TUVALU

NATIONAL STRATEGY FOR DEVELOPMENT OF STATISTICS

2020–2024

ABBREVIATIONS AND ACRONYMS

ABS	Australian Bureau of Statistics
BoP	Balance of Payments
CAPI	Computer-assisted personal interviewing
CIF	Cost Insurance and Freight
CMR	Consolidated Monthly Report
COE	Country of Export
COO	Country of Origin
CPI	Consumer Price Index
CRVS	Civil Registration and Vital Statistics
DBT	Development Bank of Tuvalu
DCC	Development Coordination Committee
DHS	Demographic and Health Survey
ECU	Evaluation Coordination Unit
FOB	Free on Board
GDDS	General Data Dissemination System
GFS	Government Finance Statistics
GNDI	Gross National Domestic Income
GNI	Gross National Income
HIES	Household Income and Expenditure Survey
HIS	Health Information System
HOPS	Heads of Planning and Statistics
HS	Harmonic Sections
IIP	International Investment Position
ILO	International Labour Organization
IMF	International Monetary Fund
IMTS	International Merchandise Trade Statistics
NA	National Accounts
NBT	National Bank of Tuvalu
NSO	National Statistics Office
OCO	Oceania Customs Organization
PAAP	Pacific Annual Attachment Programme
PBACD	Planning, Budget and Aid Coordination Department
PFTAC	Pacific Financial Technical Assistance Centre
PRISM	Pacific Regional Information System
ROE	Region of Export
ROO	Region of Origin
SEEA	System of Environmental Economic Accounting
SDG	Sustainable Development Goal
SDD	Statistics for Development Division (SPC)
SOE	State Owned Enterprise
SPC	Pacific Community
TA	Technical Assistance / Advisor
TCT	Tuvalu Customs Tax
CSD	Tuvalu Central Statistics Division
TEC	Tuvalu Electricity Corporation
TNPF	Tuvalu National Provident Fund

TNSDS	**Tuvalu National Strategy for the Development of Statistics**
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNODC	United Nations Office on Drugs and Crime
UNSIAP	United Nations Statistical Institute for Asia and the Pacific

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BACKGROUND

The **Tuvalu National Strategy for the Development of Statistics** (TNSDS) has been developed by the Tuvalu Central Statistics Division (CSD) of the Ministry of Finance (MOF). The TNSDS is intended to provide the framework for the production, management and use of the statistical information needed to inform the development and implementation of the policies and strategies in 'Te Kete'. The TSDS will also lay the foundation for monitoring progress towards achieving Tuvalu's national development goals, and its commitment towards achieving other international and regional reporting commitments entered into by the government. The TNSDS is therefore has it priorities focusing and aligned with Tuvalu's Development Goals represented by Te Kete, covering the period 2021–2030.

The TNSDS aims to bring Tuvalu's production, management and use of statistics into line with the principles of international best practice. The implementation will be led by the CSD under the leadership of the Government Statistician. Implementation of the TNSDS will involve contributions from a number of ministries, divisions and agencies[1].

The TNSDS presents the **Vision, Mission, Values** and **Roles** of all stakeholders in the achievement of the two overarching **Goals** for the TNSDS. These are supported by a **Governance Structure** for the Tuvalu Statistical System, which identifies the Sources for a set of **Core Statistics**; a clear statement of the **Modes of Dissemination** and a framework of **Strategic Factors** that will be essential for the successful implementation and achievement of the TNSDS over the four years to 2024. The TNSDS will be governed by the legislative framework of the Statistics Act and Census Act (2008 edition) which will itself be subject to review as part of the Strategy.

The Strategy presents two key Goals for the overall achievement of the Tuvalu Statistics System:

Goal 1: To have a capable statistical environment in carrying out all core activities of statistical areas

Goal 2: To provide a comprehensive, timely and reliable set of core statistics for effective planning, policy and decision making and other uses for the benefit of Tuvalu.

The TNSDS **Strategic Factors** outline the critical issues that need to be addressed in order to achieve these Goals.

VISION

A reliable and progressive statistical system incorporating all essential and best-practice statistical concepts and processes.

MISSION

To deliver high-quality core national official statistics and statistical services to all users, in particular the Government of Tuvalu.

VALUES

a. Central agency of the government that is recognized as the key producer of national official statistics
b. Accountable for the compilation and centralization of official national statistics that meet international standards for quality, reliability and timeliness
c. Accountable for the publication and accessibility of official statistics for all users and all national, regional and international purposes.

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[1] *See Section 3.2 outlining the TSDS Governance structure.*

ROLES

The Tuvalu Central Statistics Division (CSD) has three main **Statistical Areas** under its responsibility, as outlined in this strategic plan.

These three areas of responsibility include:

1. data collection, analysis and compilation of socioeconomic statistics for the purpose of evidence-based decision making;

2. facilitating and undertaking the conduct of censuses and surveys;

3. enabling and facilitating regular and reliable dissemination of high-quality statistics for national and international users, in particular line ministries and other government agencies;

1. Macroeconomics and Finance
2. Social (including environmental statistics)
3. Collections and Services

4. empowering the use of statistics in the formulation of national and sector plans and policies of all users and stakeholders, especially the Government of Tuvalu.

The hierarchy of the Statistical Areas is illustrated in Figure 1.

THE STATISTICAL AREAS FRAMEWORK
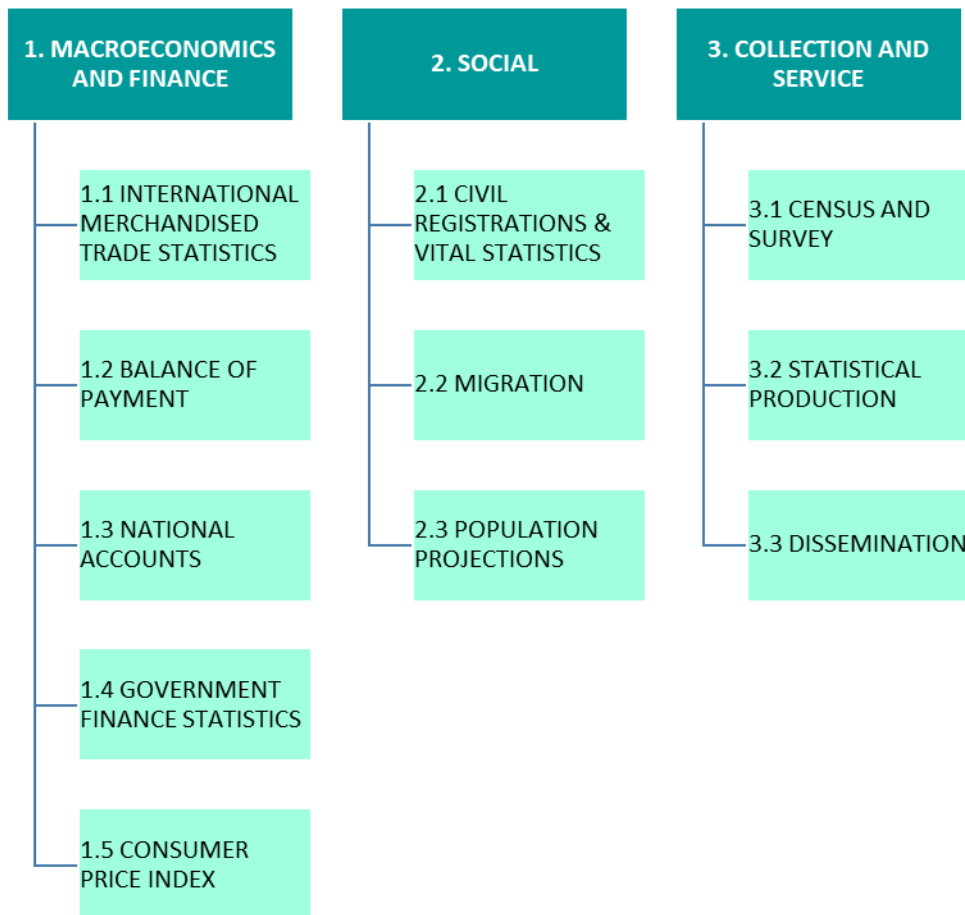
Figure 1: Framework of Statistical Areas

STRUCTURE

The existing structure of permanent positions in CSD is illustrated in Figure 2.

The main duties of these positions are as follows:

GOVERNMENT STATISTICIAN (GS)

- Maintain satisfactory level of availability and readiness of demographic and socioeconomic statistics and statistical reports as described in the division's master plan.
- Address demand for statistics by stakeholders, in particular the Government of Tuvalu.
- Foster good relationships between TCSD and data source owners and other important stakeholders.

SENIOR STATISTICIAN

- Communicate and coordinate with stakeholders on behalf of the GS of the needs and demands of the statistics
- Strategically construct and initiate workplans to assist the department of addressing the statistical requirements and processes of statistical production
- Provide advices and / or decide the statistical methods that are to engage and utilize for the processes of statistical production and validate the analyzed statistics ensuring the timely and quality statistics are produced
- provide statistical advices whenever appropriate to sources of the statistics, the end-users of the statistics and statistical committees.

STATISTICAL OFFICER

- Compilation and analysis of socioeconomic statistics
- Ensuring effective awareness and timely dissemination of statistics.

ASSISTANT STATISTICAL OFFICER

- Data collection, entry and management
- Basic statistical analysis and reporting
- Secretariat and clerical duties.

