sustineo

Trust Passion Excellence

Department of Foreign Affairs and Trade: Pacific Statistics Assessment

A survey of user and producer perspectives

Report

14 November 2016

Table of Contents

Acronyms

ADB	Asian Development Bank
ABS	Australian Bureau of Statistics
CSPS	Core Set of Pacific Statistics
DFAT	Department of Foreign Affairs and Trade, Australia
MFAT	Ministry of Foreign Affairs and Trade, New Zealand
NMDI	National Minimum Development Indicators
NSDS	National Strategies for the Development of Statistics
NSO	National Statistics Office
PARIS21	Partnerships in Statistics for Development in the 21st Century
PFTAC	Pacific Financial Technical Assistance Centre
PICs	Pacific Island Countries
PICTs	Pacific Island Countries and Territories
PIFs	Pacific Island Forum Secretariat
PITs	Pacific Island Territories
SPC	The Pacific Community
StatsNZ	Statistics New Zealand
TYPSS	Ten Year Pacific Statistics Strategy
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
USP	University of South Pacific

SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

The primary objective of this study was to provide an assessment of the current access to, and use of, statistics in the Pacific. The assessment makes an important contribution in highlighting how these issues have emerged in the context of changing regional circumstances. It provides information to support the future direction of the Pacific Statistics Regional Program.

The assessment included four key activities: (i) defining a draft set of key social, economic and environmental statistics, referred to as the 'Core Set of Pacific Statistics' (CSPS); (ii) undertaking a stocktake of available statistical data for the Pacific from key datasets; (iii) identifying gaps between the CSPS, data currently produced and accessible, and the National Strategies for the Development of Statistics (NSDS); and (iv) identifying the changes with statistics detailed in the 2009 Benchmark Study. The data sources drawn on are outlined below:

- A stocktake was conducted of key datasets, including the National Statistics Office (NSO) websites of Pacific Island Country and Territories (PICTs), the Pacific Community (SPC) National Minimum Development Indicators (NMDI) database, the World Bank Databank and IMF Data. The draft CSPS included 111 statistics across economic (32), social (36) and environmental (43) domains.
- Interviews were conducted with users of statistics within the Pacific, specifically international donors and technical providers. In total, 19 interviews were conducted with 25 individuals.
- A survey was disseminated to international users, NSO-based producers of statistics, research institutions and non-government organisations. In total, 61 usable responses were returned.

Unless otherwise specified, in the report 'users' will refer to those in the international context. This reflects the scope of the assessment and focus on international users and stakeholders.

This assessment acknowledges the relevance of Sustainable Development Goals (SDG) to the Pacific Statistics agenda. There are a number of significant initiatives currently being undertaken in this emerging field – such as prioritisation in the Pacific context. Due to the time limitations SDGs were excluded from the scope of this study but are noted as part of the next steps for statistics in the Pacific.

Key findings

Use of statistics in the Pacific

The assessment found that publically accessible data did not fulfil the requirements of international users in the Pacific to a satisfactory level. International users primarily drew on economic and social statistics for their work. The majority of users preferred international organisations, primarily the World Bank and to a lesser extent the IMF, as a result of trust, usability, comparability and the comprehensive coverage of statistical data presented.

Gaps in data

Gaps exist in data between the proposed CSPS and the data collected in the Pacific. There was greater coverage of economic and social statistics than environmental statistics. Both users and producers were aware that data not currently collected would help users with their work.

Economic statistics: The most recent and comprehensive data are available from the World Bank and the IMF. The main data gaps included producer price indices, trade price indices, wages and earnings data,

hours worked, short term indicators for the economy, measures of productivity, and natural resource depletion statistics.

Social statistics: The most comprehensive data are available through the World Bank and SPC NMDI. The main data gaps included poverty statistics, antenatal care, births attended by skilled health staff, rates of maternal mortality, the incidence of HIV-AIDS and malaria, measures of unpaid work, literacy rates, school completion rates, and tertiary level statistics.

Environmental statistics: Coverage is limited; however this is understandable given the emerging nature of environmental statistics. The World Bank provides the most comprehensive data, which is updated infrequently.

Inconsistencies in the available data

The representation of Pacific statistics in alternative fora are inconsistent, mainly due to differences in data sources and methodologies for producing the statistics. For example, where statistics on NSO and SPC sites are often based on empirical data, the statistics presented on the World Bank site are based on modelling from a baseline empirical dataset, often sourced by the NSOs or SPC. These inconsistencies present challenges for users in making evidence-based decisions for programming, particularly where there is no information on how the statistics were compiled and under what assumptions.

Timing between data collection and publication

The timing between collection and publication of data was identified as an issue for users. The lack of up-to-date data limited evidence-based decision making as well as programming, planning and funding decisions. A lack of domestic demand for data and capacity issues with the NSOs were noted as limiting the pace of data processing.

Quality of data

Users expressed mixed levels of confidence and trust in the statistics produced for the Pacific. Producers were more confident in the quality of data than international users. Users expressed greatest confidence in economic statistics. There were diverse views on the need for international comparability compared to prioritising local country needs, however overall international comparability was noted as important.

The capacity of NSOs to undertake data collection and data processing were noted as areas of concern, particularly in relation to survey and social data. Part of this related to a lack of transparency in the processing and cleaning of data.

Varying perceptions of data reliability emerged among stakeholders. Interview participants reported that they preferred using World Bank or IMF data because they were considered authoritative. This was regardless of the fact that those international datasets draw on SPC and NSO data.

Data accessibility

Most users faced difficulty in gaining access to the types of file and datasets that they desired. This included confidentialised unit record files as well as data in usable formats, such as Excel. While a process exists for accessing data, the way that the current system is enacted is problematic as it relies on individual relationships across multiple organisations. Issues related to confidentiality concerns with access to unit record files need to be further assessed.

Data dissemination

While there are a number of regional platforms for data dissemination, there is currently no strong coordination function for the dissemination of data in the Pacific. International users desired a central place to access data which is convenient, reliable and user friendly. They noted that improvements could be made on the current platforms. The SPC has the potential to play an important role in data dissemination given the relationships it holds with relevant international and domestic organisations. This would require consideration of resource allocation and a revised focus of priorities for the SPC.

Changes compared to the 2009 Benchmark Study

The methodological differences between the 2009 Benchmark Study and this assessment limited the comparisons that could be made. Anecdotally, the gaps identified by the 2009 Benchmark Study appear largely consistent with those presented in this report. Interview and survey participants contended that the quality of data has improved during the past five years but not at the rate, or to the extent, expected.

Alternative data sources and collection techniques

Administrative data are considered an under utilised source of information for the Pacific which could complement other data sources. The logistical challenges and resourcing implications of building linkages between different data systems need to be considered in increasing the use of administrative data. Geospatial data were also noted as a potential source for cost effective assessments of land use change, infrastructure development and population density. Previous work by SPC on geospatial data could identify useful lessons for broader use. Shifting towards technology supported data collection was presented as an opportunity for improving quality and timeliness of data collection and processing. However, this would require adequate ICT support, training and resourcing to succeed.

Capacity and resourcing challenges

Significant capacity and resourcing challenges exist within the Pacific that impinges on the production of high quality statistical data. These include issues such as access to technology, qualification of key personnel, staff numbers as well as the relatively low standing of NSOs within their broader government systems. Capacity building and training activities need to be fit-for-purpose and targeted to the requirements of the particular country. There is a requirement to continue an approach which acknowledges the diverse circumstances faced by NSOs. This could include consideration of a tiered approach to the provision of support to reflect the different capabilities across the region.

Regional coordination and governance

Interview participants noted the need for clearer governance and coordination functions within the Pacific. While noting significant effort from both users and producers in the Pacific, interview participants observed that coordination could be improved. A key challenge is the coordination of donor inputs and technical assistance that is aligned with NSO and Pacific government priorities.

Multiple 'priorities' for statistics among stakeholders

Multiple priority sets of statistics and indicators are currently being developed in the Pacific. While this is based on the common understanding that there are limits in the capacity and resources available in the region, a challenge is managing the priorities of different stakeholders. These priorities were observed by interview participants at a number of levels – between and within the PICTs, international organisations, donors and technical providers. Interview participants noted that these different priorities need to be acknowledged in future work that seeks to identify 'priority' statistics for the region.

<u>Leveraging opportunities presented by the SDGs</u>

The SDGs could present both challenges and opportunities to advancing statistics in the Pacific. Interview participants noted that Pacific Island leaders had been active in considering which indicators were of central relevance and importance to the Pacific. This has been instigated through a process led by the PIFS, with involvement from SPC and UNESCAP. This provides an opportunity for building local demand for statistics through aligning the prioritised SDGs with both NSDS processes and the CSPS.

<u>Making domestic users the primary customer for statistics in the Pacific</u>

A question this assessment raises is who the primary customer is within the Pacific context related to data quality, timeliness, accessibility and dissemination. The scope of this assignment has focused on international users, who have emphasised processes to allow for evidence-based and driven policy-making and data to enable research. However, project stakeholders have emphasised the importance of generating demand for statistics from within the Pacific, rather than international users. Building on the current interest among Pacific leaders related to the SDGs could be an opportunity to engender greater interest and resourcing from local actors to improve use of statistics at the country level.

Recommendations and next steps

The table below outlines recommendations to be considered by DFAT and other stakeholders. These recommendations should be discussed with regional stakeholders to consider costing, timelines, the responsible organisations, and how they align with the objectives for TYPSS.

