



Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 24-Oct-2019 | Report No: PIDA27757



BASIC INFORMATION

A. Basic Project Data

Country Tonga	Project ID P171377	Project Name Statistical Innovation and Capacity Building in Tonga	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 21-Oct-2019	Estimated Board Date 11-Feb-2020	Practice Area (Lead) Poverty and Equity
Financing Instrument Investment Project Financing	Borrower(s) Kingdom of Tonga	Implementing Agency Tonga Statistics Department (TSD)	

Proposed Development Objective(s)

To improve the quality and efficiency of welfare data collection, and accessibility to comparable welfare data in Tonga.

Components

Innovation & capacity building in data collection
Institutional strengthening
Implementation support

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	2.00
Total Financing	2.00
of which IBRD/IDA	2.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	2.00
IDA Grant	2.00



Environmental and Social Risk Classification

Low

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

1. Tonga is a small, archipelagic kingdom in the South Pacific. Its population of approximately 108,000 people is spread out across 36 inhabited islands, with most of the population based in the main island of Tongatapu. Other major islands and island groupings include ‘Eua, Ha’apai, Vava’u, and the Niuaus. Its location makes Tonga one of the most geographically remote nations from major centers of economic activity in the world. Historically a constitutional monarchy, Tonga has undergone major democratic changes in recent years. Major constitutional reforms in April 2010 saw the legislative assembly change to become majority democratically elected for the first time, with 17 elected representatives and 9 nobles.

2. Like many other small Pacific island nations, Tonga’s economic growth potential is constrained by structurally high costs of production and public service delivery, and by its exposure to economic and environmental shocks. Over the last twenty years, per capita GDP has grown by 1.3 percent on average. While this growth is modest by developing country standards, it is faster than the small Pacific islands average (0.9 percent). Small size and remoteness combine to increase the cost of economic activity in Tonga, limiting the competitiveness of its exports of goods and services in world markets and reducing the potential to realize economies of scale. Similarly, small size and remoteness push up the cost of providing public services. Frequent economic shocks and natural disasters are also a continuous check on growth. High dependence on imports combined with a lack of sufficient size for meaningful diversification makes Tonga highly vulnerable to external economic shocks. Additionally, in any given year, it is likely that Tonga is either hit by or recovering from a major natural disaster.

3. Climate change is already impacting Tonga, with sea levels rising well above the global average, already having forced several communities to relocate and requiring regular reconstruction of local infrastructure. In terms of climate resilience, Tonga is ranked second in the world for disaster risk using an index combining exposure and vulnerability. Since 1997 Tonga has experienced approximately 15 significant natural disasters. The most recent severe weather system to hit Tonga, Tropical Cyclone Gita (February 2018), caused widespread damage and losses across Tongatapu and ‘Eua. The total economic value of the effects caused by Tropical Cyclone Gita was estimated to be approximately Tonga Pa’anga \$356 million (US\$164 million), which is equivalent to 37.8 percent of the nominal gross domestic product (GDP) in Tonga. Climate change will exacerbate these existing disaster trends, increasing both the frequency and intensity of storms and flooding.



4. Poverty in Tonga is on par with other upper middle-income countries. “Extreme poverty,” as measured using the US\$1.90 per person per day (2011 PPP) line, is negligible at 1 percent in 2015/16, close to the upper middle-income country (UMIC) average of 2.4 percent in 2013. It is also one of the lowest in the Pacific region, though there are comparability issues with how the underlying consumption aggregates are constructed and it is difficult to be certain regarding relative deprivation. When measured against a poverty line that reflects the standard of living in upper middle-income countries (US\$5.50 in 2011 PPP), Tonga’s rate of 27.5 percent in 2015/16 was slightly higher than the UMIC average of 24.4 percent in 2015. Tonga also produces national statistics related to poverty based on the Consensual Method of estimation (a sociological approach which reflects the extent to which people can achieve a basic standard of living as defined by a majority of the population). This approach indicates that around a quarter of the population were living in poverty (subjectively defined) in 2015/16. Poverty was found to be particularly prevalent in rural and remote areas relative to urban areas. However, it is difficult to compare these statistics to monetary poverty estimates based on household consumption data from the HIES.

5. Social and human development indicators in Tonga are amongst the strongest in the Pacific, but challenges remain. Primary and secondary school net enrollment rates are relatively high at 87 percent and 76 percent, respectively. The quality of education remains a challenge though, with children scoring poorly on early-grade reading assessments. Under-five mortality, at 16 per 1000, continues to decline, while 96 percent of births are attended by skilled health staff. However, the growing crisis of non-communicable diseases (NCDs) threatens to reverse improvements, with some evidence suggesting that life expectancy in Tonga is now falling because of NCDs.

6. Important gender disparities that adversely affect development outcomes for women. Economically, women are no more likely to be poor than men in Tonga, outperform men in education participation at all levels, and are relatively well represented in senior management levels. Challenges do persist, however. Women are underrepresented in politics: there is only two females among the 12 Cabinet ministers and only two Members of Parliament out of 25 are women (October, 2019). Additionally, women have substantially worse health outcomes with a higher non-communicable disease burden, 20 percent more likely to be obese than men, and almost 10 percent more likely to die prematurely. Also, forty percent of ever-partnered women aged 15-49 have experienced gender-based violence.