Figure 2: CSD organizational structure

SOURCES

There are generally acknowledged to be two types of statistics; **Official Statistics** that are collected and disseminated by the National Statistics Office (CSD) and **Administrative Data** that is collected and disseminated by government ministries, agencies and public sector organizations in fulfilling their legislative and policy mandates.

The principal sources of data and statistics covered under this Strategy are summarized in the following table:

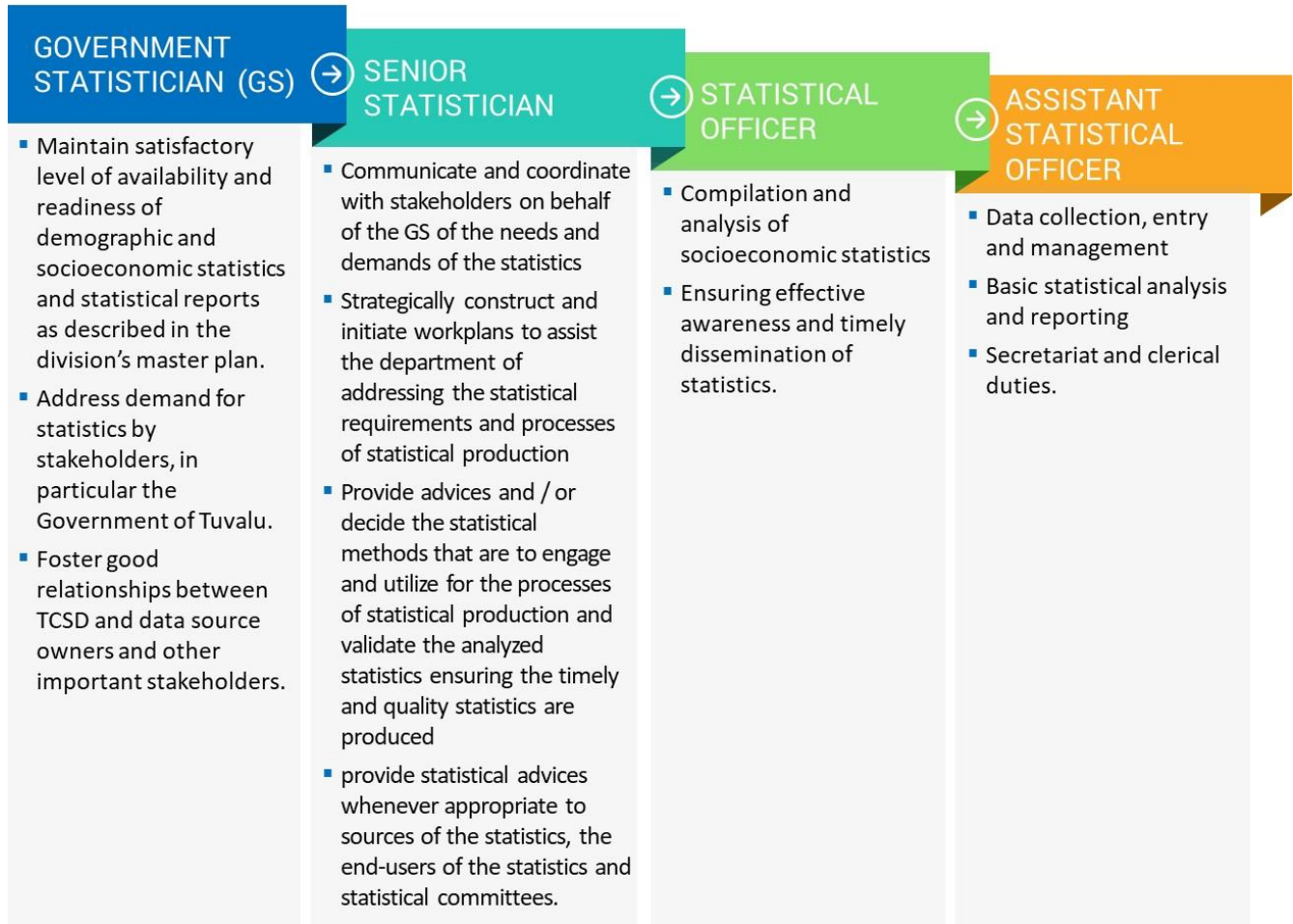| SOURCES	DATA TO PRODUCE
Official Statistics	
Central Statistics Department	Population & Housing Census socio-economics statistics
	Household Income and Expenditure Survey socio-economics statistics
	Multiple Indicator Cluster Survey social indicators
	Prices indices and inflation rates
	Balance of Payments
	National Accounts
	Visitors and residents international travels
Administrative Data	
Health Department	Births and deaths (including cause of death)
Customs Department	International Trade
Development Bank of Tuvalu	Domestic lending
National Bank of Tuvalu	International transactions and monetary statistics, including deposits and lending operations
Treasury Department	Government revenue and expenditure
Tax and Revenue	Taxation of industries and businesses
Tuvalu National Provident Fund	NPF contributions and number of employees by industries and businesses and employment
Fisheries Department	Fishing catches and revenues (license fees, etc.)

CORE STATISTICS

The core statistics derived from the Core Sources covered by this strategy for the development of statistics in Tuvalu are illustrated in *Figure 3*:

1.1 CONSUMER PRICE INDEX	2.2.6 Overseas residents' deaths
1.1.1 Imports – CIF values	**2.3 POPULATION PROJECTIONS**
1.1.2 Exports – FOB values	2.3.1 Registered resident population
1.1.3 Trade balance – CIF values	2.3.2 Registered total population
1.1.4 Principal imports – CIF values	2.3.3 Population projections
1.1.5 Principal exports – FOB values	**3.2.1 SOCIO-ECONOMIC & DEMOGRAPHIC STATISTICS**
1.2 BALANCE OF PAYMENT	3.2.1.1 resident population
1.2.1 BoP summary statistics	3.2.1.2 median age
1.2.2 International investment position	3.2.1.3 sex ratio
1.2.3 Tuvalu BoP financial account	3.2.1.4 dependency ratio
1.2.4 Goods account	3.2.1.5 population growth rates
1.2.5 Services	3.2.1.6 population density
1.2.6 Primary income	3.2.1.7 Number of households
1.2.7 Secondary income	3.2.1.8 Labour force participation rate
1.2.8 Capital transactions	3.2.1.9 Employment population ratio
1.2.9 Foreign exchange rates	3.2.1.10 Unemployment rate
1.3 NATIONAL ACCOUNTS	3.2.1.11 migrant statistics
1.3.1 GDP (current price)	3.2.1.12 Fertility statistics
1.3.2 GDP (constant price)	3.2.1.13 Mortality statistics
1.4 GOVERNMENT FINANCE STATISTICS	3.2.1.14 Dwelling characteristics
1.4.1 Statement of operations	3.2.1.15 Cooking methods, appliances and energy
(a) Gross and net operating balances	3.2.1.16 ICT statistics
(b) Net lending / borrowing	3.2.1.17 households expenditure
(c) Financing	3.2.1.18 households income
	3.2.1.19 Multiple statistics to produce base from MICS.
1.4.2 Classification of functions of government	For instance the domestic violence against women,
	water security status accessed by households, etc.
1.4.3 Public sector debt	**3.2.2 POVERTY**
1.5 CONSUMER PRICE INDEX	3.2.2.1 Population and households below the poverty line
1.5.1 CPI indices	3.2.2.2 Poverty line
1.5.2 Inflation rates	**3.2.3 DISABILITY PROFILE**
2.1 CIVIL REGISTRATION & VITAL STATISTICS	3.2.3.1 Disability dimensional statistics
2.1.1 Completeness of births	**3.2.4 EDUCATION**
2.1.2 Fertility - **a.** sex ratio; **b.** crude birth rate; **c.** ASFR (Age specific fertility rates); **d.** Total Fertility Rate (TFR)	3.2.4.1 Proportion of children attending school
2.1.3 Completeness of deaths	3.2.4.2 Gross enrolment rate
2.1.4 Mortality – **a.** sex ratio; **b.** crude death rate; **c.** under 5 mortality; **d.** life expectancy statistics; **e.** non-communicable diseases;	3.2.4.3 Net enrolment rate
2.1.5 Cause of deaths	3.2.4.4 Out of school rates/ Drop-out statistics
2.1.6 Completeness of deaths	3.2.4.5 Early childhood development index
2.2 MIGRATION	**3.2.5 HEALTH**
2.2.1 Residents' arrivals	3.2.5.1 Consumption of tobacco
2.2.2 Residents' departures	3.2.5.2 Consumption of alcohol & kava
2.2.3 Visitors' arrivals	3.2.5.3 Child Health
2.2.4 Visitors' departures	3.2.5.4 Access to water
2.2.5 Overseas residents' births	3.2.5.5 Access to Sanitations

Figure 3: Core Statistics

GOALS

The priorities for statistics are driven by:

- Te Kete 2021 to 2030 (National Strategy for Sustainable Development of Tuvalu documents).
- The existing sector policies of Tuvalu
- Set of surveys, censuses and core official statistics that are essential requirements for Pacific Island countries
- IMF General Data Dissemination System (GDDS) and dissemination plan of SPC's Statistics for Development Division (SDD).
- Outcomes of statistical programmes, trainings and meetings that provide support for CSD.

Two principal Goals have been identified for this strategy for the development of statistics in Tuvalu:

Goal 1:	To have a statistical environment capable of carrying out all core statistical activities
Goal 2:	To provide a comprehensive, timely and reliable set of core statistics[2] for effective planning, policymaking and decision-making and other uses for the benefit of Tuvalu

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[2] *All statistics elaborated in Statistical Areas 1 to 3.*

STRATEGIC FACTORS

The Strategy identifies five key **Strategic Factors** that will guide and influence the implementation of the strategy; addressing these five factors and putting in place measures and mechanisms to meet them will be critical for the overall achievement of the Strategy.