Recommendations and next steps	Issue addressing	Priority
HIGH PRIORITY		
1. Produce a high-level plan and governance structure for implementing activities under the TYPSS. This would: a. provide a framework for coordinating activities relevant to economic, social and environmental domains of statistics b. include the identification of responsible organisations for work related to each domain, with a clear articulation of their role, responsibility and means of working with other responsible organisations. This high-level plan would manage any overlap across different organisations to reduce the duplication of work, and provide a clearer picture of where resources are invested. The plan should include adequate accountability mechanisms and the provision of sufficient resourcing.	Regional coordination and governance	High
2. Establish a regional dissemination strategy to integrate the needs of domestic, regional and international organisations. This would complement the high-level plan outlined in Recommendation 1. It would provide a clear articulation of expectations related to data dissemination, roles and responsibilities of different organisations, and include a release calendar for data.	Data accessibility and dissemination	High
3. The draft CSPS should be refined to align with producer and user priorities, as well other work being undertaken to prioritise statistics in the Pacific.	Core set of statistics	High

	The statistics that underpin the prioritised set of SDGs would provide a solid foundation for this activity, given the strong buy in from Pacific Island leaders. The refinement of the CSPS should include consultation with both producers and users to maximise buy in from the relevant stakeholders. Within the prioritised set of statistics, a subset should be established which is a realistic and minimum requirement for delivery from smaller PICTs given the lower capacity. This process should include steps to ensure the prioritised statistics are comparable internationally.		
4.	Current forms of data collection, particularly surveys, should be reviewed for cost effectiveness and whether they are fit-for-purpose in a resource-constrained environment.	Information and Communications Technology	High
5.	Further investigation is conducted into the opportunities and limitations of technology supported data collection in the Pacific, with a particular focus on costs and capability.	Information and Communications Technology	High
6.	NSDS be undertaken from remaining PICTs and a review of the successes and lessons learned from previous NSDS processes recorded.	NSDS	High
7.	Confidentiality concerns related to allowing access to unit record file data should be further considered. This includes canvassing the concerns of data producers, as well as: identifying appropriate processes to conduct anonymization of data; ensuring appropriate policies, legal instruments and systems are in place to maintain data security; and aligning of current data management processes with best practice standards. This should assess the costs and risks of facilitating greater access to confidentialised unit record file.	Data accessibility and dissemination	High
8.	The different priorities of key stakeholders is acknowledged and integrated in future work identifying 'priority' statistics for the Pacific. This would assist the transition to a fit-for-purpose approach to the production of statistics in the Pacific by establishing a clear baseline and understanding among key stakeholders.	Managing stakeholder priorities	High
MEDIUM PRIORITY			
9.	A tiered approach to the provision of technical support to PICTs should be developed further. This includes considering an appropriate structure for the support, and clear and reasonable criteria for classification of countries within different tiers. This must be done in consultation with PICTs. As part of this process, the type of training offered to PICTs should be reviewed and targeted towards the different priorities of NSOs.	Capacity and resourcing challenges	Medium
10.	Greater transparency should be promoted in the processing and cleaning of data. This could include the specification of minimum data standards and reporting requirements in agreements with other relevant stakeholders, as well as transparent processes for the archiving of data files and clear record of the type of data processing and cleaning that was conducted.	Data quality	High
11.	Clauses are included in agreements with relevant organisations to require the timely release of data and in specified forms. This	Data quality	High

would allow for greater accountability with respect to the publication of data.		
12. Increase the use of technology to promote engagement between stakeholders outside of face-to-face meetings of the PSSC. While face-to-face meetings are important, significant resource savings could be made through more frequent remote communication between the organisations involved in various aspects of supporting Pacific statistics.	Information and Communications Technology	Medium
13. Further work is undertaken to promote better access to data for regional and international users. This should include more clearly outlining the existing process for accessing NSO owned data. Establishing and publicising a focal point for organisations involved in the data access process would be beneficial (for example, NSOs and SPC), as would establish a standardised form to access data. This would complement work undertaken in relation the dissemination strategy outlined in Recommendation 2. In the interim, a list of data collection activities across the Pacific could be hosted on the SPC website to better inform international users of the data they seek to access.	Data accessibility and dissemination	Medium
14. Identify the specific constraints preventing NSOs from providing up-to-date, timely and comprehensive sets of statistics. The reasons as to why PICTs sometimes have very low Statistical Capacity Indicator scores should be examined and addressed.	Capacity and resourcing challenges	Medium
LOW PRIORITY		
15. Develop a regional communication strategy to complement the development of the dissemination strategy outlined in Recommendation 2. In the interim, a regular publication could be developed to promote awareness related to data collection and dissemination activities in the region. This would complement other work undertaken by regional partners, such as the ADB and IMF.	Data accessibility and dissemination	Low
16. Regularly undertake user and producer surveys to improve accountability and awareness of stakeholder needs. The survey used as part of this project could be used as a template for engaging both groups and refined, as required.	Managing stakeholder priorities	Low

1. INTRODUCTION

This DFAT commissioned independent assessment focuses on current access to, and use of, statistics in the Pacific. The assessment is set against the backdrop of the Ten Year Pacific Statistics Strategy (TYPSS), specifically in the implementation of Phase II, and acknowledges these as the guiding framework for activities undertaken to improve statistics in the Pacific. Rather than provide a comprehensive review against the activities under the TYPSS, this report provides a more specific assessment of key issues related to the use of data among international data users and other development partners. This report is part of an on-going effort to ensure the regional statistics program is improving and responding to changing circumstances. The findings from this assessment are intended to help support the future direction of the statistics program in the Pacific.

Background

The TYPSS (2010-20) is a regional approach to maximise and coordinate resources to provide regional strategic leadership in relation to improving statistics in the Pacific. Its particular focus is on improving the scope and quality of national statistics.

The *Strengthening Statistical Services through Regional Approaches: A Benchmark Study and Way Forward* (the Benchmark Study) was a precursor to the TYPSS. The Benchmark Study recognised the need for a comprehensive plan to improve and develop the collection and use of statistics in the Pacific region. In June 2009, the Benchmark Study was approved by Pacific National Statistics Offices (NSOs) with its recommendations subsequently approved by the Pacific Community (SPC) Committee of Representatives of Governments and Administrations (October 2009), and the Forum Economic Ministers Meeting (November 2009).

The TYPSS outlines a series of short- and long-term programs to contribute to national statistics capacity development and regional coordination and capability. The Strategy is implemented through three Phases. Phase I of the Strategy covered the period 2011-14 and focused on supporting key statistical collections, producing a core set of statistics, building capacity within PICTs or access to regional capability, promote access to user-friendly statistical information systems and databases, introducing new innovative statistical tools, and developing national strategies for the development of statistics.

In 2013, the Mid-Term Review of Phase I identified tangible progress towards improving key aspects of statistics in the Pacific across the objectives. However, the Review also identified areas for improvement and lessons learned to inform the development of the TYPSS Phase II Design document.

The implementation of the TYPSS is currently midway through Phase II (2014-17). Through this period substantial efforts have continued from individual countries, regional organisations and international technical providers and development partners to improve statistics in the Pacific. Where the Mid-Term Evaluation of Phase II of the TYPSS, planned for 2017, would provide a comprehensive assessment of the activities undertaken between 2014-17, this report was commissioned to provide an assessment of statistics in the Pacific within a more narrowly defined scope.

Scope of the assessment

This assessment accepts the TYPSS as the guiding framework for the development of statistics in the Pacific. We acknowledge that the scope of work undertaken by key organisations in relation to statistics are aligned to the TYPSS, specifically Phase II. This report provides an independent assessment of the current state of statistics in the Pacific, within the bounds of its methodological focus and limits.[1]

We focus on identifying key issues that relate to the use and access to data in the Pacific. The important contribution of this is to highlight how these have emerged in recent times in the context of changing regional circumstances, and providing insight for the next phase of the program.

This assessment departs from the approach of other studies on statistics in the Pacific by focusing on international data users, technical assistance providers and development partners. Engagement of other stakeholders was sought through a survey however the focus is on the international stakeholders.[2]

The focus on international users is valuable for a number of reasons. The ability of development partners to continue to provide effective support to the PICTs is dependent on their capacity to monitor progress and evaluate the impact of their efforts. An important part of this is considering the coordination of their own activities, and gaining an understanding of the alignment of work being conducted against their own priorities. Similarly, while development partners working with statistics in the Pacific have rightfully had a strong focus on capacity building and country ownership of data in the past, and this remains important, the priorities of development partners as data users is also important to acknowledge and assess.

Objectives of the assessment

The primary objective of this project is to provide an assessment on current access to, and use of, statistics in the Pacific. The project was guided by four key activities outlined in the original TOR:

- Define a draft set of key social, economic and environmental indicators, referred to as the 'Core Set of Pacific Statistics' (CSPS);
- Undertake a stocktake of the statistical data in the Pacific that are currently publicly available;
- Identify gaps between the CSPS, data currently produced and accessible, and the National Strategies for the Development of Statistics (NSDSs); and
- Identify the changes with statistics detailed in the 2009 Benchmark Study.

The remainder of this section outlines the approach taken in conducting the project. Section 2 introduces a basic set of economic, social and environmental statistics. Section 3 provides a brief characterisation of the use of statistics in the Pacific. This sets the context for the stocktake of data availability in Section 4. Section 5 discusses the key findings from the project, and Section 6 provides a brief comparison between the

---

[1] The report does not claim to be a comprehensive assessment of work under the TYPSS, be inclusive of the views of all stakeholders, or to evaluate of progress made against the objectives of Phase II. Similarly, the report does not to seek to make judgement on the performance of particular organisations in relation to their work related to the implementation of the Phase II. We acknowledge that certain organisations have developed strategic documents and business plans to prioritise their work under Phase II and this dictates their priorities. These areas are beyond the scope of the assessment and should be the focus of the Mid-Term Review of the Phase II of the TYPSS.

[2] This is not to diminish the importance of other data users or producers however it was not within the scope of the current study to include all relevant stakeholders. It is acknowledged that the on-going engagement of a broad range of data users and producers from domestic, regional and international levels is critical in the successful achievement of the Strategy's objectives.

current assessment and the 2009 Benchmark Study. Section 7 presents next steps for improving statistics in the Pacific.

Approach and methodology

Our approach involved close engagement with DFAT and other project partners. A document review was initially undertaken to gain an understanding of the program and included the TYPSS, the 2009 Benchmark Study, and the recent SPC evaluation. The project drew on national, regional and international data sources to develop a holistic understanding of the TYPSS and key issues related to statistics in the Pacific.

During the assessment, it was noted that significant work was being undertaken by PIFS, SPC and the United Nations in relation to prioritising indicators of the SDGs for the Pacific. To avoid repetition with this work, these issues have not been analysed as a central part of report, but are noted as important points for consideration in Section 7.

Data stocktake

A stocktake of key datasets was conducted to assess the current availability of statistical data in the Pacific. This focused on reviewing the data available on the websites and databases of selected datasets related to the statistics presented in the CSPS as relevant for 18 PICTs.[3]

The analytical criteria for each statistic was based on:

- **Frequency** with which data are collected related to specific statistics;
- **Timing** between collection of data and publication of that data; and
- **Quality** of data in terms of the coverage, completeness and accuracy of data available.

The purpose of the stocktake was to reveal issues related to the data gaps in economic, social and environmental statistics from a sample of datasets. Databases were selected based on providing a good representation of publicly available data in the three above noted domains, across domestic, regional and international levels. The selection of the datasets for the stocktake was finalised in consultation with DFAT and included: the National Statistics Office (NSO) websites for each PICT (national); the SPC NMDI database (regional); and the World Bank Databank and IMF Data (international).[4]

The criteria used in stocktake were based on the data available at the various websites when reviewed. This departs from the approach used in the Benchmark Study, which engaged directly with NSOs regarding data that existed but was not publicly available. As a result, the stocktake does not reflect the sum of the total data that exists, but rather what was publicly available at this time. This approach was appropriate given the time and resource constraints associated with the assessment and the overarching focus of the assessment on data use and access.