B. Sectoral and Institutional Context

7. Data deprivation in Tonga, like the other PICs, hinders evidence-based policy making. Policymakers must consider a range of complex trade-offs regarding service delivery and investments at the national level and identifying priorities in the context of the challenges they face. The evidence base for these decisions however, is thin. Data collection in the Pacific Island countries, Tonga included, lags many regions in the developing world in terms of data quality, frequency of collection, and the timeliness of results. While a demographic and health survey is being conducted in Tonga in 2019, and there was a



labor force survey in 2018, in addition to a survey of disability, a HIES has not been conducted since 2015-16. The National Statistics Office (NSO) also has not produced national monetary poverty estimates using the 2015-16 data, with the most recent poverty estimates being based on 2009-10 data. In addition, unless HIES post data collection processes are improved, there may be a long time lag between collection of data and the publication of poverty statistics.

8. Public access to the collected data is another challenge facing Tonga, like other countries in the region. Data collection in and of itself is not enough: to maximize the benefits of the data, it must be made accessible to various stakeholders in the government, donor, academic, NGO, and civil society sectors. This is reflected in the mission statement of the Tonga Strategy for the Development of Statistics 2019-2023 (TSDS): *“to provide user-friendly access to quality statistics, informing policy development and planning, mindful of Tonga’s development aspirations, and acknowledging international best practices, local knowledge and culture,”* though the technical challenges to achieve this objective are substantial in the Pacific context. Before data can be shared, NSOs must first anonymize the data sets to protect the identities of the surveyed households and people. However, anonymization is much more complex in countries with small and highly dispersed populations, as it becomes easier to uniquely identify people based on a broader range of variables. Thus, this process is costlier and more time-consuming in the Pacific, and data sets are often only available several years after the surveys are conducted, if at all. De-identified data for the Tongan surveys referred to above (Household Income and Expenditure Surveys, Demographic and Health Survey, Labor Force Survey, and Disability Survey), are not publicly available on the SPC website, where survey information is available and there is space for data to be accessed via the Pacific Data Hub Micro Data Library.

9. Data deprivation in Tonga hinders efforts to track progress on gender inequality over time and design policies to address it. Gender data is important, as it helps stakeholders understand the extent of gender gaps and design interventions to address them. Gender statistics must reflect the many areas of concern where women and men may not enjoy the same opportunities (e.g., the labor market) or where women’s and men’s lives may be affected in different ways (e.g., gender-based violence). The minimum set of gender indicators was prepared by the Inter-Agency and Expert Group on Gender Statistics as a guide for the national production and international compilation of gender statistics. The UN Statistics Division, as the Secretariat of IAEG-GS, is tasked to collect and compile data and metadata from leading agencies and make those data available online at <http://genderstats.un.org>. Many indicators in the Minimum List rely on multi-topic household surveys as data sources. Therefore, a well-designed HIES would address gender data gaps in the country. However, collection and reporting of gender data in Tonga, as well as the rest of the Pacific, is lacking. Sex-disaggregated data on labor force participation is only available in five PICs: Fiji, Samoa, Solomon Islands, Tonga, and Vanuatu, as can be seen in Table 1 below. In the context of Tonga, although some sex-disaggregated indicators are reported based on HIES data, the number falls short of the Minimum List of gender indicators. Thus, any effort to improve the monitoring of gender outcomes and design of gender-specific policies must include improvements in data collection.



Table 1. Presentation of sex-disaggregated data in reporting based on latest HIES surveys

Country	Latest HIES/ poverty report	Sex-disaggregated indicator					Total # of disaggregated indicators in document
		PO by gender of HH head	Education & poverty, by sex	Health access or outcomes by sex	Labor force stats, by sex	Mobile phone ownership or use	
Fiji	2013/14	N	N	N	N	N	0
FSM	2013/14	Y	N	N	N	N	1
Kiribati	2006	Y	N	Y	Y	N	5
Nauru	2012/13	Y	Y	Y	Y	N	6
Palau	2014	Y (expenditure)	N	N	N	N	3
RMI	2002	Y (income)	Y	N	Y	N	8
Samoa	2012/13	Y	Y	N	Y	N	3
Solomon Islands	2012/13	Y	N	N	N	N	1
Tonga	2015/16	N	N	Y	Y	Y	5
Tuvalu	2015/16	N	Y	Y	Y	N	11
Vanuatu	2010	Y	Y	N	Y	N	6

10. National Statistics Offices (NSOs) lack funding to meet the prohibitive costs of data collection in the Pacific. The per-interview costs of data collection in the Pacific (including Tonga), are some of the highest in the world. These outcomes are partially the result of systemic issues, including sparse populations and high travel costs due to the island geography. However, these issues are compounded by outdated methodologies and inefficient use of technology. Although the systemic challenges will remain a significant factor in data collection costs in the Pacific, there is scope to substantially reduce costs by adapting and integrating proven methods from other parts of the world. One example is switching from a diary method for collecting consumption data to a recall method, which can reduce the number of days required at each location, thereby decreasing personnel costs, a significant component of the survey budget. In addition, integrating new technology, such as Computer Assisted Personal Interviewing (CAPI), reduces the need to print and transport paper questionnaires, which has decreased the costs of data collection in contexts such as Tonga, despite the upfront cost of hardware investment.