The five Strategic Factors are:

- Investment in technological capacity, human resources and financial resourcing
- Collaboration with data source owners and other stakeholders
- Statistical dissemination processes
- Revision and enforcement of Statistics Act and Census Act
- Statistical roadmap in place for the Te Kete 2021 to 2030, a document referred to as the National Sustainable and Development Plan of Tuvalu

Each of these five key Strategic Factors is analyzed in the following sections; targets and strategic actions are identified along with key issues and constraints. A summary matrix of the Strategic Factors, Targets and Actions is at Annex 3.

1. Investment in human resources, technology and financial resourcing

a. The need to restructure

Target

  i. Increase the size of CSD, in particular by increasing the number of statistical positions, to ensure the statistical system is capable of meeting essential statistical goals.

  ii. Restructure the division into three main divisions: 1. Macroeconomics and Finance; 2. Social (including Environment); 3. Collections and Services.

Strategic action

Raise a properly structured and comprehensive proposal to Finance Headquarters and Human Resource Management, the Development Coordination Committee and Cabinet to seek endorsement.

The structure of CSD has not been reviewed or changed substantively for more than 20 years. During this period, the workload and responsibilities of the division have expanded greatly, especially with the introduction of international standard statistical indicators. Staffing and skill levels have not increased and the structure of the division has not changed to meet the new challenges and demands.

The CSD is the third smallest NSO in the Pacific with the least number of officials carrying out activities. One of the principal challenges faced by CSD in recent years has been to apply international statistical concepts and processes and to develop a capable and efficient statistical system. The division is heavily reliant on assistance from technical agencies in certain areas, such as Government Finance Statistics (GFS), which were not previously in the scope of collections, compilations and releases.

The issues arise mainly from a lack of in-house resources, especially skilled human resources, as well as time and space to effectively deliver on essential statistical goals. The demand for statistics continues in the form of the statistical requirements of the national strategic plan, Te Kete. A list of core statistics is given under Statistical Areas 1 to 3. Statistical demands, and the resource constraints faced by CSD, will not decrease and the requirements cannot simply be eliminated. These demands are expected to impose an increasingly heavy burden on CSD, unless they can be met by an increase in the resource base.

Given the limited number of qualified statisticians in Tuvalu, the core statistical areas have been allocated in a way that best suits the situation. As a result of the limited number of Statisticians, some areas such as '*Registered Population*' and '*CPI*', have been allocated to Assistant Statistical Officers, even though these areas should be part of the senior officials' accountability. The priority focus areas of macroeconomics and finance are assigned to senior staff of CSD.

Individual staff experience intense workloads. Managing these workloads in a small NSO is difficult.

b. Improving macroeconomics and finance statistics

The division has depended heavily on assistance from the International Monetary Fund (IMF) and Pacific Financial Technical Assistance Centre (PFTAC) in macroeconomic statistics. Initiatives in addressing these issues focus mainly on key areas of challenge, including balance of payments (BoP), GFS and national accounts. The CSD does not have specific dedicated compilers for these areas. Recruiting specialized staff for is the favored solution.

Target

In-house analysis and compilation of BoP, GFS and National Accounts

Strategic action

  i. Ensure that CSD has at least one compiler for each of the individual statistical areas, and assign responsibility for these areas to senior staff of the division.
 ii. Foster collaboration between compilers and the Budget Team of the Department of Planning, Budget and Aid Coordination (PBACD) and Treasury to develop knowledge and understanding of government financing processes, the national budgeting process, significant revenue and expenditure, and the classifications utilized.
iii. Continue building knowledge, capacity and staff confidence with PFTAC and IMF through in-country technical assistance missions, and enable the respective compilers to actively engage in compilation processes.
 iv. Seek training opportunities for staff whenever possible and available, and ensure compilers participate actively to extend their capability and maximize skill transfer.
  v. Increase retention of capacity attained within CSD to offset the impacts of staff turnover.

   c.   Use of statistical technology

CSD used CAPI (computer-assisted personal interviewing) for collecting data for the first time while conducting the 2017 Population and Housing Mini-Census. To manage the data collection process, CSD used Survey Solutions, a software tool developed by the World Bank, to design the survey and collect the data using tablets. To analyze the data, CSD employed 'Stata', which is the preferred tool of the World Bank, and SPC, for the analysis of survey data and poverty analyses.

Target

  i. In-house use of 'CSPro', 'Stata', 'SPSS' (statistical software), PopGIS and documentation software for survey design, data management, data analyses and statistical disseminations.
 ii. Adopt CAPI methods for conducting censuses and surveys, implemented through the use of Survey Solutions and other identified software where feasible and appropriate.
iii. Improve management of the CSD website for effective dissemination of statistics and reports.

Strategic action

  i. Establish a statistical unit that specifically coordinate censuses and surveys collections, statistical production and dissemination that utilizes the statistical software. It is recommended that the recruits working under this unit should at least have adequate programming, information and technology background.
 ii. Ensure adequate capacity in using statistical software such as Stata through statistical training and use in official analyses.
iii. Coordinate with SPC assistance on the use of CSPro and Survey Solutions to develop CAPI questionnaires for surveys and censuses.
 iv. Utilize the applications of PopGIS in statistical publications and train the stakeholders of using the PopGIS
  v. Engage in resource mobilization to secure sufficient funding to meet the cost of accessing and using the statistical software and technology required for the implementation of key statistical concepts and processes.

d. Accessing support programmes, training, workshops and meetings

There are many support programmes available for NSOs, including training and meetings facilitated regionally and internationally by technical partners and donors (Figure 4).

DONORS, FACILITATORS	PROGRAMMES, TRAININGS, WORKSOPS AND MEETINGS
ABS	Pacific Leadership Forum
JICA, UNSIAP	Production and analysis of monitoring indicators in support of inclusive development policy
OCO, SPC	Customs and Statistics data
PFTAC	Fishing revenues
	GDP compilations & forecasts
	GDP data administrations
	GFS administrations
SPC	Agriculture census
	Censuses rounds
	CRVS
	Disability monograph
	Documentation of microdata
	Editing and cleaning of HIES data
	Heads of Planning & Statistician meeting
	International trade and the PTAs
	Mainstreaming gender across government policies
	Statistical roadmap of gender statistics to monitor the SDGs
Statistics New Zealand	Pacific Annual Attachment Program
UNCTAD	Measuring ICT statistics
UNESCAP	System of Environment & Economics Account
UNICEF	MICS data processing
	MICS planning and administration
	Poverty analyses
UNICEF, UNSIAP, World Bank	Survey solution, CAPI and STATA
UNITAR	Monitoring of SDGs
	StarTact tool
University College London	Disability statistics
UNODC	Monitoring SDG16
UNWomen	Localisation of SDGs related to Gender Equality
	Statistical roadmap of gender statistics to monitor the SDGs

Figure 4: Summary of principal training, workshops and meetings

SPC and PFTAC, followed by UNICEF, have offered a wide range of support to regional NSOs, including CSD.

Attending these support initiatives brings value to CSD. Staff gain experience and learn from officials and also benefit from knowledge sharing between countries.

The CSD has not been able to attend some meetings and training sessions. In some cases, there was a clash of schedules for the appropriate official, or the cost of attendance was not budgeted for.

Target

CSD statisticians participate in all relevant support programmes, training, workshops and meetings to ensure awareness of statistical initiatives and updates that are to introduced to regional NSOs, leading to improved statistical capacity and a more efficient statistical system

Strategic action

   i. Attend and participate in all relevant assistance programmes, training, workshops and meetings to maximize benefits from increased knowledge and experience.
  ii. Continue fostering good relationships with technical agencies and in updating status of assistance received and future assistance required.
 iii. Seek government approval for appropriate budget and resources to attend partly funded meetings, particularly high-level meetings where only travel costs are funded and per diems and incidental costs are not met.
  iv. Utilize south-south collaboration whenever possible and appropriate.
   v. Propose training opportunities to donors and development partners.

2. Coordination of data and statistics with stakeholders

Data source owners and users are important stakeholders. Without them, it is impossible for CSD to operate effectively. Earlier sections of this strategy document list the data sources and information that need to be captured. It is important for data source owners to be aware of the significance of their data in the statistical system and the reasons why CSD needs to collect it.

In turn, CSD must understand users' needs properly and provide a high-quality service. This service to stakeholders will be both a determinant of, and be determined by, CSD's level of capacity and efficiency.