More details on the stocktake and various limitations are available in Annex A – Details on stocktake conduct.

---

[3] The PICTs included: Cook Islands, Fiji, Guam, Kiribati, Marshall Islands, Federate States of Micronesia, Nauru, New Caledonia, Niue, Palau, PNG, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna.

[4] This study acknowledges the numerous other sources where data may exist, but time constraints necessitated a limited sample.

Interviews

The purpose of the interviews was to identify key themes related to data use and accessibility, particularly as relevant to the data requirements for participant's work in the Pacific. Interviews were conducted with users of statistics, primarily international donors and technical providers.[5]

In total, 19 interviews were conducted with 25 individuals from the organisations listed in Table 1. The interviews were conducted between 21 July and 12 August 2016. Personnel within DFAT include: Gender, Equality and Disability Inclusiveness, Health, Infrastructure, Development Economics, and Pacific Economic Growth. A full list of interview participants and their organisational affiliation are available at Annex B – Interview participant list. The interview question guide is available at Annex C – Interview guide.

Table 1 – Organisations engaged in the project

• Department of Foreign Affairs and Trade (DFAT), Australia	• United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)
• Ministry of Foreign Affairs and Trade (MFAT), New Zealand	• Secretariat of the Pacific Community (SPC)
• Australian Bureau of Statistics (ABS)	• University of South Pacific (USP)
• Statistics New Zealand (StatsNZ)	• Pacific Financial Technical Assistance Centre (PFTAC)
• ADB	• Partnerships in Statistics for Development in the 21st Century (PARIS21), OECD
• World Bank	
• Pacific Island Forum Secretariat (PIFS)	

Survey

The survey was designed to engage a broad range of stakeholders relevant to statistics in the Pacific, including both producers and users of statistics. The survey was revised based on feedback from DFAT, ABS, StatsNZ and MFAT. Two versions of the survey were developed, one targeted at users and the other at producers. Each survey comprised approximately 30 questions. The survey is available at Annex D – Survey questions.

The survey was distributed through a network of relevant stakeholders, including NSOs, technical assistance providers and donors. This was also extended to include research institutions and non-government organisations that work in the Pacific. Stakeholders had the opportunity to participate over a two-week period (25 July to 5 August 2016). Overall, the survey returned 61 usable responses, which included 20 producers and 41 users. Only 20 respondents opted to indicate their organisational affiliation, including NSOs (N=10), universities (n=4), government (n=2), IMF (n=1), SPC (n=1), and the Bank of the South Pacific (n=1).[6] Graphs and findings from the survey are discussed throughout the report. A list of additional graphs from the survey is available at Annex E – Survey Results.

Terminology

For the purpose of providing a clear understanding of the terminology used in this report, a number of terms are defined below.

---

[5] It was not within the scope of the assessment to engage with all relevant organisations. The focus of this assessment meant we did not engage with in the interviews with the domestic users or producers. Similarly, relevant sectoral specialists from regional organisations were not able to be engaged, neither were relevant international stakeholders such a UNESCO, UNICEF and the World Health Organization.

[6] Additional responses were received in a Word document however these did not provide the complete information required for inclusion in the survey totals.

Data and statistics

Data and statistics are used interchangeably in this report. 'Data' relate to the raw information collected and 'statistics' provide an interpretation or summary of these data. Variables, or indicators, are data items or quantities that can be measured or counted. For example, 'GDP per capita' is a statistic sourced from 'national accounts data' and 'population estimates'.

Statistics can be presented only for certain groups that are within the overall (aggregated) data. In this case, statistics are disaggregated. Common ways of disaggregating statistics include by gender, age, ethnic group, level of education, income level, or geographic region.

Confidential unit record data typically relate to records for specific individuals or households that are modified in some way to protect the confidentiality of respondents.

Users and producers of statistics

Throughout the report, reference is made to both producers and users of statistics. While these terms indicate they are distinct groups, in practice there is overlap with some stakeholders functioning as both producers and users of statistics. The difference between these groups at the national, regional and international level should also be recognised. As noted above, this project focused on international users who have a different set of priorities and requirements to users at the Pacific Island level.

Noting the above caveats, producers and users are understood in this report as follows:

- **Producers** are stakeholders who are actively involved in the production of statistics. This includes data producing agencies, such as the NSOs, as well as other stakeholders who are responsible for the generation of data from surveys and other forms of data collection across the region.
- **Users** are stakeholders who draw on data or statistics to inform their work. This includes a broad range of policymakers, researchers, non-government organisations, private sector stakeholders, international organisations and development partners.

Given the focus of this assessment, the use of the term 'users' in the report should be interpreted as referring to international users unless otherwise stated. This is important as the requirements of domestic and international users will be different and the findings in this report should not be taken to speak on behalf of users within PICTs.

2. CORE SET OF PACIFIC STATISTICS

The first task of the assignment was to develop a set of priority economic, social and environmental statistics – the 'Core Set of Pacific Statistics (CSPS). Defining a basic set of statistics is important for providing policymakers and civil society with targeted access to information. This can assist in monitoring the economy, society and the environment as well as evaluating policy and other interventions.

Ideally, the selection of a basic set of statistics for the Pacific would be based on a consensus following consultation with policymakers and stakeholders. The CSPS proposed here is not designed to be an exhaustive list and but one for discussion, further consultation and refinement.

The draft CSPS includes a total of 111 statistics across economic (32), social (36) and environmental (43) domains. The full list of statistics in the CSPS is available at Annex F – Draft CSPS.

The development of the CSPS

The following section outlines the rationale and steps in devising the statistics for each domain of the CSPS.

Economic
The CSPS adopts the UNESCAP Core Set of Economic Statistics. The core set was designed by countries and development partners and endorsed by the heads of NSOs. The consultants saw no strong reasons to deviate from this list.[7] The core set consists of key structural and high frequency statistics within various domains of economic statistics (UNESCAP, 2016).[8]

Social
The set of social statistics were based on a review of the World Bank Databank, the United Nations Statistics Division (UNSD), and the PRISM and NMDI databases of the SPC. These sources were selected to ensure relevance to international obligations for reporting and for regional specificity and importance.

In order to be included in this set, the CSPS social statistics must have appeared in at least two of these databases. The statistics were grouped into the following five categories: population, health, education, employment and gender.

The inclusion of 'culture' as a category of statistics was noted as potentially important to the Pacific region, and cultural statistics are included in the NMDI. However, statistics from this category did not appear within any of the other data sets examined as part of this review, and have therefore not been included. Given its regional importance, the category of culture should be kept in mind in further developing social indicators in the Pacific. There is on-going work developing 'Alternative Indicators of Well-Being' in Melanesia and once a set of indicators has been finalised by this project, they are likely to become a priority for policymakers in the Melanesian countries.[9]

Environment
For the basic set of environmental statistics, key indicators were drawn from the World Bank, the Environmental Indicators of the UNSD, the Asian Development Bank's Statistical Database System and the NMDI of the SPC. These databases and statistics were selected according to their relevance to the environmental priorities of the Pacific region.

---

[7] It was drawn to our attention by the SPC that, through the UNESCAP Task Force on capacity review for economic reporting, work is currently being undertaken on Pacific NSOs that are too small to meaningfully compile all the indicators.

[8] Survey respondents were asked if they thought additional economics statistics should be included in the CSPS. The following statistics were mentioned: household income; national health accounts; aid flows; food production; natural resource utilisation; a business registry; and remittances.

[9] Survey respondents were asked if they thought additional social statistics should be included in the CSPS. The following statistics were mentioned: immigration/emigration; work/residence permits; violence and violence against women; crime statistics; political participation by women other than being MPs in national parliaments; the proportion of women in senior civil service positions; investment of professional development of public servants; population density on land in use; financial literacy; ownership of a bank account; and access to internet/mobile phone.

The statistics chosen for the environmental set were chosen if they occurred in at least two of the above sources. The environmental statistics were grouped into the following 10 categories: air and climate, energy, agriculture and land, forests, aquatic resources, ecosystems and biodiversity, water, waste, disasters, and population. The inclusion of natural disasters, while only included in the UNSD sets of statistics, was identified as important given the high vulnerability of Pacific countries to natural disasters.

3. USE OF STATISTICS IN THE PACIFIC

Key findings

- Users reported negative satisfaction in response to whether current publicly accessible data fulfilled their work requirements.
- Users drew primarily on economic and social statistics for their work. A lesser emphasis was placed on environmental statistics.
- Research was the most common use of statistics in the Pacific. This was followed by policy formulation and general information.

This section provides a brief overview on the use of statistics in the Pacific and the level of satisfaction from international users with the current provision of statistics. The survey data showed that 'research purposes' (n=30) is the most common use of statistics in the Pacific. This was followed by 'analysis of trends for longer-term policy formulation' (n=27) and 'general social/economic/environmental' information (n=24). There is overlap between these different uses, for example, where research purposes can clearly align with policy formulation and general social/economic/environmental information. The emphasis on research likely reflects the international and user dominated responses to the survey.

The survey showed that users drew primarily on economic and social statistics for their work, as outlined in Figure 1.
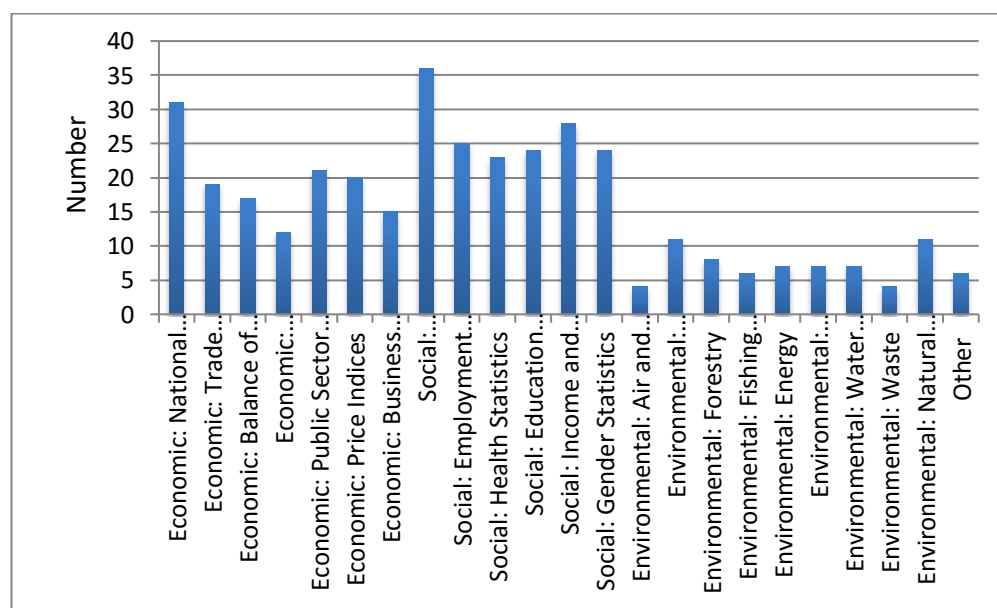

Figure 1 – Statistics which users nominated as using most regularly in their work (N=40)

Overall, users drew on economic statistics such as 'National Accounts' and social statistics related to 'Population and Demographics' the most. There was a slightly higher usage across social statistics than economic statistics. Few users reported regularly using environmental statistics in their work, with the exception of drawing on data for agriculture and natural disasters. This does not imply that environmental statistics are not useful. There is a lack of statistics available within the environmental domain and if more were collected, then more might be used. The lack of environmental statistics is not isolated to the Pacific context; with interview respondents noting that data within this domain is also not well recorded within countries with well-resourced and experienced statistical systems. The data from the interviews supported the findings of the survey, with users emphasising the importance of economic and social data for undertaking the majority of their work.