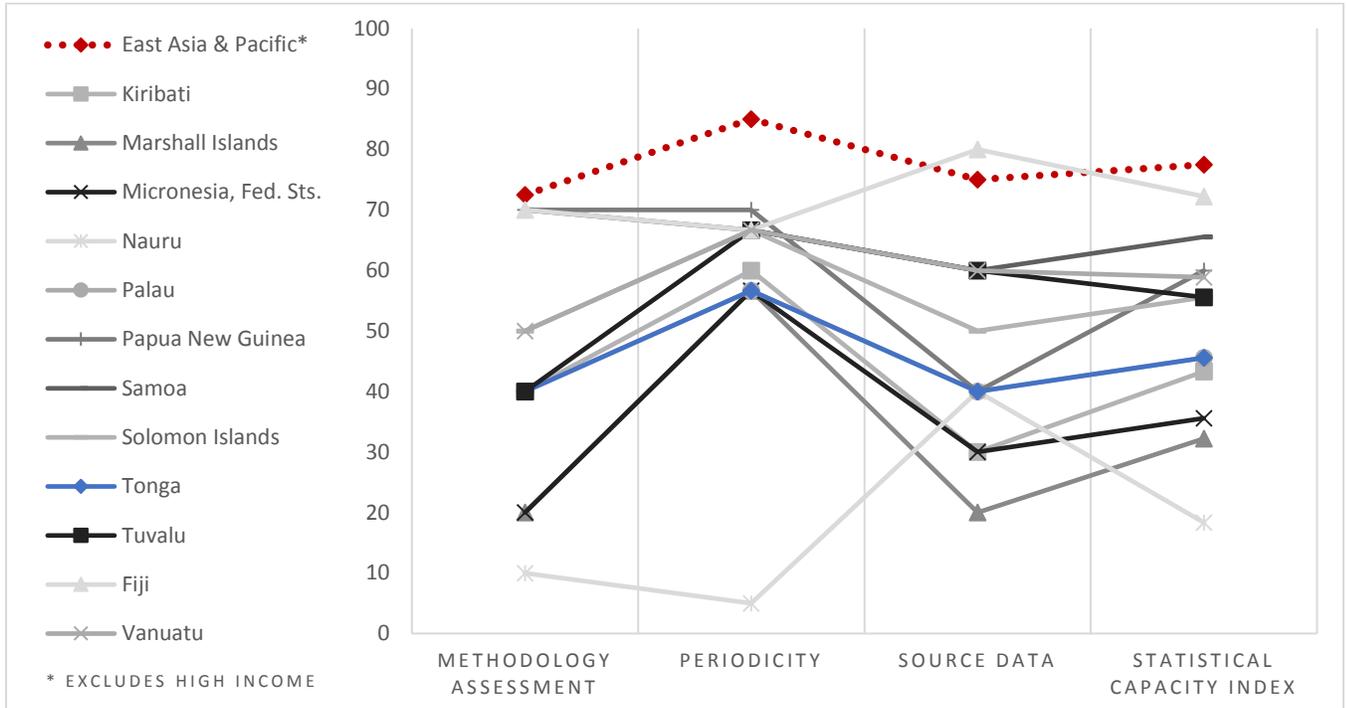
11. Low statistical capacity is another major challenge in addressing data deprivation. According to the World Bank’s Statistical Capacity Index¹ (SCI), Tonga has a SCI score of 45.6 in 2018, which has it ranked below the EAP developing country average as well as below Fiji, Samoa, Vanuatu, the Solomon Islands, and Tuvalu. In particular, Tonga’s Source Data score, which measures if a country meets international recommendations for collecting five key data sources (agricultural census, health survey, population

¹ The World Bank’s Statistical Capacity Indicator is a composite score assessing the capacity of a country’s statistical system. It is based on a diagnostic framework assessing the following areas: methodology; data sources; and periodicity and timeliness. Countries are scored against 25 criteria in these areas, using publicly available information and/or country input. The overall Statistical Capacity score is then being calculated as simple average of all three area scores on a scale of 0-100. See datatopics.worldbank.org/statistical-capacity for more detail.



census, poverty survey, and vital registration system coverage), is well below the EAP average (see *Figure 1*) and uniformly below some other PICs such as Vanuatu and Fiji.

Figure 1: Statistical Capacity Index (2018)