Targets

   i. A clearly defined core set of statistics to ease the statistical collections.
  ii. Improvement in administration and management of data sources.
 iii. Create a centralized database that timely deliver efficient processes of data management and statistical production.
  iv. Establishment of a Statistics Steering Committee with clear terms of reference to enhance the functioning of CSD, including the coordination of statistical data source owners, stakeholders and CSD.
   v. Assessment of the quality of the collected data to better understand the source data and to improve data collection practices
  vi. Assessment of statistical users' needs to better understand stakeholders and more effectively meet their requirements

Strategic action

   i. Identify the data that must be collected and design a data collection work plan.
  ii. Properly inform data sources of the need for, and importance of not only working together, but also of supplying data willingly.
 iii. Promptly and properly inform data sources of any issues with the data they manage, and collaborate in improving entry, recording, filing and dissemination practices.
  iv. Work with sources to agree on how they can best contribute to sharing information and meeting expected timelines for releasing data to CSD.

v. Clearly inform data sources of the practices in place to ensure confidentiality in the utilisation of data.

vi. Create forms to record all data that is to be collected, and properly monitor the collection status.

vii. Coordinate and communicate with statistical stakeholders, identify the statistics needed to be produced, and collaborate on means of integrating them into CSD programmes.

viii. Identify areas to start with in coordination using the centralized database. The Health and Migration statistics are good areas to begin with. Include the other areas whenever they are appropriate. Seek financial assistances from the government, respective projects and donors to meet the costs needing to create a centralized database.

ix. Deliver satisfactory services to statistical stakeholders. Giving statistical reports would be a preference to maintain the trust and courage between CSD and source data of continuing data exchanges

x. Bind an agreement with the stakeholders in a form of MoU or Data Access Agreement whenever appropriate to attain and maintain trust of data exchanges for the purpose of analyses, producing and using of the statistics, and especially the microdata

3. Statistical dissemination processes

Statistical reports, press releases and the CSD website are the primary means of disseminating statistics to stakeholders. Dissemination is also facilitated with assistance from the GDDS team of IMF, PFTAC and SPC.

The majority of statistical releases are disseminated as *Statistical Area Reports*. They are individual reports for the statistical areas indicated in this plan. Other statistics that cannot be released as Statistical Area Reports will be included in *Statistical Biannual Reports*, press releases and CSD website releases.

Target

i. Clarification of Tier statistics as guidance for CSD in prioritization of the statistics to produce.

ii. Timely release, publication and dissemination of compiled and analyzed statistics through all modes of statistical dissemination.

iii. More reliable and efficient updating of the CSD website.

iv. Production of a dissemination work plan and release calendar.

v. Maintenance of accurate records to reflect the status of statistical releases, publications and dissemination of statistics to improve understanding of production processes and services

vi. Collection of solid evidence reflected in the use of statistics in decision-making and policy formulation.

Strategic action

i. Clarify and identify the Tier statistics and indicators with clear definition.

ii. Engage data source owners through the Statistics Steering Committee, which is to be responsible and accountable for the statistical processes of the national statistics system, particularly for data collection and production of statistics.

iii. Ensure timely data collection, data entry, analysis and compilation of statistics.

iv. Create forms to record the status of all releases, publications and dissemination of statistics, and set up monitoring of these processes.

v. Appoint a webmaster for the CSD website, with the role to include proactively providing updates to SPC, irrespective of official requests for updates.

vi. Propose high-level coordination and delegation responsibilities for the dissemination of censuses and surveys, and ensuring statistics are accessible and used in planning, decision-making and policy formulation.

vii. Design a work plan, release calendar and proper statistical dissemination process.

viii. Release statistics in formats that stakeholders can readily understand.

ix. Make the Statistics Steering Committee accountable for dissemination.

x. Coordinate with SPC on censuses and surveys and social statistics dissemination whenever it is a requirement.

xi. Comply with requirement that all official statistics can only be published and disseminated after they have been seen and approved by the Government Statistician.

4. Revision and enforcement of Statistics Act and Census Act

The Statistics Act and Census Act were revised in 2008. The CSD has experienced difficulties in enforcing the legislation, especially in relation to compliance with data collection requirements when undertaking censuses and surveys. Data source owners are reluctant to share information, despite clear explanations about confidentiality and limited disclosure of information. Although compliance powers exist under the acts, it has not been the practice to enforce legal sanctions for non-compliance with statistical collection processes.

However, it is important to have appropriate ordinances in place that fully reflect the need for compliance, with penalties for non-compliance. The legislation must give CSD a clear mandate to obtain the information necessary to compile and disseminate essential statistics. Although these criteria are all present in the current legislation, the penalties referred to in the acts have never been exercised in practice.

Target

i. Revise the Statistics Act and Census Act, wherever appropriate, to update the statistical framework under the 'Schedule 1'; to reflect the current status of CSD, and to give CSD a clear and enforceable mandate to collect the information required to compile and disseminate essential statistics.

ii. Enforce the Statistics Act and Census Act, whenever appropriate, to minimize the challenges that arise during the collection of data and information.

Strategic action

i. Seek advice and work closely with the Attorney-General's Office on the ordinances.

ii. Seek assistances of associate organization such as Australian Bureau of the Statistics, Statistics New Zealand and SPC in reviewing the Acts.

iii. Seek the advice and endorsement of the Attorney-General's Office and the Police department for advocacy on the provisions of the acts and the powers vested in CSD relating to the enforcement of the ordinances.

iv. Collaborate with the Police department and Attorney-General's Office whenever there is a need to implement penalties for non-compliance.

5. Statistical roadmap in place for Te Kete 2021 to 2030 and 2021 to 2023 Te Uluniu strategy

The PBACD and ECU used to lead the Finance ministry in monitoring the TKIII roadmap and activities. This monitoring includes institutional activities that were initiated as part of the ministry's 2016–2018 Corporate Plan.

However, CSD faces significant challenges in meeting the ministry's reporting requirements. The challenges arise because of the unclear linkages between the CSD statistical programme and the monitoring requirements for the implementation of TKIII and the ministry's corporate plan. It is therefore now important to have a comprehensive overview of the requirements that the CSD statistical system must meet with regards to national statistics and indicators framework and requirements as outlined in the national strategic plan 2021 to 2030, together with the 2021 to 2023 Finance Corporate Plan referred to as 'Te Uluniu'.

Target

i. Draft and form a statistical roadmap for the implementation statistical production requiring for the national strategic plan for sustainable development 2021-2030.

Strategic action

i. Improve collaboration, communication and coordination between CSD, PBACD and ECU on how the Te Kete can be monitored statistically using existing programmes and statistical processes for the production of statistics and indicators.

ii. Design a statistical roadmap for the implementation of statistical production in these areas.

STATISTICAL AREAS

1. MACROECONOMICS AND FINANCE

1.1 INTERNATIONAL MERCHANDISE TRADE STATISTICS

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE
1.1.1 Imports – CIF values	HS, source markets (COO and regions), monthly and annually	Customs department's PC Trade system, Fisheries department, Plant Protection & Quarantine Section of Agriculture
1.1.2 Exports – FOB values	HS, destinations (countries and regions), monthly and annually	
1.1.3 Trade balance – CIF values	Sources, destinations, monthly and annually	
1.1.4 Principal imports – CIF values	HS, monthly and annually	
1.1.5 Principal exports – FOB values	HS, monthly and annually	

CSD liaises directly with data source owner to extract data from PC Trade (a computer programme).

The FOB value of imports is no longer entered by the source owner due to a new policy of Tuvalu Customs Tax (TCT) to change the valuation of imports from FOB to CIF. The FOB value is instead estimated on the basis of other information for the entries. The analysis and compilation of this data are managed in-house.

CSD is engaging in opportunities to collaborate with the private sector and Customs and Trade departments to achieve improvements in data, focusing on trade under Pacific PTAs (Preferential Trade Agreements), which need to be captured as part of IMTS analysis.

ACTIONS

- Improve understanding of the processes of data management through PC Trade, ensuring sufficient knowledge of the trading declarations that need to be made by Customs and brokers, and also relevant experience in the analysis and reporting essentials.
- Obtain data from sources on a monthly basis, and identify variables that need to be saved for access, analysis and reporting. Identify outliers and unexpected entries, referring to the Customs department for clarification where access to declaration forms is an alternative source of information.
- Consider integration of PTAs within the scope for IMTS, and collaborate with the Customs and Trade departments to capture PTA-related data.
- Consider integrating data on fish exports and shuttle trading. Communicate and collaborate with the Quarantine section of the Department of Agriculture to capture declarations of agricultural commodities being transported overseas, and similar information for fishery joint ventures (for instance, volumes of fish catches estimated to be off-loaded overseas).
- Seek assistance from SPC, whenever needed, for statistical processes, especially compilation of census and survey statistics, indicators and reports.

1.2 BALANCE OF PAYMENTS

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCES
1.2.1 BoP summary statistics	Current, capital and financial accounts, annually	Treasury department, Fisheries Division, Western Union, NBT, Auditor General Office
1.2.2 International investment position	Assets, liabilities and net IIP, annually	
1.2.3 Tuvalu BoP financial account	Acquisition of assets, incurrence of liabilities	
1.2.4 Goods account	Goods credit, goods debit	
1.2.5 Services	Services credit, services debit	
1.2.6 Primary income	Primary income credit, primary income debit	
1.2.7 Secondary income	Secondary income credit, secondary income debit	
1.2.8 Capital transactions	Capital transactions credit, capital transactions debit	
1.2.9 Foreign exchange rates	Selling and buying rates of foreign currencies	

PFTAC and IMF have assisted CSD with the analysis and compilation of BoP statistics and indicators. There is an urgent need for the BoP data to be updated to enable associated indicators to be produced; for example, the GNI statistics.

- CSD needs significant capacity and resource enhancement to enable it to produce these indicators. Stronger advocacy is also needed to raise data source owners' awareness of the importance of collecting the information and the relevance of BoP statistics to overall economic policy and management. Data source owners are frequently very reluctant to release the required information, despite the legitimate demands of stakeholders, including CSD and the Tax authority. Currently there is issue with quality of information collecting from NBT. And there have not continuing collections from Western Union for number of years now.