Users provided largely negative responses relating whether available data satisfactorily aligned with their work requirements. This is reflected in Figure 2 where the majority of the responses were 'somewhat dissatisfied' (n=18) or 'very dissatisfied' (n=6), compared to 'neither satisfied or dissatisfied' (n=6) or 'somewhat satisfied' (n=10). No users were 'very satisfied' with the available statistics in meeting their needs.
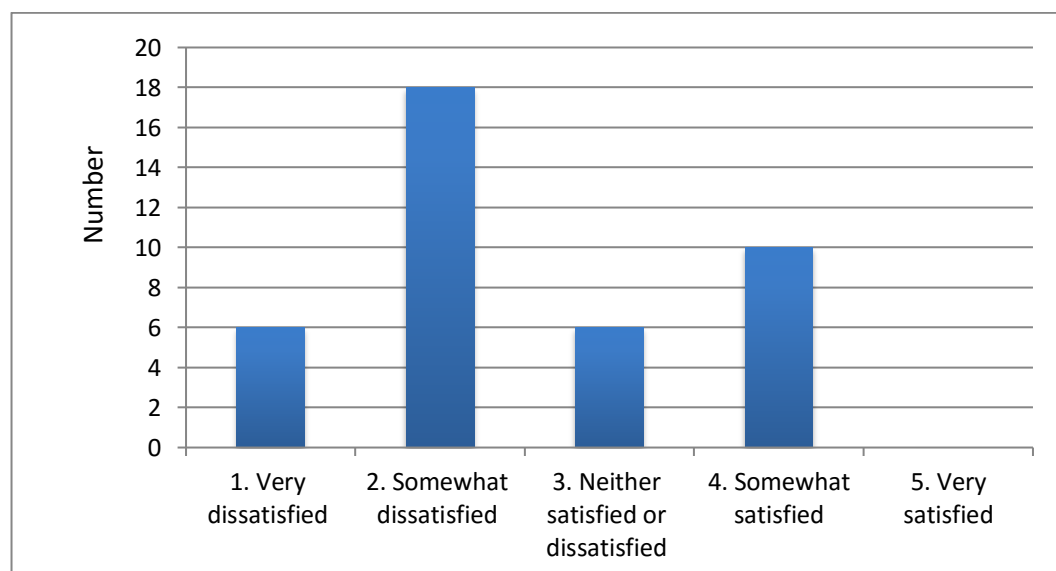
Figure 2 – User satisfaction with the available statistics meeting their work needs (N=40)

4. STOCKTAKE OF CURRENT STATISTICAL DATA IN THE PACIFIC

The stocktake assessed the current availability of statistical data in the Pacific. This assessment was based on publicly accessible data across national, regional and international levels. This section presents the findings from the stocktake related to the availability of statistical data compared to the draft CSPS statistics. Where relevant, the stocktake distinguishes between empirical and modelled data. For example, labour force statistics are often modelled estimates from the ILO. This is where multivariate regression techniques are used to input missing values at the country level. Similarly, the majority of World Bank data discussed throughout this section is modelled, where as other datasets reviewed such as the NSO sites and NMDI will be based on empirical data.

Overview of the stocktake against the CSPS

Key findings

- There are gaps in the data available for the 18 PICTs across all four datasets reviewed. The NSO and SPC's NMDI sites covered the most PICTs (n=17), followed by the World Bank (n=14), and the IMF (n=12).

Of the 22 PICTs, 18 were included in the stocktake. Four small PICTs – American Samoa, French Polynesia, the Pitcairn Islands and Northern Marianas – were excluded. For the 18 PICTs included in the stocktake there were incomplete statistical data available. Table 2 outlines the availability of country and data.

Table 2 - Data for PICTs within designated databases

Country	NSO	NMDI	IMF	WB
Cook Islands	✓	✓	–	–
Fiji	✓	✓	✓	✓
Guam	✓	–	–	✓
Kiribati	✓	✓	✓	✓
Marshall Islands	✓	✓	✓	✓
Micronesia	✓	✓	✓	✓
Nauru	✓	✓	–*	✓
New Caledonia	✓	✓	✓	✓
Niue	–**	✓	–	–
Palau	✓	✓	✓	✓
PNG	✓	✓	✓	✓
Samoa	✓	✓	✓	✓
Solomon Islands	✓	✓	✓	✓
Tokelau	✓	✓	–	–
Tonga	✓	✓	✓	✓
Tuvalu	✓	✓	✓	✓
Vanuatu	✓	✓	✓	✓
Wallis and Futuna	✓	✓	–	–
Total countries	**17**	**17**	**12**	**14**

* Nauru has recently joined the IMF (April, 2016) but is yet to be included in its databases
** The NSO site for Niue was not functional when the stocktake was conducted

Only 12 of the PICTs reviewed had data present across all four datasets. NSO and NMDI websites covered the most countries, being available for 17 of the 18 PICTs. The most prominent gaps in available data existed for the Pacific Island Territories. This was particularly the case for the IMF, which provided data for only 12 countries. Niue was only covered by one dataset.

Stocktake of economic statistics

Key findings

- The most recent and comprehensive economic statistics are available from the World Bank and IMF.
- The main data gaps included Producer Price Indices (PPIs), trade price indices, wages and earnings data, hours worked, short term indicators for the economy, measures of productivity, and natural resource depletion statistics.
- Another gap related to statistics on the assets and liabilities of the banking sector. These are required to provide an indication of the health of PICTs banks.

Prices and costs

Consumer Price Index (CPI) data are typically reported by NSOs on a quarterly basis although some countries report it monthly. It is usually disaggregated by good/service. However, seven NSOs are yet to provide any CPI for 2016. The World Bank provides an annual time series of the CPI up to 2015 for six PICTs and the NMDI has recent (to at least 2013) CPI data and Food CPI data for 12 and 15 PICTs respectively. However, this is annual data and the latest year the CPI is available in NMDI is for 2014. The IMF provides the latest quarterly CPI data for six PICs and provides recent monthly data for three.

Fiji is the only country with a PPI. Trade price indices are only available from Fiji and the Federated States of Micronesia.

Wages and earnings data are available from three NSOs but only Samoa has recent statistics for these variables. No wages and earnings statistics are available from the other sources.

Exchange rate statistics are more comprehensively covered by the IMF and World Bank sources, with data up to 2015 for seven and eight countries respectively. The IMF collects and reports statistics on a monthly, quarterly and annual basis. Their monthly exchange rate data run into 2016 for seven member PICs.

The World Bank provides Purchasing Power Parity (PPP) conversion ratios for 11 PICTs for 2014. PPP conversion factors are not available from the other sources.

Demand and output[10]

Demand and Output should include a breakdown in each sectors production and contribution to Gross Domestic Product (GDP). GDP statistics are reported annually and are often available by industrial sector of production. However, in the case of six NSOs, the latest GDP statistics are for a year prior to 2014. The availability of merchandise trade statistics from NSOs usually matches that of GDP and is often disaggregated by product. Only four NSOs report information on the trade in services.

The World Bank provides the most comprehensive national account data with respect to PICTs. The World Bank provides GDP data for five PICTs up to 2015, and data for a further six up to 2014 in real and nominal terms. No recent GDP statistics are available for Guam, Nauru, and New Caledonia. GDP statistics are available by broad industry sector and expenditure component. No disaggregation between merchandise and services trade is provided in the World Bank data. In the IMF's Direction of Trade database, quarterly data up to the end of 2015 are provided for seven PICTs.

---

[10] Demand and Output should include a breakdown of each sectors production and contribution to GDP.

An important gap exists in statistics for PICTs relates to Short Term Indicators (STIs). The purpose of STIs is to provide signals to policymakers ahead of the release of GDP statistics. Examples of STIs include new orders or investment intentions, retail sales, inbound tourist numbers, accommodation occupancy rates, building construction, changes in inventories and job vacancies. Another gap is that no measures of labour or multifactor productivity were available from the sources that were reviewed.

Income and wealth

Balance of Payments statistics are available from less than half of the NSO websites and what statistics are available are often dated (before 2014). External debt statistics are reported by the websites of four NSOs and information on a country's international investment position is only available from Palau and the Federated States of Micronesia. No information is provided on income distribution from NSO websites.

The IMF provides comprehensive statistics on current account, capital account, financial account balances and debt for 11 PICTs, as well as their international investment positions (although sometimes only up to 2013). However, the World Bank provides the best source of income inequality statistics, providing a GINI index for Fiji (2008), Kiribati (2006), Papua New Guinea (2009), Samoa (2008), Solomon Islands (2005), Tonga (2009) and Vanuatu (2010). The NMDI reports recent statistics for the poorest quintile for just Solomon Islands.

Money and banking

Four NSOs report statistics relating to the assets/liabilities of depository corporations. Broad money (a standard measure of the money supply) is reported by three NSOs but is for 2011 and 2012 for two of these cases. Interest rate data are provided by four NSOs but are only reported for 2016 on a quarterly basis by Samoa and the Solomon Islands. Statistics for broad money and interest rates to 2015 are available for seven PICTs from the World Bank and for five PICTs from the IMF on a monthly basis up to March 2016.

Government

Expenditure and revenue statistics are only available from the NSOs for Fiji (2006), Samoa (2012), and Vanuatu (2011). The IMF provides annual data on main government budgetary aggregates and debt position for nine PICTs up to 2015 but with forecasts to 2021 in its Asia and Regional Economic Outlook.

Labour market

The only data concerning the labour market is from the NSO of Samoa reporting the number of hours worked for 2012. Data on hours worked are not available from the other sources.