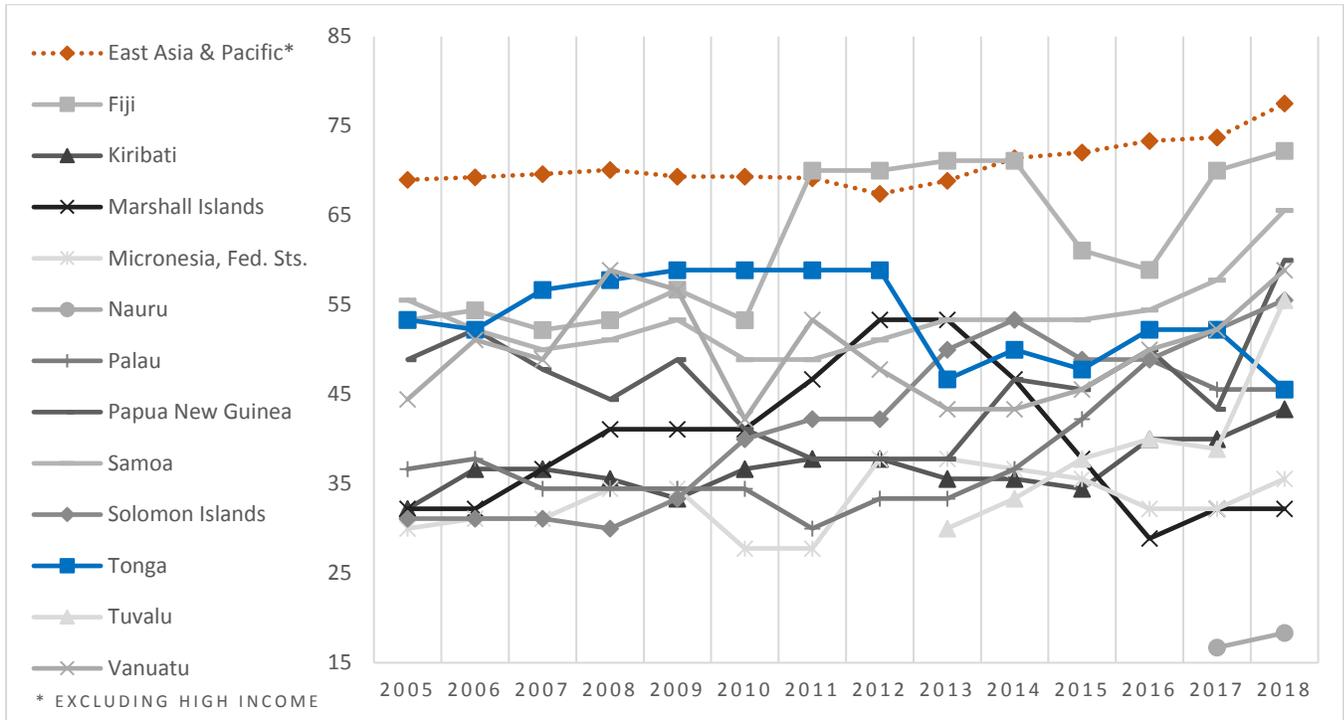
Source: World Bank, datatopics.worldbank.org/statisticalcapacity

12. Historical SCI ratings show a stagnation in statistical capacity in Tonga over the past decade.

Figure 2 below shows the overall SCI rating for the eleven PICs from 2005 to 2018, where countries have shown uneven progress, and Tonga has shown a recent decline. From 2007 to 2012 Tonga had an SCI rating of over 55, while most recently it has had a rating close to or below 50. Since the measure depends on the periodicity of data collection, countries will improve immediately after completing a survey, but because funding is irregular and often sourced from development partners, the periodicity cannot reliably be maintained, and the SCI score falls again as the data ages. To break this cycle and increase sustainability, data collection must become more affordable.



Figure 2: Statistical Capacity Index (2005 - 2018)



Source: World Bank, datatopics.worldbank.org/statisticalcapacity

13. The Tonga Statistics Department (TSD) faces the same challenges as other Pacific NSOs. TSD is relatively well-staffed and well-funded for the Pacific, with a current expansion target of employing 55 staff by 2023, as stated in the TSDS. However, systemic issues common to the Pacific still lead to some of the highest per-interview costs of data collection in the world. Though 70 percent of Tonga’s population live on the main island, the remaining people are dispersed across 50 other inhabited islands spread over 700,000 square kilometers of ocean. The travel and logistics involved in producing a household survey that is nationally and regionally representative can be prohibitively expensive.

14. There are opportunities for Tonga to improve data collection through technology, but this will incur significant upfront costs and require staff training. Although the geographical challenges will remain a significant factor in data collection costs, there is scope to substantially reduce costs by using new technologies and integrating proven methods from other parts of the world. Tonga has already taken a significant step in this direction through the adoption of Computer Assisted Personal Interviewing (CAPI), which not only reduces the cost of printing and transporting paper questionnaires, but also improves the speed of data cleaning and processing after fieldwork concludes. However, as this is a recent technological adoption in Tonga, there may be further room to improve efficacy and efficiency. Another cost saving approach that Tonga could adopt, is a switch from a diary method for collecting consumption data to a



recall method, which is a more efficient approach to fieldwork with no reduction to data quality. Changes such as these require large upfront investments in physical and technological infrastructure as well as staff upskilling.

15. Beyond cost and technical constraints, adapting international best practices to the Pacific is a significant challenge. While implementing harmonized methods and exploiting economies of scale have benefits in many parts of the world, the approach is particularly crucial in the Pacific context. Countries, including Tonga, are small and NSO capacity is thin, limiting the opportunities for domestic initiatives. Countries are also relatively similar to each other while being very distinct compared to other contexts globally. This situation limits the applicability of importing international best practices without careful consideration and customization but creates conditions for rapid adoption and scale-up within the region once local best practices are identified.

16. This Project will thus be part of a new IDA Regional Program that seeks to address the considerable challenges of data deprivation and poor quality of statistics across the PICS. In the first phase, the Pacific Community – Statistics for Development Division (SPC-SDD) will work with two IDA small states - Kiribati (also a Fragile and Conflict-Affected Situation) and Tonga - to initiate the Regional IDA program. It is expected that additional countries will join the Program, with the ultimate objective of improving the comparability, accessibility, sustainability and overall quality of statistics across the Pacific.