ACTIONS

- Continue collaboration with PFTAC to compile and update the balance of payments statistics and indicators on an annual basis.
- Improve CSD's capacity to manage the compilation of BoP statistics in-house. Identify, propose and attend training opportunities for compilers to build knowledge and capacity in compilation methods and concepts.
- Increase confidence and engagement in reporting, informing and advising the Minister of Finance and CEO of statistical outcomes.
- Seek the understanding and assistance of data source owners to enable CSD to obtain the required information.
- NBT is currently providing information in a form of manual forms filled as accordance to statistical purposes. It is important that NBT includes the descriptions of the transactions in additions to the statistical codes produced as part of every forms filled.
- CSD to deliver trainings to staff of NBT and Western Union of transactions classifications

1.3   NATIONAL ACCOUNTS

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE
1.3.1 GDP (current price)	Aggregate, per capita, growth, annually	Treasury department, SOEs, TNPF, Inland Revenue Division
1.3.2 GDP (constant price)		

Tuvalu's GDP is estimated on the basis of the System of National Accounts, 1993 (SNA93). To the extent possible with the data available, changes have been implemented to ensure closer alignment with the updated standard, 2008 SNA. As with BoP work, PFTAC has assisted CSD with the annual compilation of GDP. The most recent statistics updated to 2018 and were produced in April 2019.

Timely compilation is constrained by challenges in collecting and compiling the required source data. High-priority issues relating to data quality include the need to rebase the constant-price estimates from their present base year of 2005, and to increase the range of source data (particularly for the private sector) used to estimate current-price GDP. Further, since Tuvalu's economy has significant links with the rest of the world, GNI is a very important indicator of Tuvalu's economic situation. GNI is dependent on robust measures of both GDP and BoP.

Staff capacity in national accounts is very limited. An increase in the number of staff with skills in national accounts is essential to reduce CSD's reliance on technical assistance from PFTAC.

ACTIONS

- Progress activities 1 to 4 under BoP (provided above)
- Continue to work with PFTAC in compiling GDP and GNI.
- In addition to the main statistical area report on GDP, aim to release important outputs as part of the biannual statistical area report
- Standardize the TIN classifications as according to the ISIC.

1.4   GOVERNMENT FINANCE STATISTICS

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE

1.4.1   Statement of operations
    (a) Gross and net operating balances
    (b) Net lending / borrowing
    (c) Financing
1.4.2   Classification of functions of government
1.4.3   Public sector debt
	Annually	Treasury department, SOEs, Inland Revenue, Auditor-General's Office, Rural Development Department, PBACD

IMF/PFTAC have provided training and assistance to CSD on the compilation of GFS data. In the current organizational structure, CSD has no specific GFS compiler. The most recent GFS statistics are for 2017. These were produced during an in-country mission by an IMF official, who assisted CSD in compiling the statistics.

The limited number of CSD staff and its competing priorities contribute to a long-term issue of insufficient capacity in compiling GFS statistics. However, CSD is taking responsibility for managing GFS statistics and aims to appoint a specific compiler, starting in 2020.

ACTIONS

- Progress activities 1 to 4 under BoP (provided above)
- Communicate and collaborate with the respective data sources to capture and improve information on the financial transactions of local governments, Tuvalu Development Funds (TDF) and Special Development Funds. It is important that TDF is enabled to disaggregate data at donor level. There are currently weaknesses in information on, and access to local government transactions and accounts. CSD needs to assist in improving data sources and ease of accessibility.
- In addition to the statistical area report, release important outputs as part of the biannual statistical area report.

1.5   CONSUMER PRICE INDEX

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE
1.5.1 CPI indices	Major groups, subgroups and quarterly indices	The prices outlets
1.5.2 Inflation rates	Quarterly, annual and average annual of total groups	

The prices of commodities identified in the CPI regime (basket of goods and services) are collected from price outlets each quarter. The statistics are used to produce the CPI on a quarterly basis. Pricing only takes place on Funafuti, where just over half of Tuvalu's population resides.

ACTIONS

- Consider expanding the scope of pricing to include the outer islands, depending on the reliability of the indicators.
- Make arrangements with the main retails (i.e. the Meckanzie LTD, JY, Sulani) to supply the prices of key items to CSD respective seniors independently of officials responsible for price collections purposely to minimize the inconsistencies arises from the collections.
- CSD will continue collecting price data every quarter from scheduled sources, and make necessary assessments of price indices, CPI movements and most importantly the inflation rates.

2.   SOCIAL

2.1   CIVIL REGISTRATIONS AND VITAL STATISTICS (CRVS)

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE
2.1.1 Completeness of births	Annual and average 3 years statistics	Health department
2.1.2 Fertility - **a.** sex ratio; **b.** crude birth rate; **c.** ASFR (Age specific fertility rates); **d.** Total Fertility Rate (TFR)		
2.1.3 Completeness of deaths		
2.1.4 Mortality – **a.** sex ratio; **b.** crude death rate; **c.** under 5 mortality; **d.** life expectancy statistics; **e.** non-communicable diseases;		
2.1.5 Cause of deaths	Age-group, monthly and by sex	
2.1.6 Completeness of deaths	Annual and average 3 year statistics	Registry Division of the Office of the Attorney-General

CSD liaises directly with the data source owners in the Ministry of Health and National Registry Office to assist in collecting national births and deaths data. Vital statistics were recently produced and updated to 2016 during progressive work on the 2016 CRVS report and such a report was successfully completed in 2017 as the first CRVS report.

Owners of data sources may take some time (several months in some cases) to issue official notifications of events, and there is therefore, a delay in registration updates, leading to delays in data collection. The causes-of-death statistics are yet to be properly registered and entered in accordance with international classification standards. The data source needs to improve its ability to identify and assign classifications to causes of death.

Data editing for the CRVS report involved removing duplicates and standardizing the data format, for instance, coding of variables. In cases where there were missing variables (such as sex, birth date/year, age), they were imputed using other information. For instance, population census and migration data captures residents' birthdates. Challenges arise when causes of death are poorly described. In these cases, descriptions are corrected using other information from the Health Administration department.

ACTIONS

- Update collections based on Health department registrations and CMR (Consolidated Monthly Report) on a monthly basis.
- Tuvalu is a small place where everyone tends to know everyone else. Recording of unofficial events (e.g. announcing events on the radio) is recommended to assist in maintaining consistency and to validate and reconcile the registered information with the source.
- Inform the source of any issues and determine possible ways of solving or minimizing them.
- It is important that appropriate classifications are used for causes of death so they can be registered according to international standards. CSD has been working with SPC to reduce issues relating to CRVS data through raising awareness and providing training for data source.
- The CSD Officer responsible for Health is charged with improving his/her ability in managing vital statistics, particularly in implementing the classification of causes of death. Given good administrative data, it should be possible for CSD to manage timely data collection for this area in-house.

2.2 MIGRATION STATISTICS

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE
2.2.1 Residents' arrivals	Occupation, age-group, sex – monthly	Immigration
2.2.2 Residents' departures		
2.2.3 Visitors' arrivals	Occupation, region, nationality, age-group, sex – monthly	
2.2.4 Visitors' departures		
2.2.5 Overseas residents' births	Sex – monthly	
2.2.6 Overseas residents' deaths	Age-group, sex – monthly	

Arrival and departure cards are collected directly from the source by CSD, which then proceeds with data entry. The analyzed statistics have been updated to 2018, but are yet to be published.

Inconsistencies in filling out and filing travel cards within the immigration process is the major problem. Listed below are examples of errors and non-standard outputs arising from these practices:

- A significant number of erroneous entries occurred for travel by national boats (MV Nivaga and MV Manufolau) internationally. A large number of entries were left out for most of these travelers.
- No travel cards were issued for fishing vessel arrivals and departures. No information was captured on those who entered Tuvalu by these vessels and left the country by plane, or vice-versa.
- Information for travelers on special flights and charter flights were mostly entered for one leg of their journey, but not both. Therefore, in situations where only departures were recorded, the number was definitely wrong.
- The existing database does not use the ILO standard classification of occupations.

ACTIONS

- Inform the Immigration Department of issues, and implement activities necessary to minimize them.
- Proceed with weekly data entry of arrivals and departures.
- Create an 'ID-database' to verify the correctness of entries and avoid mistakes. The ID-database should include all the dates for different modes of transport (air or sea) for travel internationally. This information, which is captured independently of migration data, is mainly used to reconcile the entry of migration statistics.
- Ensure that all travel by air and sea is included during the data entry phase.
- Reduce errors arising from incomplete arrival and departure information (for instance, for those arriving on a fishing boat but departing by plane, charter flights with records for only one leg of the journey, and only one-way records available for national boat employees travelling internationally).

2.3   POPULATION PROJECTIONS

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE
2.3.1 Registered resident population	Sex and quarterly	Census, migration and vital statistics
2.3.2 Registered total population		
2.3.3 Population projections	Quarterly	

The process depends on the completeness of vital statistics and migration statistics. The statistics have been updated to 2016 but are still provisional. Therefore, the updates are yet to be released officially.

The delay in data releases is the result of delays on the part of data source owners, primarily the Health department, which is slow to produce the target statistics.

ACTIONS

- Ensure timely analysis of vital statistics and migration data to enable timely release of targeted statistics.
- Use projections from census and HIES data for comparison of population estimates.
- Formulate the Statistical Identifications of the population to assist in updating certain characteristics of the population. For instance, the labour force statistics.

3. COLLECTION AND SERVICE

3.1 CENSUS AND SURVEY

Censuses and surveys are amongst CSD's most important data collections. The data from these collections assists CSD to meet the demand side of statistics, especially in addressing standard statistical indicators. In supplying demographic and social statistics to meet the needs of users, CSD depends heavily on analysis of microdata from censuses and surveys as a key source of information.