Natural resources

Statistics that measure the discovery, depletion and degradation of natural resources are not reported by any NSO. Adjusted net saving measures the true rate of saving in an economy after taking into account investments in human capital, depletion of natural resources and damages caused by pollution. Adjusted savings are available for seven PICTs up to 2014 from the World Bank.

Stocktake of social statistics

Key findings

- The World Bank and NMDI provided more comprehensive data on social statistics than the NSO websites.
- The main data gaps included higher frequency headcount poverty statistics, health statistics relating to antenatal care, births attended by skilled health staff, rates of maternal mortality, the incidence of HIV-AIDS and malaria, and measures of unpaid work.
- With respect to education, gaps exist for literacy rates, school completion rates, and tertiary level statistics.

Population

Country population is available from virtually all NSOs and is sometimes reported annually, or over 5 or 10-year periods. However, most NSOs do not report recent population estimates (2014 onwards). Half of the NSOs provide (usually dated) information on population distribution. While five NSOs report information on net migration it is only available for the years before 2010. However, as noted below, population estimates are routinely published by the SPC's NMDI.

The World Bank reports population and population growth for all PICTs up to 2015. Population is disaggregated by age and gender. The NMDI has even more up-to-date data, reporting population statistics for all PICTs in its database for 2016.

Coverage of most other social statistics is highest in the World Bank data. Birth and death rate statistics are available for 10 PICTs up to 2014, for Palau in 2013, and infrequently for the Marshall Islands. Life expectancy and fertility rates are available for 11 PICTs to 2014. Poverty headcount below $1.90 a day (2011 PPP) is available for seven countries for various years since 2000. Net migration statistics are available every five years for 10 Pacific countries with the latest data available being for 2012.

The country coverage of some population statistics in the NMDI (such as life expectancy and basic needs poverty) is very high but recent statistics are not available.

Health

Eight of the NSO websites do not report any of the health statistics included in the CSPS. For those NSOs reporting information on health, statistics are sparse and nearly always out dated. Coverage is highest for infant and child mortality rates although only half of the NSOs report these statistics. No information is available regarding the use of antenatal care.

The World Bank reports infant and under-5 mortality rate for 12 PICTs annually up to 2015. These statistics are disaggregated by gender every five years. Health spending per capita is also available annually for 12 countries to 2014.

Statistics for contraceptive prevalence, antenatal care, births attended by skilled health staff, maternal mortality, and immunization against measles and DPT are reported for a large number of PICTs in recent years but these statistics are reported infrequently rather than annually. The same applies to the prevalence of malnourished children (% of children under-5, based on weight for age).

Statistics for diabetes prevalence (% of population ages 20 to 79) is available for all PICTs in the World Bank data. From the NSOs, information on the prevalence of diabetes is only available for Tuvalu (for 2007).

Prevalence of HIV is only available for Fiji and Papua New Guinea. No statistics on the incidence of malaria and TB are available from the World Bank. The NMDI database has dated statistics on the incidence of malaria for three PICTs but extensive coverage of statistics on TB.

<u>Education</u>
Statistics on primary and secondary school enrolments are widely available from NSO websites although only three provide information at the tertiary level. Only one NSO website reports primary school completion rates and recent data relating to expenditures on education, and literacy rates are very sparse.

Coverage of education statistics is higher in the NMDI than in the World Bank database. The NMDI database reports gross and net school enrolment statistics for 13 and 14 PICTs at the primary and secondary levels respectively. Similar coverage exists for gender parity indices at these education levels as well as pupil teacher ratios.

All sources have poor coverage of statistics with respect to literacy rates, completion rates and statistics at the tertiary level.

<u>Employment</u>
Statistics on the labour force and unemployment rates are widely available from NSO websites but are rarely recent and some statistics are only collected every 5 or 10 years. Only the Cooks Islands reports statistics on unpaid subsistence workers but at five yearly intervals. Tonga collects annual data on own account workers but the latest statistics are for 2011.

Labour force statistics should include statistics for the labour force in different sectors of the economy. Labour force participation ratios are available up to 2014 for eight PICTs from the World Bank. The data are annual and are disaggregated by gender. These data are modelled data from the ILO and national estimates are sparse, not up-to-date, and not reported annually. This is reflected in the NMDI, which has good coverage for labour market participation rates and unemployment rates but nearly all statistics are for earlier than 2013.

<u>Gender</u>
The proportion of seats held by women in national parliaments is reported by the Federated States of Micronesia in 2007, Tuvalu in 2002 and Tonga in 2005. However, coverage by the NMDI is very high. This statistic is reported in recent years for all PICTs except two.

Stocktake of environment statistics

Key findings

- Coverage is limited; however understandable reflecting the emerging nature of environmental statistics.
- The World Bank provides the most comprehensive data but these data are not updated frequently.

<u>NSO Statistics</u>
Environmental statistics is an emerging filed and NSOs tend not to report the on them. The only environmental statistic relating to air pollution since 2008 is the consumption of ozone depleting substances for Samoa. Up to six NSO websites provide information on precipitation and temperatures but

this information is usually at least three years out of date. No statistics are available for aquatic resources, water abstracted, wastewater, and natural disasters. Five NSOs have statistics for access to improved water and sanitation but no data are reported since 2010. Only the Federated States of Micronesia reports access to electricity for 2010. Statistics for 'Energy', 'Agriculture and land', 'Forests' and 'Ecosystems and biodiversity' are rarely reported and are often out of date when they are available. An increased emphasis on environmental statistics may place further requirements on already resource constrained NSO offices.

The NMDI has up-to-date statistics for PICTS on forested land and annual rates of deforestation. The only other environmental statistics relate to out-dated information on access to improved water and sanitation and very sparse data for the fisheries sector.

World Bank Statistics

With the exception of statistics on deforestation the coverage of environmental statistics for PICTs is far greater in the World Bank database than in the NMDI. However some of the statistics reported by the World Bank are not up-to-date.

The World Bank provides annual statistics on total greenhouse gas emissions for all PICTs up to 2012. No precipitation or temperature data are reported. Energy use statistics are reported for seven PICTs but only up to 2007, while renewable energy consumption is available for nine PICTs but only up to 2011. No recent statistics are available for fossil fuel energy consumption.

Land area and use are the most comprehensive statistics available. Land area and forest area are available for all 14 countries in the database to 2015 and terrestrial protected areas for 2014. Arable land statistics are available for all except Nauru and Tuvalu annually up to 2013. Hectares of land under cereal production are reported in annual data for seven countries to 2014.

Annual statistics for total fisheries production and aquaculture production are reported for all PICTs up to 2014.

The proportion of the population with improved access to drinking water and sanitation is universally available for all on an annual basis although there are some missing data for Tuvalu and Palau. These statistics are also disaggregated by urban/rural area. Statistics relating to access to electricity are available for all PICTS in the World Bank data except Nauru but only for 2012 and these statistics are not available on an annual basis.

National Strategies for the Development of Statistics

Key findings

- The NSDSs that have been developed have played a positive role in facilitating the engagement of users and producers of data at the national level.
- Currently, only three countries (Samoa, Vanuatu and Cook Islands) have adopted NSDS, with two (PNG and Solomon Islands) finalised but waiting adoption.

Current status of NSDSs in the Pacific

The development of the NSDSs has been led by PARIS21 and the SPC in partnership with the relevant NSOs and supported by other development partners. Interviews highlighted that the process of planning, designing and developing these strategies has been important in drawing together different stakeholders

from across government, the private sector, academia and civil society and raising awareness of the types of data that exists within the NSOs and other ministries. This process was also reported to have helped with national level priority setting and facilitated increased support to statistics by officials in government.

For each country, an important stage in the development of the NSDS has been the conduct of a National Statistical Systems (NSS) assessment. This process has been used to engage interested users and draw on their perspectives on the current state of NSSs in Pacific. The assessment was noted as also being useful in identifying statistical gaps in the NSS and the capacity constraints of data producers. All countries with NSDS underwent NSS assessment, as well as those in development and planning. Training at both regional and country levels have been conducted to introduce countries to the concept, framework and process of NSDS. The training was noted as having further contributed to facilitating South-South exchanges and learning on challenges and lessons in the NSS.

Within the Pacific, however, the development of the NSDS remains a work in progress. As Table 3 highlights, only three NSDSs have been finalised and are currently being implemented.

The size of some PICTs means it is not feasible to do a whole NSDS for each country. Rather, a fit-for-purpose approach will be taken with small countries and territories where detailed corporate plans and strategies for statistics will be developed that look beyond the NSOs to other key ministries. This will be based on a standard template and will occur in 2017.

Table 3 – Summary of the current status of statistic strategies in the Pacific

Stage of Development	NSDS
Finalised (adopted)	Samoa, Vanuatu, Cook Islands
Finalised (awaiting adoption)	PNG, Solomon Islands
In Development	Tonga, Fiji
In Planning	Guam, Kiribati, Federated States of Micronesia, Marshall Islands, Nauru, New Caledonia, Niue, Palau, Tokelau, Tuvalu, Wallis & Futuna

5. INTEGRATED DISCUSSION AND ANALYSIS

This section presents an integrated analysis of the key findings. It builds on the findings from the stocktake and integrates the results from the survey and interviews. While the findings are discussed on an issue-by-issue basis, they are often inter-connected and non-mutually exclusive.

Data gaps and inconsistencies from the stocktake

Key findings

- There are significant gaps exist data between the CSPS and the data collected in the Pacific.
- Both users and producers are aware that there is data not currently collected which would help users with their work.
- Inconsistencies exist in the statistics presented in different datasets as a result of differences in data sources and methodologies for producing the statistics.
- Inconsistencies in data present challenges for users in making evidence-based decisions for programming activities, particularly where there is not information on how the statistics were compiled and under what assumptions.
- The majority of international users preferred international organisations, primarily the World Bank, as a result of trust, usability and the comprehensive coverage of statistical data presented.

The stocktake found there were clear gaps between the CSPS and available data in the Pacific that present challenges for data users. This finding from was supported by both interview and survey data.

Interview participants noted that the 'patchiness' of data in the Pacific varied according to the type of statistics. Economic and social data were noted as being more widely collected and available than environmental data. This was attributed to the requirement for certain economic data to be produced for the countries to function, and the international push since 2000 for better social data as a result of the Millennium Development Goals (MDGs). Interview participants observed that the availability of environmental data in the Pacific was, in general, poor with the exception of some data related to agriculture and fisheries. However, the stocktake revealed there were still significant gaps related to this data, particularly at the NSO level, reflecting that these types of statistics are still in their infancy.

Interview participants confirmed that the data gaps presented issues for undertaking their work. The lack of data in certain areas made it difficult to make evidence-based decisions for certain programme activities. For example, one participant noted that they were forced to revise the indicators they wanted to choose for their strategic programming in the region as a result of inadequate available data to measure change over time.