Relevance to Higher Level Objectives

17. The data collected by the project provides key information for monitoring multiple national outcomes in the Tonga Strategic Development Framework. National Outcome B, “balanced urban & rural development across island groups,” includes among its indicators the poverty index, which is developed from HIES data. In addition, three other National Outcomes will be better monitored by data collected under this project. National Outcome A, “dynamic & knowledge-based economy,” includes targets for agriculture, fisheries, and tourism. Growth in agriculture and fisheries are measured in direct percentage changes as they are industries under the SNA. Tourism, however, must be proxied by the total number of air visitors. The satellite account in tourism will allow for direct measurement of this indicator. National Outcome C, “empowering human development with gender equality,” includes both measures on gender equity and climate resilience, both of which will be strengthened by this project. Finally, monitoring of National Outcome F, “effective land & environment management & resilience to climate & risk” will be strengthened by the SEEA satellite account, which can directly measure improved use of natural resources for long term flow of benefits.

18. Closing data gaps is a corporate priority for the World Bank Group and for the region. The World Bank Shared Strategy for Household Surveys in 2015 identified the need to address data deprivation globally and committed the WBG to support the 78 IDA countries in the production of multi-topic household surveys every 3 years between 2016 and 2030. In the region, Country Partnership Frameworks (CPF) of Papua New Guinea (report no. 128471), Fiji (report no. 139509) and the Solomon Islands (report no. 122600) and the Regional Partnership Framework (RPF) for remaining nine² Pacific Island countries

² Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Palau, Samoa, Tonga, Tuvalu, and Vanuatu



(report no. 120479) highlight significant gaps in socio-economic indicators in most of the PICs and emphasize the necessity of having a solid foundation for evidence-driven policymaking. In addition, the fact that the nine PICs are evaluated together under a single SCD underscores the need for increased comparability in addition to more frequent data to facilitate regional prioritization and decision-making.

19. The RPF for the PIC9 emphasizes the need to address persistent knowledge gaps. The RPF highlighted the lack of concrete information on the prevalence and severity of poverty and the specific nature of constraints faced by the poor, as well as the uneven quality and inconsistent methodologies in HIES implementation and poverty analysis. As such, the RPF explicitly lists addressing knowledge gaps as Objective 4.3 and states the need to: 1) provide technical assistance to NSOs and SPC to enhance their data collection and analysis capabilities, and 2) develop and pilot low-cost survey approaches that are financially sustainable.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

To improve the quality and efficiency of welfare data collection, and accessibility to comparable welfare data in Tonga.

PDO Level Indicators

- (i) Percentage change in the per-survey cost of core HIES data collection compared to previous HIES round
- (ii) Number of HIES datasets produced during the project lifetime using improved electronic data capture systems
- (iii) Share of HIES datasets available for open access
- (iv) Number of comparable regional indicators produced

D. Project Description

Component 1: Innovation & capacity building in data collection (USD 1.42m)

20. Under component 1, the project will support innovations and capacity building in data collection. The activities are divided into the following sub-components:

- Supporting the preparation and implementation of two (2) rounds of the HIES, including: a) HIES data collection; b) analyzing the HIES data collected, c) publicly disseminating the results and datasets; and d) carrying out activities to strengthen the technical capacity of TSD.
- Conducting a) price surveys to improve the frequency and representativeness of the consumer price index data points; and b) sector surveys to fill gaps in the national accounts data.
- Improving census data collection to allow for the production of exposure risk maps for early warning systems of natural disasters.

Sub-component 1.1: 2020/21 Household Income & Expenditure Survey



21. The project will finance data collection using new methods as recommended by the PSMB. The project addresses short-term data deprivation by providing financing to conduct the next two rounds of the Household Income and Expenditure Survey (HIES), beginning with the upcoming 2020/21 round. Specifically, the project will finance the operational costs of the survey, including wages for supervisors and enumerators to conduct the survey, supervisor and enumerator training, travel and accommodation, the costs of publishing and disseminating the results, as well as any other associated logistics costs. It is through the implementation of the HIES that the project seeks to address longer-term data deprivation by introducing new methods that reduce the costs of data collection in terms of money and time, while at the same time improving the quality of the collected data. Countries are often reluctant to try new methods due to large up-front costs or complexity of implementation; this project addresses this challenge by covering the initial costs of innovation, including procurement of hardware and training of NSO staff and enumerators. In addition, since the recommendations will flow through SPC-SDD and the PSMB, innovation will not take place at the price of regional comparability. The project will also finance the development of a sampling frame from the cartography from the 2021 population census, which is essential to the implementation of the HIES but also can serve as the sampling frame for all other household-based data collection exercises until the next round of the census is conducted.

22. To ensure comparability with previous rounds, the HIES will include a small calibration experiment. Across the Pacific, consumption data has historically been collected using consumption diaries. Recent experimental research in the Republic of the Marshall Islands, however, has demonstrated that improved quality can be obtained for a lower per-survey cost by using a 7-day recall methodology, and therefore the PSMB has recommended that countries make the transition to recall data collection at the same time as moving to CAPI data collection, as both changes in methodology will break the trends in welfare measurement. To understand the implications of these changes, the 2020/21 HIES will include a calibration experiment in which a small number of additional interviews will be conducted collecting consumption information on the traditional paper-based diary system. The results will be used to estimate changes in welfare over time had the methodology remained the same.