The data is also a key source of information about the historical socioeconomic statistics and characteristics of people and households; for instance, education enrolment status of children, remittance income, consumers' expenditure patterns and significant household income and expenditure.

Over the past decade, CSD has conducted the following censuses and surveys:

CENSUSES & SURVEYS	PERIOD	
HIES	1994, 2004/2005, 2010, 2015/2016	5 year inter-survey period
Population & Housing Census	1991, 2002, 2012, 2017	10 year inter-censal period (2017 was actually a mini-census)
Multiple Indicator Cluster Survey	2019/2020	The survey is to complete by 2020
Demographic and Health Survey	2007	It is recommended that another survey be conducted.

The Population and Housing Census is conducted approximately in every 10 years. This period has been deemed too long for the production of essential outputs for efficient decision-making and policies reforms. The cost of conducting a census is the main reason for the lengthy period between collections (the 2012 census cost an estimated $0.5 million).

CSD successfully carried-out the first mini-census in 2017 on a very limited budget, only 5 years after the 2012 one. By shifting data collection in the field from a paper-based process to CAPI (Computer-Assisted Personal Interviewing), it is possible to conduct censuses and surveys at shorter intervals and at much less cost.

DEMANDS AND UPCOMING CENSUSES AND SURVEYS

Given the frequency of censuses and surveys, the next Population Census and HIES are expected to take place within the scope of this strategy. There is also considerable demand for the next DHS to be conducted (the previous one was in 2007).

In addition, new surveys have been introduced in the Pacific region. These surveys include the 'Disability Survey' and Multiple Indicator Cluster Surveys (MICS). The scope and design of MICS questionnaires and requirements are very similar to those for DHS. Annex 2 shows the planned timeline for censuses and surveys for 2020–2024.

Given the priorities emphasized in Strategic Factor 1a (see above), it would be challenging for CSD to conduct censuses and surveys during 2019. However, based on the demand for DHS and MICS, it is recommended that the surveys take place as outlined in Annex 2. The 2012 census collected disability data for the first time ever, using questions similar to the Washington Group Short Set of [Disability] Questions.

ACTIONS

- Astutely assess the efficiency of decisions with the proceedings as accordance to national context.
- Conduct consultations rounds with stakeholders to capture the data needs, feedbacks and recommendations of the stakeholders as part of the planning and designing phase
- Establish a technical committee with a TOR to oversee the activities at all stages of respective censuses and surveys. And if it is not necessary, then establishing a steering committee to be informed of the initiatives should be of satisfactory with the proceedings.
- CSD to produce a proper and comprehensive strategic census / survey plan that includes the tabulations plan, and to deliver quality trainings for proficient organized and a successful undertaking together with timely and quality production of the statistics

- Enhancement of minimal fatigues to experience by households. It is recommending to interview only very few households when there is pilot fieldwork.
- Generate statistical IDs at persons' and dwellings level to minimize the effort requiring of the collections. For instance, the date of births and sex, the GIS plots (and others) can mostly captured and therefore to re-use base from existing information.
- After completing the data processes of editing and cleaning for every census and survey, CSD has to document all the microdata leading to a proper constructed and comprehensive metadata
- Given the prospects of having frequent censuses and surveys, at the same time it is important to understand that CSD must have adequate capacity of using the statistical software and CAPI applications to meet the requirements of the proceedings. And with such a need, it is recommended to establish a unit under CSD with staff to practically responsible of utilizing such a technology during the survey / census designing, collections and data processing.
- The CSD to formulate a statistical identification of the population and dwelling to ease the efforts requiring of collections.

3.2   STATISTICAL PRODUCTION

STATISTICS TO PRODUCE	ANALYSIS DISAGGREGATION	SOURCE
3.2.1 SOCIO-ECONOMIC & DEMOGRAPHIC STATISTICS		
3.2.1.1 resident population 3.2.1.2 median age 3.2.1.3 sex ratio 3.2.1.4 dependency ratio 3.2.1.5 population growth rates 3.2.1.6 population density 3.2.1.7 Number of households 3.2.1.8 Labour force participation rate 3.2.1.9 Employment population ratio 3.2.1.10 Unemployment rate 3.2.1.11 migrant statistics 3.2.1.12 Fertility statistics 3.2.1.13 Mortality statistics	Sex, individual islands and regions	Population and housing censuses
3.2.1.14 Dwelling characteristics 3.2.1.15 Cooking methods, appliances and energy 3.2.1.16 ICT statistics	Individual islands and regions	
3.2.1.17 households expenditure 3.2.1.18 households income	per capita, monthly, annual	HIES
3.2.1.19 Multiple statistics to produce base from MICS. For instance, the domestic violence against women, water security status accessed by households, etc.		MICS

3.2.2 POVERTY		
3.2.2.1 Population and households below the poverty line	Sex, age, employment status, households and population characteristics, and geographical location (urban/rural)	HIES
3.2.2.2 Poverty line	Regions	
3.2.3 DISABILITY PROFILE		
3.2.3.1 Disability dimensional statistics	Social and economic characteristics	Census and survey data
3.2.4 EDUCATION		
3.2.4.1 Proportion of children attending school 3.2.4.2 Gross enrolment rate 3.2.4.3 Net enrolment rate 3.2.4.4 Out of school rates/ Drop-out statistics 3.2.4.5 Early childhood development index	Region, national, sex, educational levels	Census, surveys
3.2.5 HEALTH		
3.2.5.1 Consumption of tobacco 3.2.5.2 Consumption of alcohol & kava 3.2.5.3 Child Health 3.2.5.4 Access to water 3.2.5.5 Access to Sanitations	Region, national, sex	Census, surveys

3.2.1 SOCIO-ECONOMIC AND DEMOGRAPHIC STATISTICS

Standard statistics to analyze base from census and surveys data. It will be a one off analyzes of producing the indicated statistics that should readily of proceeding during the reporting phases of census and surveys.

3.2.2 POVERTY

UNDP assisted CSD in analyzing and reporting on the statistics for poverty for the MDGs. The cost-of-basic-needs method was used to identify the level of relative poverty in Tuvalu. This involved establishing a food poverty line and a non-food component to set the national basic-needs poverty line. The basic-needs poverty line was then used to determine the poverty benchmarks and calculations of poverty indicators. HIES results were the principal source of information in this area. HIES were conducted in Tuvalu in 1994, 2004/2005, 2010 and most recently during 2015/2016. UNDP and CSD worked together to produce the most recent analysis and report, using data from the 2010 HIES.

ACTIONS

- New approaches to producing poverty indicators are available. CSD recommends utilizing a reliable and recognized method to produce the indicators, and is targeting working with an analyst capable of utilizing such a method.
- In terms of formulating a poverty report, CSD may consider alternative methods of analysis, or may continue to produce the indicators and report using the cost-of-basic-needs method of estimating relative poverty that has been used previously.

3.2.3 DISABILITY PROFILE

Data on people with disabilities were collected for the first time during the 2012 Population and Housing Census. The outputs were part of the analytical report of the census. CSD collected this data again during the 2017 Population and Housing Mini-Census.

ACTIONS

- CSD to continue coordinating with SPC and UNICEF of analyzes and producing disability statistics using the censuses and surveys data.

3.2.4   EDUCATION

The education statistics were used to analyzed and produced base from censuses and surveys data. The Education department used to get engaged in the process of analyzing the indicators as a mean of communicating and informed them of the statistics.

ACTIONS

- Use the data of the HIES, Population & Housing census and MICS to produce the indicated statistics. CSD is strengthening coordination with the data sources with aims for successfully capturing the data need and discussions communication of the analyzed indicators.

3.2.5   HEALTH

And similar to the education statistics, the health statistics were also used to analyzed and produced base from censuses and surveys data. And during the designing phases of data collection and releases of analyzed statistics, the Health department were always informed properly of the data need and uses where the CSD was responsibly leading the analyses.

ACTIONS

- Similar approaches to progressive actions for education section.

3.2.6   ADMINISTRATION DATA AND SECTOR STATISTICS

Administrative data produced by line ministries and other government agencies is very important for providing many standard statistical indicators. It is necessary however, that this administrative data is validated as being statistically sound and reliable. This process of validation is essential if the data is to be trusted and used for policy development.

In Tuvalu, some key ministries and agencies have begun to produce their own statistics. For example, the education sector has significantly improved its capacity to produce its sector statistics and has a good database in place. The sector conducts surveys and undertakes its own analysis and reporting. Education and CSD must collaborate in the process, including on dissemination. Similarly, the Police department has shown improvement in the production of crime statistics.

Sector statistics are also being improved in other important areas; for example, environmental statistics related to the impacts of climate change, health statistics, and many others. Although these administrative statistics may not be within the scope of the core statistics, they are still recognized as being an important part of the overall national statistical system and statistical production process.

ACTIONS

- In support of sectors with the statistics, CSD is willing to coordinate the process of official releases, which would include validation of statistics.
- Certain administration data of respective agencies will be of much helpful and informative with the initiative of upgrading the population statistical identifications.