User responses to the survey further confirm the challenges related to gaps in key datasets (see Figure 11 in Annex E – Survey Results). It was also clear that producers were aware that gaps in data present challenges for users in undertaking their work (see Figure 17 in Annex E – Survey Results).

Beyond the gaps in data between the CSPS and what is collected, other issues emerged related to inconsistencies between the datasets, particularly when comparing the national, regional and international databases. These inconsistencies relate to the actual numbers presented and dates last updated.

Each of the reviewed datasets draws on a different methodology in compiling statistics. According to interview participants, the data for the NSOs sites are usually based on empirical data produced at the national level. The SPC statistics draw on NSO data where possible, but if there are gaps in the data, information is supplemented by other databases, such as the FAO and World Bank. The statistics within the World Bank database often draw on NSO and SPC data itself, however also involve modelling from a baseline year which gives consideration for changes in other factors in each country's development. Interview participants noted that these differences in the approach to producing statistics resulted in different numbers being presented across the databases. This makes it difficult for users to know which data are correct or best suited to their purpose, particularly when they are not statisticians or economists.

The inconsistencies between the datasets impact on which organisation's data users choose to draw on. The majority of interview participants, noted that the NSO websites were not updated regularly enough, but where they were it was likely they presented the most up-to-date information for what was happening on the ground. The SPC databases of NMDI and PRISM were used by some, however incomplete data along with a clunky user interface deterred users from drawing on it more regularly.

The majority of interview participants noted their first point of reference for data was one hosted by an international organisation. The IMF database was noted as being reliable, although sometimes difficult to navigate and was restricted to economic data which often did not fill all the users needs. The relative comprehensiveness of the World Bank dataset and the user-friendly interface were reasons why interview participants noted it as their primary source for data. An additional reason for prioritising World Bank data was that, given all the inconsistencies and gaps in the database, it was a data source that could be trusted. This was an interesting finding because, as a number of interview participants noted, the World Bank data is mostly based on material produced by the NSOs and SPC.

The tendency for users to draw on datasets hosted by international organisation was reflected in the survey, as presented in Figure 3.
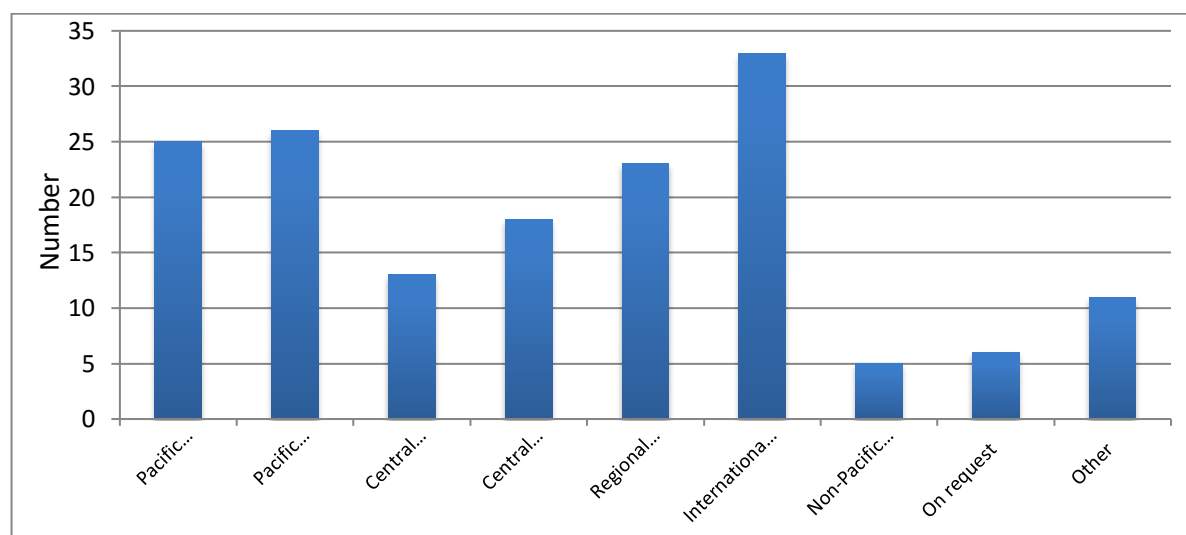

Figure 3 – The sources from which users obtain most of their data (N=40)

Frequency of data collection

Key findings

- Observations on the frequency of data collection were obscured by issues related to the timing between data collection and publication.
- Interviews revealed that frequency of collection was noted as broadly adequate and a less significant concern than other data quality and dissemination issues.

The stocktake provided observations on the frequency of data collection based on publicly available information from websites. As a result, we are only able to comment on the data that had been published. The analysis on frequency of statistics that have been published is limited by the timeliness of data collection through to publication.

While statistics from NSOs are typically reported annually or quarterly, on many NSO websites the last time statistics were collected and published was more than one year ago, and sometimes many years. Trade and CPI data are generally more up-to-date than national account and other economics statistics. The IMF and World Bank statistics are updated regularly and are nearly always available with a lag of one or two years, noting that these numbers could be remodelled based on the same baseline year. While this suggests that there is scope to improve the frequency of data collection, interview participants did not indicate it was significant issue.

Those that commented on frequency noted that quarterly and annual data, particularly related to economic statistics, were collected with adequate frequency. The key issue interview participants observed was in the processes and publication of the collected data. This observation extended to other survey based data, such as from Census surveys and Household Income and Expenditure Surveys (HIES). While interview participants contended there had been a lot of survey data collected in the last five years, the timely dissemination of that data was the core concern rather than frequency.

Timing between data collection and publication

Key findings

- Timing between collection and publication of data was identified as a significant issue of concern for data users, particularly for policymakers.
- The lack of up-to-date data was considered a challenge for using evidence in decision making, as well as broader programming, planning and funding decisions.
- Capacity issues with the NSOs and a lack of either internal demand for updated data or obligations within agreements were noted as drivers for slow data processing.

The timeliness with which collected data was disseminated was highlighted as a central concern. While the NSO websites state that statistics are usually published immediately following their collection, the stocktake demonstrated this was not always the case. It revealed that the timely processing and release of statistical data is variable across the Pacific.

The lack of timeliness with data publication undermined the usability of that data. A number of policymakers noted within interviews that they rely on up-to-date data to inform programming, planning

and funding decisions. The use of data that is many years out of date can pose risks to the effectiveness of the policy or programme, particularly given the significant demographic change in many PICTs. Interview participants reported frustration as often the relevant data had been collected but not made available.

The survey data also highlighted the dissatisfaction of users with the current timeliness of data dissemination, as presented in Figure 4.
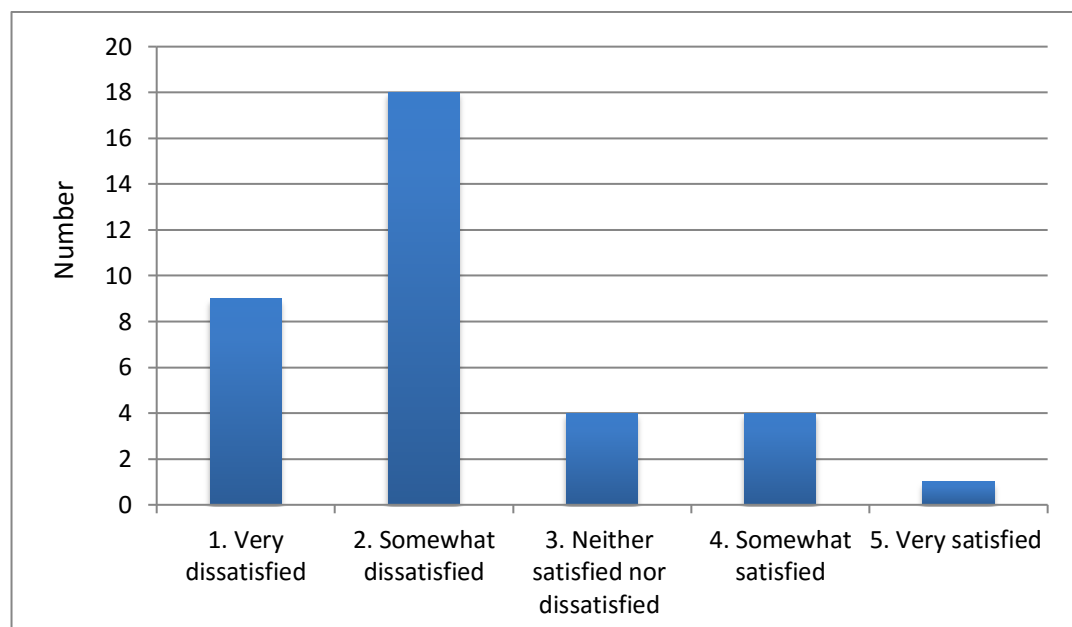

Figure 4 – User responses to how satisfied they are with the frequency of publication of statistics they use (N=36)

The inability of relevant organisations to report on certain statistics can lead to perverse outcomes in broader statistical systems. For example, one participant reflected that as a result of a Pacific NSO's lack of timeliness in releasing certain economic data, the national bank of the country duplicated effort by keeping its own records. The national bank data became the preferred data source rather than the NSO.

A range of reasons underpinned the time lag between data collection and publication. These included the capability of NSO staff to process the data, as well as their capacity to do all the tasks required of them given that their human resources are already thinly spread. It also raised question of whether the provision of support was adequate to service their requirements. Interview participants noted that they felt there was also a lack of accountability for the publication of data. There were two primary reasons suggested for this last point. First was the lack of domestic pressure and demand for the release of such data. Second was the lack of obligations within agreements for the release the data in a specific format.

Quality of data

Key findings

- Producers were more confident in the quality of data than users.
- Interview participants expressed greatest confidence in economic statistics, while there were varied assessments of social and environmental statistics.
- Interview participants expressed mixed levels of confidence and trust in the statistics produced in the Pacific, which influenced which data and datasets they relied on.
- International users noted the capacity of NSOs to undertake the data collection and data processing as an area of concern, particularly in relation to survey and social data
- International users noted issues related to a lack of transparency in the processing and cleaning of data.
- Interview participants provided diverse views on the need for comparable regional and international data, compared to prioritising local country needs. However, overall interview participants noted the importance of international comparability.

Concerns are often raised over the quality of statistics in the Pacific. However, data quality has many dimensions including completeness, timeliness, accuracy, reliability, accessibility and integrity. It is therefore difficult to identify which aspects of quality are of most concern.

The stocktake, interviews and survey, revealed multiple issues relating to the data quality in the Pacific. Issues of completeness and timeliness of data dissemination are noted above as factors regarding quality. Both these issues undermined the ability of international users to make decisions based on up-to-date data. More broadly, there were mixed views among survey and interview participants related to the confidence they had in the data they were using. This was in terms of the accuracy and reliability of the data, and whether they trusted the integrity of the statistics they used.