23. Beyond collection, the project will include support for the analysis and dissemination of results. The HIES data set will be cleaned, compiled, analyzed, documented, and disseminated in a timely manner, with the survey report and anonymized microdata being released no later than 12 months after the collection of the last interview. The timely release of the report and dataset will boost policy relevance and open the opportunity for the national and international research community to contribute to the dialogue. This focus on the timely release of results, and the release of the microdata at the same time as the report, is a marked change from the long delays common in the region. To facilitate the faster processing times, the analysis will be supported by the welfare economist hired under SPC-SDD project, and the anonymization and documentation recommendations will follow those issued by the PSMB, promoting comparability and decrease inadvertent disclosure risk.

24. The project will also fund institutional and technical capacity building of the TSD to analyze the data and publish the results. The project will build technical capacity of TSD staff on statistical software packages, HIES analysis, poverty measurement, and incorporating thematic/sectoral lenses to poverty



analysis, such as tourism, agriculture, disability, and gender. The capacity building activities comprise a combination of a resident advisor that remains in-house throughout the HIES implementation, just-in-time technical assistance from a roster of international and regional experts (which will be facilitated by SPC in its emerging role as a regional “systems leader”), and peer-to-peer learning between NSOs. Funding will also be available for the costs of publishing and disseminating the results.

25. Capacity building for the TSD is based on an embedded international resident advisor. An important lesson learned from previous statistical capacity building projects in other low capacity or thin capacity environments is the importance of having a daily presence in the NSO to support the project preparation and implementation. In these types of organizations, many of the senior staff with the technical knowledge and experience necessarily have administrative responsibilities that limit the time that they can devote to technical tasks or to mentoring young staff. An international resident advisor means that there is always staff with the required technical skills and knowledge of the local context to continue moving the project forward. Resident advisors will be twinned with a TSD staff member to facilitate skill transfer and backstopped by the Statistics Advisor hired under the SPC-SDD project to ensure consistent advice across countries. In other similar projects, the international advisor has provided hands-on training to local staff in important skills such as sample design, programming for electronic data capture, or analysis using software packages (Stata, R). The repeated nature of these interactions allowing for the natural building of knowledge, and the strong links to daily activities, have shown to be a much more effective approach to building lasting capacity than either brief intensive trainings or the fly-in-fly-out model of technical assistance.

26. The design of the HIES sub-component will incorporate lessons from other projects to support HIES implementation and innovation in the Pacific. An ongoing Public Financial Management (PFM) project in the Republic of the Marshall Islands (RMI) includes a component on supporting the NSO in data collection and modernization for the HIES, including methodological improvements and using Computer Assisted Personal Interviewing (CAPI). The team will look to incorporate the lessons learned in that project for the design of this component, including the roles of the Resident Advisor, the optimal mix of support that SPC needs to provide, and overcoming the fiduciary and reporting challenges.

27. The funding of data collection closes an immediate data gap but also is a platform for improved methods. While the collection of the HIES data is considered a core responsibility of the NSO, there is rarely the opportunity for methodological improvements. The good practice of data collection and analysis requires comparability between rounds to understand the trends in well-being and other socioeconomic statistics. The reluctance to break the series results in methodologies being “sticky,” or resistant to change. In addition, there is risk associated with incorporating new methods, such as CAPI or electronic data collection. The program focuses on leveraging the coordinating role of the regional organization to assist with decreasing the risk of breaking the trend to update the questionnaire design and data collection method. Having the endorsement of the regional organization, and technical advisors in the international community generally, bolsters the confidence of NSOs should they receive questions or pushback on the results generated by the new methods. In addition, the learning associated with



implementing the HIES surveys using these improved methods have strong spillover effects on other NSO activities; e.g., training and experience in CAPI data collection is transferrable to all other field activities.

28. This project component also provides an opportunity to directly improve the collection of data on gender gaps. The questionnaire design updates above will include, at the minimum, the collection of data that enables sex-disaggregated analysis on poverty, welfare, and other information typically collected in the HIES, such as the collection of individual-level information on employment/labor market outcomes as well as some human capital indicators. These and other efforts will provide decision-makers with better information about the nature and scale of the social and economic barriers holding women and girls back and will inform policies to close gender gaps and track progress on gender-related interventions.

29. Timely release of the report and dataset will boost policy relevance and open the opportunity for the national and international research community to contribute to the dialogue. The resulting data set from the WB-financed HIES round will be cleaned, compiled, analyzed, documented, and disseminated in a timely manner, ideally with the survey report and anonymized microdata being released no later than 12 months after the collection of the last interview. This focus on the timely release of results, and the release of the microdata at the same time as the report, is a marked change from the long delays common in the region.

Sub-component 1.2: 2024/25 Household Income & Expenditure Survey

30. To solidify the use of improved methods and to meet the World Bank's recommendations regarding the periodicity of survey, the project will also support the 2024/25 HIES. The activities for the 2024/25 round of the HIES will be similar to those for the 2021/2022 round, with the exception that it will not be necessary to repeat the work to convert the census cartography into a sampling frame as the 2021 round of the census will be still be the most recent. In addition, any recommendations made by the PSMB since the earlier round will be integrated into the later round, though acknowledging the need to maintain regional and national comparability. Also, the budget for the resident advisor will be reduced as lessons learned from the previous HIES will be incorporated into the subsequent round.