3.3 DISSEMINATION

CSD recognizes the importance of satisfying stakeholders' demands for timely and reliable statistics. Regular dissemination is the principal means of connecting users to the statistics and indicators that they need, and ensuring these statistics and indicators are easily and readily accessible. The proposed modes of dissemination are expected to be used during this strategic period are demonstrated in the Annex-2 of the Annex section. The key targets of statistical dissemination are;

i.   Attaining the publications of the statistics as accordance to dissemination strategy and modes of dissemination emphasized in Strategic Area 3, Annex 2 and Annex 6

ACTIONS

- The CSD has to work as accordance to strategic actions of strategic factor 3 using the proposed dissemination modes (Annex-2 and Annex-6) and timelines.
- The administrations of CSD has to formulate a dissemination policy to guide and clarify the CSD together with the stakeholders of the roles requiring for dissemination.
- CSD to frequently conduct statistical analysis trainings that engaged the stakeholders of utilizing the PopGIS and census or survey data to produce varieties of the statistics
- Assign staff to properly train and thus responsible of anonymization and documentation of all the censuses and surveys microdata using the appropriate statistical software forming of metadata to assist users of understanding the data
- Timely populating and update of the statistical website

MONITORING AND EVALUATION

The progress of activities is to review biannually. The review focuses on responses to the Strategic Factors that were initiated for the purpose of achieving the goals, the actions set out for Statistical Areas including collections and dissemination practices, and accordance with the strategies outlined in Annex 1 and Annex 2.

It is essential that the overall strategy functions well. The monitoring and evaluation (M&E) process includes reflection on the listed criteria (below) that are used to assess the respective Strategic Factors (SF) and annexes:

A. UNDERSTANDING STAKEHOLDERS

Purpose

To understand the needs of statistical stakeholders and enable effective planning to address the demand for statistics.

M&E to reflect evidence and responses

Conduct an assessment to ascertain who are the most common national, regional and international stakeholders; what statistics they require; and what purpose they use them for.

Area of assessment: SF-2

B. SATISFACTORY STATUS OF SERVICE TO STATISTICAL STAKEHOLDERS

Purpose

To always provide satisfactory levels of statistical services to statistical stakeholders, in particular, the Government of Tuvalu.

M&E to reflect evidence and responses

Are stakeholders satisfied with the statistics produced for access? Which stakeholders' purposes are not satisfied, and which statistics does this dissatisfaction relate to? It is important to understand which statistics do not satisfy stakeholders' demands; what are the gaps and weaknesses, and how can these be overcome?

Area of assessment: SF-2, SF-3 Annex 2

C. CAPACITY AND HUMAN RESOURCE MANAGEMENT

Purpose

To capture statistical areas in which CSD lacks capacity, and also lacks staff resources given existing workloads

M&E to reflect evidence and responses

Who are the officials involved in analysis, compilation and reporting of corresponding statistical areas? Was the process carried out in-house or with assistance from outside CSD? Who provided assistance and what was the purpose of the assistance? In which statistical areas does CSD lack capacity to carry out the statistical essentials? In which statistical areas does CSD have problems with production processes because of limited time or lack of staff? How is CSD coping with the technology required in the current statistical environment – are CSD statisticians capable of using the technology, or can the technology only be applied with technical assistance?

Area of assessment: SF–1, SF-5

D.   COLLECTION STATUS

Purpose

To understand the progress of collection processes and capture issues arising from facilitation of collections

M & E to reflect evidence and responses

Which statistical areas have had to change the schedule for collections because of certain problems? What are the problems that caused the changes? Which statistical areas have problems with data sources not being willing to release the information and statistics required? How has CSD responded to such issues?

Area of assessment: SF-2, SF-4 Annex 1

E.   REPORTING STATUS

Purpose

To understand statistical dissemination practices and progress

M & E to reflect evidence and responses

Identify statistical areas that are reporting according to the reporting schedule or plan. Identify statistical areas that are not reporting according to the reporting schedule or plan, and the reasons for not reporting as planned. What are the challenges (if any) of disseminating statistics? What was the response to such challenges?

Area of assessment: SF-2, SF-3 Annex 2

ANNEXES

Annex-1 Participants that were part of the consultations of the TNSDS

Names	Ministries / Departments / Agencies
1. ALL AREAS	
Mr. Niuatui Niuatui	Finance Headquarter
	Planning, Budget & Aid Coordination Department
	Former Statistician
Mrs. Siemai Apinelu	Ministry of Public Utilities & Industries
	Former Statistician
Mrs. Lototasi Vaguna	Evaluation & Coordination Unit
Mr. Alapati Taupo	Education Department Headquarter
Mrs. Loisi Seluka	Finance Headquarter
Mrs. Alimau Pugameau	Planning, Budget & Aid Coordination Department
Mr. Toakai Puapua	Tuvalu Central Statistics Division
Ms. Grace Alapati	
2. MACROECONOMIC & FINANCE	
Mr. Falaoa Sione	Business Department
Mr. Peter Hudson	
Mrs. Loise Tinilau	Price Control
Mr. Temumuni Talitiga	Customs Department
Mrs. Sania Teisini	Inland and Revenue Department
Mrs. Pelenise Kino	
Mr. Pentala Teo	National Bank of Tuvalu
Mr. Fakatoafe Teikauea	
Mr. Asau Leauma	Office of the Auditor General
Mr. Mase Tumua	
Mrs. Fuaitai Taomia	Planning, Budget & Aid Coordination Department
Mr. Penivao Moealofa	
Mrs. Taulogo Nakata	Tuvalu Electricity Cooperation
Mr. Kiatoa Ulika	Tuvalu National Provident Fund
Mr. Tuitala Lasifo	
Mr. Telele Kilifi	Tuvalu Telecommunication
Mrs. Susie Polau	Western Union
Mr. Polau Salaika	
Mrs. Memita Densy	
Mrs. Bateteba Aselu	Public Enterprise Reform Monitoring Unit
3. SOCIAL, CENSUSES / SURVEYS AND DISSEMINATION	
Mrs. Bateteba Aselu	Public Enterprise Reform Monitoring Unit
Mrs. Sina Tane	Education Department Headquarter
Miss. Betty Elizabeth Melton	Energy Division
Mr. Kaio Taula	
Mr. Suiti Faavae	Rural Development Department
Mr. Salesa Falesene	Gender Affairs Department
Mrs. Leilani Ielemia	Immigration Department
Mrs. Tutonu Semi Bruce	Kaupule Funafuti
Mr. Niko Iona	Meteorological Services Division
Mrs. Tavau Vaaia	
Mr. Limoni Mativa	
Ms. Corina Ituaso	Office of the Attorney General
Miss. Kitele Tefoto	Registry of Attorney General
Ms. Hilda Carere	Social Welfare
Mrs. Aloama Sikela	

Annex-2: Mode of dissemination

a.	Statistical area reports	This mode of release is purposely assigned to statistical areas that report individually. The reporting is in two categories: • Biannual area reports, which are to release twice a year. Certain statistical areas are released in this way, for instance, IMTS (International Merchandise Trade Statistics) reports. • Quarterly area reports, which are to release four times a year. Certain statistical areas are released in this way, for instance, CPI (Consumer Price Index) reports. • Annual area reports, which are to release once in a year. The timeline of such a release suits the publications of statistical areas where the CSD depends heavily on external technical assistances that used to offer once only in a year, for instance National accounts, BoP and GFS.
b.	Statistical biannual reports	This mode of release is purposely assigned to statistical updates of all statistical areas that are accessed by stakeholders. Such reports are released twice a year.
c.	Press release / Top statistics	Press releases (including the statistical newsletters) and top statistics are another means of immediately communicating important statistics to the public. Infographics are generally used in such releases to facilitate stakeholders' understanding and interpretation of the statistics.
d.	Census & Survey reports	The publicize consolidated reports for a specific statistical survey, for instance the upcoming 2021 HIES report
e.	CSD website	There used to have a regional NSOs web-administration known as PRISM (Pacific Regional Information System). The PRISM is an SPC platform that regional NSOs can use to make their publications available on the internet. Now the NSOs have been encouraged to continue managing their websites independently of PRISM. The CSD website has basically started to develop provided the assistance of SPC
f.	PopGIS	PopGIS is a powerful tool that displays large amounts of statistics and indicators on a map. The information is visualized in a manner that reveals more powerful and compelling stories than can be provided by statistical tables. Additional data layers, such as locations of schools and health facilities, can be added, and satellite imagery can be used as a backdrop. PopGIS allows users to map their own data, as long as they match the administrative national and subnational boundaries used in the system.

