies, civil society groups, commercial interest groups, youth and community members. Meetings were held in Tongatapu and in the outer islands of Vava'u and Ha'apai. A stakeholder engagement plan has been prepared, which will be disclosed prior to appraisal.

**B. Disclosure Requirements**

Environmental Assessment/Audit/Management Plan/Other		
Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
10-Dec-2018	01-Feb-2019	
<b>"In country" Disclosure</b>		



Tonga  
15-Feb-2019

Comments  
<http://tongafish.gov.to/>

**Resettlement Action Plan/Framework/Policy Process**

Date of receipt by the Bank  
10-Dec-2018

Date of submission for disclosure  
01-Feb-2019

**"In country" Disclosure**

Tonga  
15-Feb-2019

Comments  
RPF is part of ESMF - disclosed as one document at:  
<http://tongafish.gov.to/>

**Indigenous Peoples Development Plan/Framework**

Date of receipt by the Bank

Date of submission for disclosure

**"In country" Disclosure**

**C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)**

**OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

**OP/BP 4.04 - Natural Habitats**



Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

NA

#### **OP/BP 4.10 - Indigenous Peoples**

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?

No

#### **OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

#### **OP/BP 4.36 - Forests**

Has the sector-wide analysis of policy and institutional issues and constraints been carried out?

NA

Does the project design include satisfactory measures to overcome these constraints?

NA

Does the project finance commercial harvesting, and if so, does it include provisions for certification system?

No

#### **The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes



### All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

### CONTACT POINT

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**APPROVAL**

Task Team Leader(s):	Cary Anne Cadman
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**Approved By**

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Country Director:	Mona Sur	05-Mar-2019