Producers of statistics had greater confidence in the quality of the data that they were producing than reported by users. Figure 5 outlines the perception of the producers related to the data quality.
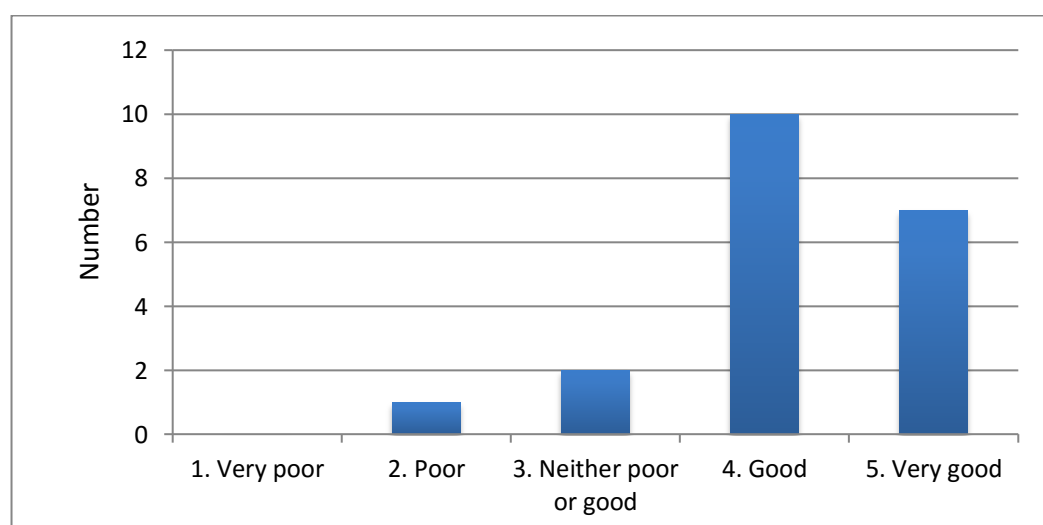

Figure 5 – Producers perceptions on the quality of the statistics they produce (N=20)

Survey respondents identified their most common concerns as quality, accessibility, timeliness, completeness, reliability, inconsistency, accuracy and lack of comparability. Overall interview participant

responses were less positive regarding the quality of the statistics. In terms of reliability and trust they were more confident with economic data than social data. Economic data were considered as being of good quality, and comparable to the data available for countries in other regions, such as those in South East Asia. This is with the exception of economic data for certain statistics in certain countries. The work of PFTAC in providing technical assistance, and the backstopping of IMF, were noted as being important.

Social statistics were considered by interview participants to be more variable in quality. The quality of social statistics was noted as having improved in the last five years, with more consistency in the way that data was collected. This was particularly in relation to the HIES where the SPC has provide significant assistance. However, issues were identified regarding the method of collection, capability of those doing data processing and transparency in terms of those processes.

Interview participants made few comments related to environmental statistics. This was either because they did not draw on this type of data in their work, or the data was not available. Of the few observations made, issues were raised relating to the method of data collection. Specifically, questions were raised related to the accuracy of current field methods for recording agricultural production data.

While there was general consensus that the quality of statistics had improved there is still scope for significant further improvement. The key areas noted as being of concern were related to the capacity of the NSOs to undertake the data collection and data processing. This was particularly in relation to social data received through surveys. Another issue identified related to a lack of transparency in the processing and cleaning of data by key organisations. This relates to a lack of detail being provided as to what assumptions and steps have been taken in cleaning the data, rather than doubting that the processes are being undertaken. Without knowing the process, questions over the integrity of data would remain. A few interview participants also noted concerns on the adequacy of support provided at a regional level.

Comparability

Different stakeholders emphasised the importance of data being comparable to other regions. Users from international organisations emphasised the value of the data collected in the Pacific directly feeding into the international databases. For these international users, they advocated a shift towards the harmonisation of data collection standards in the Pacific to match international standards and databases. This would assist with assessing development progress in the Pacific and be critical in assessing progress made towards achieving the SDGs. However, not all interview participants supported the shift towards harmonisation of data collection standards to promote international comparability.

A number of interview participants noted that, as well as there being resource limitations with undertaking this task, international comparability should not be the primary priority in the Pacific. A focus on regional comparability could be of benefit, and potentially require fewer resources to do so. For example, by promoting regional comparability, specifically through the SPC NMDI, greater awareness of the performance of different PICTs could be published. For the PICTs, it was contended these comparisons would be more meaningful as they have a greater connection to the SPC than other international organisations. However, it should be noted that this could have the potential of limiting the perceived quality of the data for the Pacific and undermining efforts to align with the SDGs. A more appropriate option could be to align with international standards and processes, but limit the selection of priority statistics to those that are a priority in the Pacific.

Concerns were raised by a few interview participants related to the feasibility of regional comparability where an emphasis is regularly placed on acknowledging the local social, cultural, historical and economic context and characteristics of each PICT, and shaping the data collection process accordingly. Note was also made of the diversity of PICTs, and related NSOs, when considering data comparability. For a number of small countries, it is not feasible to expect that they would produce a full set of core statistics. Within their resource limits, and to ensure quality is still maintained, there will need to be a priorisation of what to produce. It is to be expected that within the set of core statistics there will be gaps with smaller PICTs. Another limitation of regional comparability could be where there are particular sensitivities around the performance of PICTs, for example related to data on literacy and numeracy.

It was clear the interview participants felt there would be benefits from greater harmonisation of data collection within the Pacific. The alignment with international standards is important to ensure comparability, consistency and confidence. It is also important that the data produced suit the priorities and needs of PICT governments and other users. As interview participants highlighted, both users and producers of statistics at the country level would need to be involved in the process, as without domestic buy-in it is unlikely any changes would be sustainable.

Perceptions of trust in and reliability of data

The inconsistencies between data sets identified by interview participants presented challenges, with a number of international users expressing concern over which datasets they could trust for their work.

Part of the challenge for statistics in the Pacific is managing the perceptions of reliability. In one anecdote an interview participant noted that they felt required to draw on data from international organisations because they were seen as authoritative. The participant noted that while they knew that the data hosted by NSO and SPC contributed to the World Bank datasets, the perception of their stakeholders was that these data sources are not as reliable as the World Bank. This presents an issue, as the use of data held on NSO websites and SPC databases could be limited not by their actual quality, but by the perceptions of others.

In contrast to the above anecdote, another participant noted that by drawing on sources from international organisations in a presentation to Pacific Island leaders their key message was obscured. While they felt they had made a convincing, evidence-based argument on the importance of a key health issue, the discussion was largely centred on questions why recent data available from NSOs and SPC was not used.

The examples above highlight that there are issues related to which datasets are trusted and given preference by different stakeholder groups in the region. This highlights that when managing issues of trust and reliability of data, there also needs to be advocacy work to engage users who work with statistics related to the Pacific to understand where the data comes from and under what conditions.

This is separate to discussions on actual data quality but is an important issue to engage with, as the perceptions of users will shape the data used.

Data accessibility

Key findings

- Users faced significant difficulty gaining access to the type of file and data set that they desired. This is particularly in relation to confidentialised unit record file.
- While a process exists for accessing data, the way the current system is enacted problematic as it relies on individual relationships across multiple organisations.
- Prospective data users are not always aware the type or scope of data that they can request, as the conduct of data collection activities are not always updated.
- Confidentiality concerns related to accessing confidentialised unit record file data were identified by interview participants as a key issue for PICTs. Careful consideration needs to go into assessing the best way to approach this type of data access.

Data accessibility emerged as another significant point of concern for users. Interview participants reported having significant difficulty gaining access to the type of file and data set that they desired. Gaining access to confidentialised unit record files, raw data or micro data in a format that was usable was noted as particularly difficult for the majority of interview participants. This was supported by survey findings, as presented in Figure 6, which notes that the majority of users found it 'somewhat difficult' to access the data they need.
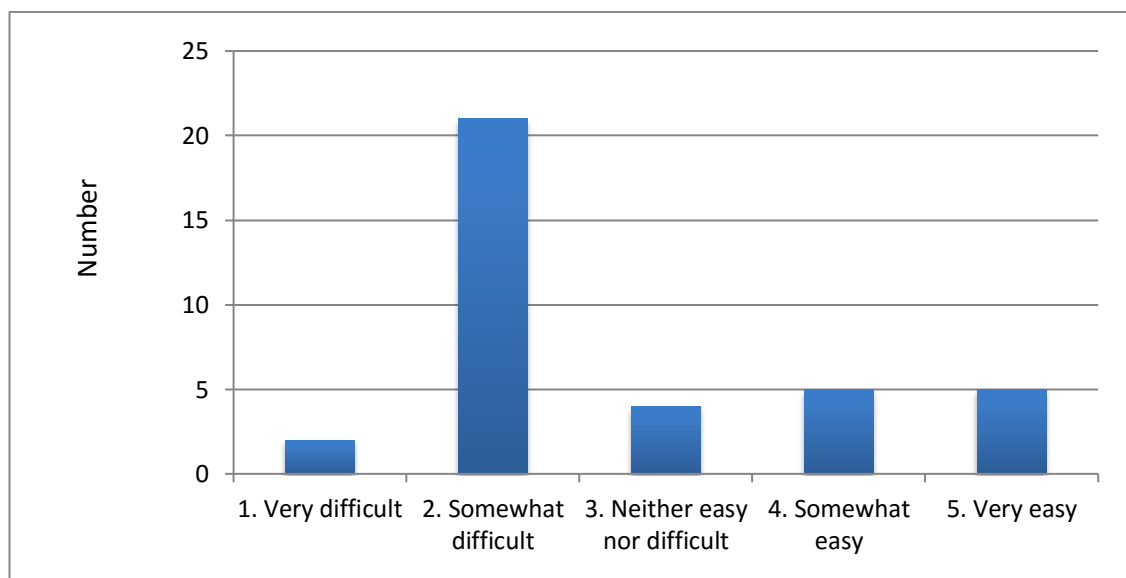
Figure 6 – User responses to how easy it is for them to access the data they use (N=37)

The interviews highlighted that users have different levels of access to data. For example, some interview participants note they could access the data that they needed without significant issue. However, this was also a reflection of the type of work relationship they had with the NSOs. Participants from other international organisations noted that they could usually gain access to files but not 'version zero' or the raw data. The data files they accessed had often been cleaned to some degree but without any detail provided on how it was done. In contrast, two stakeholders who work from within the region both noted they were able to gain access to the files in the forms that they desired most of the time. Both reported that their access was built on individual relationships and trust that had been developed over a number of years.