Sub-component 1.3: Data collection for economic statistics

31. The project will also support data collection to close the key data gaps in economic statistics. High quality economic statistics are integral to obtaining an accurate measure of the size and composition of the national economy. However, there are significant gaps in economic statistics for Tonga. According to the IMF 2017 Article IV report, both the monitoring of economic conditions and policy formulation are complicated by the lack of officially reported data. There is evidence that technical assistance has worked to broaden the coverage of national accounts data. Balance of payments statistics are now being developed according to BPM6 standards. But IMF notes that there is room for improvement- "the sources, quality, and timeliness of data need to be strengthened." Specifically, the project will focus on three areas:



expanding and improving available price data, developing a Tourism Satellite Account as an input to national accounts, and setting up a System of Environmental Economics Accounts.

32. The project will finance an update of the Consumer Price Index (CPI) and the collection of four new price indices: Food Price Index, a Producer Price Index (PPI), Building Material Price Index (BMPI), and Import Price Index (IPI). The project will finance a review of the CPI methodology in light of the PSMB's recommendation on transitioning from diary-based collection of consumption data to a recall-based system. Since the CPI is based on COICOP classifications, data from the recall survey may not be available for all items or available for different levels of disaggregation. Following this review, it is necessary to re-check and revise the price data collection system. In addition to the CPI, the project will fund price data collection in four areas in which it has not been collected previously, specifically producing a Food Price Index, a Producer Price Index (PPI), Building Material Price Index (BMPI), and Import Price Index (IPI). The data collection for the Food Price Index, PPI, and IPI will be done concurrently with the CPI, and therefore these statistics will be available monthly. The BMPI will require additional data collection and will therefore be produced annually. The activities involved in each include hiring a consultant with the requisite technical expertise, collecting and analyzing the data, and disseminating the findings.

33. The project will support the collection of data for the Tourism Satellite Account (TSA), which measures the size of the tourism sector in the Tongan economy. A "satellite account" is a term developed by the United Nations to measure the size of economic sectors which are not defined as industries in the national accounts framework, while remaining consistent with the overall System of National Accounts. In the case of tourism, information from a variety of industries, including transportation, accommodation, food and beverages, recreation, entertainment, tour companies, etc., are aggregated together to measure the overall importance of the sector. Following the 2008 Recommended Methodological Framework, data will be collected in order to disaggregate overall tourism spending into expenditure by international visitors and expenditure by domestic tourists, with domestic spending further disaggregated into household tourism, government travel, and business travel. These data will be analyzed, and reports issued annually. The project will support this activity to hire a consultant with the requisite technical expertise, collect and analyze the data, and package the findings for policymakers.

34. The project will support the collection of data for the System of Environmental-Economic Accounting (SEEA), which provides valuable linkages between key industries and the environmental impact. The SEEA satellite account applies the same industry classifications to environment statistics with the goal of measuring sustainability and quantifying possible negative environmental impacts that may offset the economic expansion associated with certain industries. The TSD will prioritize environmental accounts in Energy, Water, and Solid Waste, with a target of producing all three annually by the end of the project. The work on Energy and Water will focus on the supply from national utilities, Tonga Power Limited and the Tonga Water Board, respectively, which the work on Solid Waste will focus on the production, reuse, disposal, and various types of residuals generated by different units in the economy. The work will be coordinated with the UN, and the project will support this activity to hire a consultant with the requisite technical expertise, collect and analyze the data, and package the findings for



policymakers.

Sub-component 1.4: Data collection to improve early warning systems

35. The project will support TSD in developing household-level exposure maps to improve the government's ability to mitigate risks from climate change and natural disasters. Mitigating damage from climate change and natural disasters is a priority for Tonga due to the frequency and impact of these risks. Currently early warning systems and evacuation plans are based in census data but only at the community level. In addition to not having a set list of households that are at risk, evacuation is complicated by the absence of a formal system of postal addresses, leading to delays, potentially missing households, and inefficiencies if rescuers spend extra resources canvassing. The project will assist the TSD to develop household level exposure maps by adding resources beyond those from the national government to purchase hardware for the census which have the accuracy to geo-tag individual households. The project will additionally assist the TSD in hiring a consultant and purchasing necessary geospatial data to produce national and sub-national exposure risk maps. These maps will assist in the strengthening of early warning systems by allowing risk to be assessed at the household level based on location and elevation, as well as for long term risk planning by providing the Government of Tonga with information about areas most at risk, which could then feed into urban planning and rural development strategies.

Component 2: Institutional strengthening (USD 0.354)

36. Under component 2, the project will support activities that strengthen the institutional and technical capacities of TSD to improve the enabling environment for data collection in Tonga. Aside from financing, NSO capacity is often a binding constraint to the quality and frequency of data collection. This component will carry out activities to strengthen the institutional and technical capacities of TSD, including: a) carrying out training on data analysis; b) developing an improved data dissemination strategy and carrying out workshops to implement such strategy; c) providing ICT hardware and software to support TSD in carrying out the activities under the project.

(a) Analytical training

37. Beyond the long-term technical assistance provided by the Resident Advisor, the project will provide additional financing for specialized training on data analysis and dissemination. The model of the embedded Resident Advisor is designed to provide lasting capacity building in data analysis and dissemination to NSOs. The focus of this extended training program will be both theoretical, including basic statistics, the analysis of survey data with complex design elements, and introductory economics, nutrition, and other related disciplines, as well as visual statistics for dissemination. The bulk of the activity will center on providing hands-on training in data collection software (Survey Solutions, CSPro) and statistical analysis software (Stata, R). The instruction provided by the Resident Advisor will, however, be supplemented by the welfare economist and statistical advisor hired under the SPC-SDD component or external training, if necessary, for topics outside of the Resident Advisor's realm of expertise. Possible



topics for additional training include, but are not limited to, small area estimation, economic statistics, gender and disability statistics, data visualization and mapping (QGIS, ArcGIS), and the calculation of SDG indicators.