Annex-3: The schedule for statistical publication to be produced by CSD

TYPES	TIMELINES
1. Quarterly Area Report	
1st quarter	April of 2020–2024
2nd quarter	July of 2020–2024
3rd quarter	October of 2020–2024
4th quarter	January of 2020–2024
2. Biannual Area Report	
1st biannual	August of 2020–2024
2nd biannual	February of 2020–2024
3. Annual Area Report	On different timelines
4. Biannual Statistics Report	
1st biannual statistics report	August of 2020–2024
2nd biannual statistics report	February of 2020–2024
5. Census / surveys reports	On different timelines
6. Press release / Top statistics	January, April, July and October of 2020–2024

Annex-4: TNSDS STRATEGIC LOG-FRAME

Strategic Factors	Strategic Output Targets	Strategic Actions
Goal 1: To have a statistical environment capable of carrying out all core statistical activities		
1 (a) The need to restructure	• Increase the size of CSD, in particular by increasing the number of statistical positions, to ensure the statistical system is capable of meeting essential statistical goals. • Restructure the division into three main divisions: 1. Macroeconomics and Finance; 2. Social (including Environment); 3. Collections and Assistances.	Raise a properly structured and comprehensive proposal to Finance Headquarters and Human Resource Management, the Development Coordination Committee and Cabinet to seek endorsement.
1 (b) Improving macroeconomics and finance statistics	In-house analysis and compilation of BoP, GFS and national accounts	• Ensure that CSD has at least one compiler for each of the individual statistical areas, and assign responsibility for these areas to senior staff of the division. • Foster collaboration between compilers and the Budget Team of the Department of Planning, Budget and Aid Coordination (PBACD) and Treasury to develop knowledge and understanding of government financing processes, the national budgeting process, significant revenue and expenditure, and the classifications utilized. • Continue building knowledge, capacity and staff confidence with PFTAC and IMF through in-country technical assistance missions, and enable the respective compilers to actively engage in compilation processes. • Seek training opportunities for staff whenever possible and available, and ensure compilers participate actively to extend their capability and maximize skill transfer. • Increase retention of capacity attained within CSD to offset the impacts of staff turnover.
1 (c) Use of statistical technology	• In-house use of 'CSPro', 'Stata', 'SPSS' (statistical software), PopGIS and documentation software for survey design, data management, data analyses and statistical disseminations. • Adopt CAPI methods for conducting censuses and surveys, implemented through the use of Survey Solutions where feasible and appropriate. • Improve management of the CSD website for effective dissemination of statistics and reports.	• Establish a statistical unit that specifically coordinate censuses and surveys collections, statistical production and dissemination that utilizes the statistical software. It is recommended that the recruits working under this unit should at least have adequate programming, information and technology background. • Ensure adequate capacity in using statistical software such as Stata through statistical training and use in official analyses. • Coordinate with SPC assistance on the use of CSPro and Survey Solutions to develop CAPI questionnaires for surveys and censuses. • Utilize the applications of PopGIS in statistical publications and train the stakeholders of using the PopGIS • Engage in resource mobilization to secure sufficient funding to meet the cost of accessing and using the statistical software and technology required for the implementation of key statistical concepts and processes.

1 (d) Accessing support programmes, training, workshops and meetings	CSD statisticians participate in all relevant support programmes, training, workshops and meetings to ensure awareness of statistical initiatives and updates, leading to improved statistical capacity and a more efficient statistical system.	• Attend and participate in all relevant assistance programmes, training, workshops and meetings to maximize benefits from increased knowledge and experience. • Continue fostering good relationships with technical agencies and in updating status of assistance received and future assistance required. • Seek government approval for appropriate budget and resources to attend partly funded meetings, particularly high-level meetings where only travel costs are funded and per diem and incidental costs are not met. • Utilize south-south collaboration whenever possible and appropriate. • Propose training opportunities to donors and development partners.
Goal 2: To provide a comprehensive, timely and reliable set of core statistics for effective planning, policymaking and decision-making and other uses for the benefit of Tuvalu		
2. Coordination of data and statistics with stakeholders	• A clearly defined core set of statistics to ease the statistical collections • Improvement in administration and management of data sources • Create a centralized database that timely deliver efficient processes of data management and statistical production • Establishment of a Statistics Steering Committee with clear terms of reference to enhance the functioning of CSD, including the coordination of statistical data source owners, stakeholders and CSD • Assessment of the quality of the collected data to better understand the source data and to improve data collection practices • Assessment of statistical users' needs to better understand stakeholders and more effectively meet their requirements	• Identify the data that must be collected and design a data collection work plan. • Properly inform data sources of the need for, and importance of not only working together, but also of supplying data willingly. • Promptly and properly inform data sources of any issues with the data they manage, and collaborate in improving entry, recording, filing and dissemination practices. • Work with sources to agree on how they can best contribute to sharing information and meeting expected timelines for releasing data to CSD. • Clearly inform data sources of the practices in place to ensure confidentiality in the utilisation of data. • Create forms to record all data that is to be collected, and properly monitor the collection status. • Coordinate and communicate with statistical stakeholders, identify the statistics needed to be produced, and collaborate on means of integrating them into CSD programmes. • Identify areas to start with in coordination using the centralized database. The Health and Migration statistics are good areas to begin with. Include the other areas whenever they are appropriate. Seek financial assistances from the government, respective projects and donors to meet the costs needing to create a centralized database. • Deliver satisfactory services to statistical stakeholders. Giving statistical reports would be a preference to maintain the trust and courage between CSD and source data of continuing data exchanges • Bind an agreement with the stakeholders in a form of MoU or Data Access Agreement whenever appropriate to attain and maintain trust of data exchanges for the purpose of analyses, producing and using of the statistics, and especially the microdata.

3. Statistical dissemination processes	• Clarification of Tier statistics as guidance for CSD in prioritization of the statistics to produce • Timely release, publication and dissemination of compiled and analyzed statistics through all modes of statistical dissemination • More reliable and efficient updating of the CSD website • Production of a dissemination work plan and release calendar • Maintenance of accurate records to reflect the status of statistical releases, publications and dissemination of statistics to improve understanding of production processes and services • Collection of solid evidence reflected in the use of statistics in decision-making and policy formulation	• Clarify and identify the Tier statistics and indicators with clear definition. • Engage data source owners through the Statistics Steering Committee, which is to be responsible and accountable for the statistical processes of the national statistics system, particularly for data collection and production of statistics. • Ensure timely data collection, data entry, analysis and compilation of statistics. • Create forms to record the status of all releases, publications and dissemination of statistics, and set up monitoring of these processes. • Appoint a webmaster for the CSD website, with the role to include proactively providing updates to SPC, irrespective of official requests for updates. • Propose high-level coordination and delegation responsibilities for the dissemination of censuses and surveys, and ensuring statistics are accessible and used in planning, decision-making and policy formulation. • Design a work plan, release calendar and proper statistical dissemination process. • Release statistics in formats that stakeholders can readily understand. • Make the Statistics Steering Committee accountable for dissemination. • Coordinate with SPC on censuses and surveys and social statistics dissemination whenever it is a requirement. • Comply with requirement that all official statistics can only be published and disseminated after they have been seen and approved by the Government Statistician.
4. Revision and enforcement of Statistics Act and Census Act	• Revise the Statistics Act and Census Act, wherever appropriate, to update the statistical framework under the 'Schedule 1'; to reflect the current status of CSD, and to give CSD a clear and enforceable mandate to collect the information required to compile and disseminate essential statistics • Enforce the Statistics Act and Census Act, whenever appropriate, to minimize the challenges that arise during the collection of data and information.	• Seek advice and work closely with the Attorney-General's Office on the ordinances. • Seek assistances of associate organization such as Australian Bureau of the Statistics in reviewing the Acts • Seek the advice and endorsement of the Attorney-General's Office and the Police department for advocacy on the provisions of the acts and the powers vested in CSD relating to the enforcement of the ordinances. • Collaborate with the Police department and Attorney-General's Office whenever there is a need to implement penalties for non-compliance.
5. Statistical roadmap in place for Te Kete statistical requirements	• Draft and form a statistical roadmap for the implementation of the Te Kete 2021-2030	• Improve collaboration, communication and coordination between CSD, PBACD and ECU on how the Te Kete can be monitored statistically using existing programmes and statistical processes for the production of the necessary statistics and indicators. • Design a statistical roadmap for the implementation of Te Kete

ANNEX 5: STATISTICAL COLLECTIONS TIMELINE

CENSUS & SURVEYS	2020	2021	2022	2023	2024
HOUSEHOLDS INCOME & EXPENDITURE SURVEY		▓			
MULTIBLE INDICATOR CLUSTER SURVEY (MICS)	▓				
POPULATION AND HOUSING CENSUS			▓		

ANNEX 6: STATISTICAL DISSEMINATION STRATEGY

STATISTICAL AREA	Publications	Analyses of statistical tables	Release implementation
1. MACROECONOMICS AND FINANCE			
EXCHANGE RATES	Biannual statistical reports	weekly	
1.1 INTERNATIONAL AND MERCHANDISE TRADE STATISTICS	Biannual statistical reports, Biannual area reports	quarterly	
1.2 BALANCE OF PAYMENT			2020-2024
1.3 NATIONAL ACCOUNTS	Annual area reports	annually	
1.4 GOVERNMENT FINANCE STATISTICS			
1.5 CONSUMER PRICE INDEX	Biannual statistical reports, Quarterly area reports	quarterly	
2. SOCIAL			
2.1 CIVIL REGISTRATION AND VITAL STATISTICS	Biannual statistical reports, Other individual reports	quarterly	2020, 2023
2.2 MIGRATION	Biannual statistical reports		
2.3 POPULATION			2020-2024
3. COLLECTIONS & SERVICES			
HOUSEHOLDS INCOME & EXPENDITURE SURVEY			2022
MULTIBLE INDICATOR CLUSTER SURVEY (MICS)			2020
POPULATION AND HOUSING CENSUS			2023
3.2.1 SOCIO-ECONOMIC & DEMOGRAPHIC STATISTICS	Census / survey reports	one off analyses, compilations and release	
3.2.4 EDUCATION			
3.2.5 HEALTH			
3.2.2 POVERTY	Other individual reports		2022-2023
3.2.3 DISABILITY PROFILE			2023

ANNEX 7: THE NATIONAL STATISTICAL SYSTEM OF TUVALU (NSS)

National priorities

STATISTICAL STAKEHOLDERS → STATISTICAL PRODUCERS → OFFICIAL STATISTICS

SOURCE DATA

TUVALU CENTRAL STATISTICS DIVISION

MACROECONOMICS STATISTICS

STATISTICAL END-USERS

OTHERS

MONETARY

SOCIAL STATISTICS

International commitments

POPULATION & DEMOGRAPHIC