38. Part of the technical capacity building program will include specific analytical training to improve the monitoring of gender gaps in Tonga. Beyond improvements in collecting data to track gender gaps, it is important that NSO technical staff have the capacity to carry out data analysis and calculate gender statistics from the HIES. This training may be delivered by the Resident Advisor or, if the Resident Advisor lacks the expertise in gender statistics, by SPC-SDD or another consultant hired under the project.

(b) Data and research dissemination

39. The project will support the development of a targeted dissemination strategy to increase the reach and relevant of TSD products. Beyond a launch event for the traditional survey report, there are numerous other ways in which data can be disseminated to a wider audience. Potential activities include dissemination events in regional capitals, infographics and concise policy briefs, outreach through social media, as well as the curation of data sets and key economic and social indicators with open public access, whether through regional platforms like SPC or by the NSO itself. The project will provide a limited amount of financing to increase the reach of NSO products collected both under the project and through other financing sources.

40. The project will promote data use in the wider policy community. Collecting data does not automatically lead to an increase in data-driven policymaking as data must be distilled and packaged for a non-technical policy audience. The project targets three actors in promoting data use. First, the NSO will be supported in the analysis and dissemination of both large-scale and general statistical abstracts and shorter, deeper, and less technical notes, infographics, and briefings. Topics for the latter will be determined through a consultative process with line ministries and other stakeholders. Support for these activities will come through the Resident Advisor with backstopping from the SPC welfare economist hired under the project. Secondly, the NSO and Resident Advisor will host “data orientation” workshops and data analysis trainings for those in line ministries and the local academic communities interested in primary data analysis. The objective of these workshops will be to make the microdata more approachable by describing dataset structure, the process for merging datafiles, and accounting for complex design features. Finally, the project will promote data use among development partners and the global academic community by ensuring the microdata sets are publicly released in a timely manner. The expanded access will be particularly impactful for the planning, targeting, and monitoring of strategies and new initiative by development partners.

(c) ICT hardware and software

41. The project will support improvements in ICT hardware and software to enable the implementation of project activities. Moving to new technologies in data collection and dissemination will require updated hardware and software. A limited portion of the budget is allocated to the purchase



of new hardware and software to support the implementation of above activities. Initial purchases will include video recording and conferencing equipment to reduce the logistical costs of training activities, new network storage equipment to support the move to electronic data collection, hardware and software required for data processing and analysis, and office furnishings.

Component 3: Implementation support (USD 0.216)

42. Under component 3, the project will finance the hiring of a full time Project Coordinator to provide operational and technical assistance to TSD on project management and implementation. The TSD will require support in the implementation of project activities (including fiduciary aspects, M&E, carrying out of audits, and reporting). As detailed below in the implementation arrangements, the Central Support Unit (CSU) will assist the TSD in (a) preparing annual work plans and budgets; (b) carrying out all disbursements and any financial management (FM) and procurement-related activities in accordance with World Bank-approved procedures; (c) monitoring and evaluating project activities; (d) preparing and consolidating periodic reports; (e) coordinating with other stakeholders on issues related to the project; and (f) providing administrative support. The funding in this component will support a full-time consultant for the six-year lifetime of the project, who will carry out the following functions: 1) project coordinator, 2) accountant/FM officer, and 3) procurement officer. The consultant’s role as FM officer and procurement officer will be supported by CSU. CSU will directly provide the M&E and safeguards services for the project.

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

Summary of Assessment of Environmental and Social Risks and Impacts

Impacts associated with the Project are expected to be largely positive. Increased access to anonymized data will provide information and socioeconomic data to various stakeholders in the government, donor, academic, NGO, and civil society sectors, which will be used to improve planning and decision making. The E&S risks associated with Project activities are expected to be limited and easily managed through project design and effective implementation. A LMP and SEP will be prepared in accordance with ESS2/10 respectively, at least 1 months prior to the engagement of staff or commencement of survey activities.

E. Implementation

Financial Management



43. The proposed project Financial Management (FM) arrangement are assessed to be adequate and in accordance with Bank policies. TSD has not had prior experience implementing World Bank projects and the key FM risks are that project finances are not used for the intended purposes due to error or lack of internal controls. To mitigate these risks, it is envisaged that the **Project Coordinator** (to be hired) would also have the necessary FM skills, and be supported by **TSD accountant** and the **CSU Financial Management Specialist**. The project will operate within the well-established portfolio FM procedures existing in Tonga, and these will be supplemented by project-specific FM instructions as part of the Project Operations Manual.

Procurement

44. TSD will be responsible for ensuring the fiduciary aspects of the project are managed, including procurement. Since TSD has limited capacity, it will be proactively supported by the Central Services Unit (CSU) under the Ministry of Finance, which has the mandate and the necessary resources to provide hands-on procurement support. It is estimated that TSD will undertake procurement of about USD TBD, the majority consisting of procurement of consulting services. A draft Procurement Plan has been prepared and will continue to be updated in accordance with the final list of procurement activities.

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