The current systems and processes for data accessibility are problematic. Based on the interview data, the current system is based on getting permission from the NSO, specifically from the Chief Statistician, before gaining access to a copy of the dataset from SPC. The data is owned by the NSO, but copies of the data are held by the SPC. The importance of individual relationships was critical to accessing data as there are few systemised processes currently in place. For example, interview participants noted that only a few countries have standardised forms for potential users to complete to request data. Similarly, users reported the challenges of not knowing the key personnel within either the NSOs or SPC to contact to request data, with emails and requests often going unattended.

Exacerbating this were comments that sometimes the people requesting the data did not necessarily know what data existed and, specifically, what they were asking for. This was a particular issue for stakeholders, such as those from research institutions outside the Pacific, who did not have an organisational presence in the region and lack knowledge on the data collection activities undertaken. While international users could make more of an effort to know the type of data collection being done, a limit to this is that data collection activities are not always reported as having occurred, let alone the data and findings released. Addressing the needs of research institutions from outside the Pacific is not the focus of the TYPSS, which is concentrated on domestic and regional data use. However the circumstances of the research institutions are also reflected by other international users and the issues with access to data limits their potentially significant contribution of research and policy advice in the region.

Confidentiality concerns were noted as often being provided as the reason for not releasing data. Many of the interview participants suggested that confidentiality was used as an excuse for not releasing data, where the real drivers were issues such as avoiding transparency, concern that progress in certain development indicators would reduce donor funding, and issues related to sovereignty.

Interview participants noted that confidentiality concerns were particularly prominent in countries with small population sizes. Similarly, a number of interview participants noted the legal and legislative frameworks that influence that way in which confidential unit records are protected. They impressed that the confidentiality concerns in some PICTs are significant as the small size means that the appropriate anonymisation of records may not be possible. While other interview participants question the validity of this concern, noting that applying standard processes to ensure confidentiality would be adequate, it is clear there are trust and transparency issues between the different stakeholders with regard to data accessibility. This will need to be carefully navigated as sovereignty issues will likely be raised if there is the perception that the PICT's right to decide on the release of data is question.

Addressing some of the issues with the current process system for accessing the data could provide benefits. The reliance on individual relationships to access data is not conducive for improving access to data. While not addressing issues related to data confidentiality, establishing a clearer process for data access among the different stakeholders would be beneficial. This could include establishing a focal point in each NSO and the SPC for processing data access requests. Establishing a standardised form and template to access data would assist all stakeholders. This could also make it clearer who was requesting the data, on behalf of what organisation, for what purpose and for what benefit to the host PICT or region.

Data dissemination

Key findings

- The current approach to data dissemination across Pacific users does not have strong coordination in terms of where the data should be distributed.
- Users desire a central place to access data that is convenient, reliable and user friendly.
- Within the current governance arrangement, SPC has the potential to play an important role in data dissemination given their relationships with international organisations and NSOs. However, this would require reconsideration of the priority focus of the organisation and associated resourcing.
- There is an alignment of interests between key stakeholder groups related to the dissemination of data. However, resource costs associated with a greater focus on dissemination need to be further considered.

Data dissemination was one of the big challenges for users of statistics in the Pacific. Users noted a desire for a central place to access data that is convenient, reliable and user friendly. Reviewing each individual NSO will provide an incomplete picture of available data and is time consuming.

The regional data dissemination platforms include PRISM, NMDI, PopGIS and the Pacific Survey Catalogue. These have been key platforms for dissemination that SPC has undertaken as part of the TYPSS, noting the work SPC has put in to promoting and expanding these platforms with limited resources. For NMDI and PopGIS, both provide a centralised data location while also aiming to reduce the reporting burden on NSOs. However, interview participants noted improvements could be made with these platforms, specifically the PRISM website which was noted as not being user friendly. The NMDI was the most used of the regional platforms and was noted as adequate but not as complete as other international databases.

Interview participants noted that the current approach to data dissemination does not have strong coordination in terms of where the data should be distributed. This was noted as being an important point for consideration at a regional level. Within the current governance and coordination arrangement, SPC was noted as potentially playing a critical role given the relationships it has with international stakeholders, as well as NSOs. However this would require SDD to place a greater emphasis on dissemination compared to other activities. This would require consideration of the direction of resourcing within the SDD and review of its organisational focus. Interview participants noted that the current Director of SDD was well positioned to guide the organisation as a facilitator of knowledge transfer and dissemination of statistics but it first needed to be reflected in organisational planning.

There is a logic in promoting the use of the SPC as the central point of dissemination given the funding it receives and relationships it has with the NSOs. However, in terms of progressing work related to data dissemination, it is important that there are clear expectations between the different stakeholders to ensure a common understanding of roles, responsibilities and program aims. It would also require a realistic understanding how the challenges of NSOs capacity, priority of data improvement of PICTs and resource constraints would influence the achievement of these aims. T

While it is our opinion that there is an alignment of interests between various stakeholder groups related to data dissemination, progressing this will require a clear articulation of roles and responsibilities, adequate resourcing and working with PICTs to encourage greater dissemination and use of the data. It is also clear

that the availability of resources in the statistical system and investment for statistics dictates the extent of work that can be undertaken. Resourcing will need to be considered if there is a greater focus on improvements to data dissemination and access compared to the current circumstances.

Alternative data sources and collection techniques

Key findings

- Administrative data was considered under utilised as a source of information in the Pacific that could complement other data sources. However, logistical challenges and resource costs associated with increasing linkages for administrative data should be considered.
- Geospatial data was noted as a potential data source for cost effective assessments of land use change, infrastructure development and population density. Lessons could be learned based on the SPC's experience in supporting this type of work in the region.
- Shifting towards technology supported data collection was noted as presenting an opportunity for improving quality and timeliness of collection and processing, however this would require adequate ICT support, training and resourcing.

Drawing on alternative data sources and some alterations to current data collection techniques were identified by interview participants as ways to improve the amount and quality of data available.

Data sources

Interview participants noted that administrative data was a largely untapped resource and could provide more regular, if basic, information on the work being undertaken by PICTs. Users highlighted that this data was already collected and existed across the range of other government ministries but rarely was shared with NSOs. Better sharing and compilation of this data could avoid some of the data gaps associated with information collected though longer cycle surveys. However, there were a number of issues noted that limit the current use of administrative data.

Interview participants contended that a lot of the administrative data collected by different government ministries were either inaccessible to the NSOs or were not collated in a form for use by statisticians. Other users noted that while administrative data would provide insight into some areas, it would not provide everything required. This is because the data would be focused on the government supply side and service provider actions, rather than drawing on service consumers. It would provide a useful insight but would not replace data collected through other means, such as surveys.

Stakeholders noted that as national statistics systems mature there will be greater linking of different types of administrative data as governments move to plan across different sectors. The coordination of administrative data at a country is an issue that the regional statistics program could further engage with. Appropriately resourced support to building cohesion within the NSS in PICTs could assist with common or standardised approaches being instituted earlier in the development of NSSs, rather than retrofitted at a later date. This is not withstanding that approaches to this should be sensitive to country capacity and context. Conducting a review of possible frameworks for supporting greater levels of data linkage would be potentially useful first step in progressing this area of work.

Interview participants also noted the potential to draw on other types of data sources to complement current data collection efforts, at potentially lower cost. Geospatial data was identified by interview

participants as an important data source to draw on. Geospatial data is being increasingly used across the Pacific. For example, SPC is providing a range of support to PICTs in this space, including assisting countries on updating admin boundaries, acquiring satellite imagery, producing listing field maps, producing census field maps, cleaning GPS data, and using GPS data for survey sample selection. Work has also been done in supporting the use of GPS data, combined with other population data, to produce disaster relief and disaster preparedness maps. This is hosted through PopGIS.

While geospatial data exists within the Pacific, interview participants noted that the expanded of use of geospatial data would be potentially useful. The application mostly discussed by interview participants was in assessing land use change over time, as well as assessing infrastructure development and population density in urban and particularly rural areas. Interview participants also noted the need to ground truth information from geospatial platforms. For example, in some PICTs while there might be a lot of houses in a rural area, a significant proportion of the population may be working in other urban settings. The work of the SPC in the regards to GIS could be a useful point of learning for its broader application in the region.

Interview participants noted coordination of different data sources as an area for improvement. Particular comment was made in relation to the data management systems within the PICTs and potential options for an integrated data management. Some participants suggested that the PICTs could learn lessons from StatsNZ's Integrated Data System. This system is considered as leading global practical in the integration of different data that exists at a whole of government level. However, while most participants such systems would be beneficial in the Pacific, there are a range of challenges that mean this is not likely to be successful. These related to issues with current systems, coordination capability and capacity of the NSOs.

In considering other data sources, assessment stakeholders indicated that consideration should be given to the possible resource costs associated with them. This includes both the practical access to appropriate information and communication technology (ICT) as well as the logistical and resource costs associated with development MOUs and other such agreements for sharing of administrative data across a broad range of Ministries. As the scope of priority statistics expand into environmental domains, it is also likely this will require NSOs to engage with a broader range of ministries, such as those for environment, geoscience or mapping. Engendering greater levels of local demand for statistics would potentially help with greater level of both logistical and resourcing supported at the PICTs level.

Data collection techniques

Beyond drawing on administrative and geospatial data, interview participants noted there were other ways in which data collection could be altered to improve data collection and make it more cost effective.

Technology presents opportunities for improved data collection and processing. This was particularly in terms of the increased use of computer assisted personal interview techniques, and the increased application of mobile, smart-phone and tablet based data collection. The use of these types of techniques provide benefits in reducing the double handling of data, collecting a more diverse range of data, increasing the time efficiency of data processing, and providing automated data cleaning services if programmed effectively. While there are definite benefits to be gained through better using technology to support data collection and processing, it also needs to come with adequate support in the use of the tablet interface for data collection and the dashboard for managing data. The issue of data ownership should also be considered when looking at the use of different technology providers.

As part of this, lessons should be captured from the current and previous work related to technology supported data collection in the Pacific. There is a range of current work that relates to the introduction of tablets for field and in EMIS data collection. The SPC has been engaged in this space with NSOs and other sectors, and are currently involved in support and training for the use of various technology enabled data collection activities. This includes censuses in Vanuatu, Fiji, Tonga and the provision of assistance to Tokelau, and a number of other surveys. The use of technology supported data collection is rapidly increasing and the review of past work should provide lessons on how to best take advantage of opportunities for increasing technology supported data collection.

Interview participants noted that there are potential improvements and cost efficiencies to be gained through altering the approaches taken to data collection. While noting the general improvements with social surveys in the Pacific, the cost of conducting them was unanimously noted as being high. For example, certain survey methodologies are extremely costly. Current practice is for each surveyed community to keep a diary of their activities over a two-week period, with the enumerator team staying in that community for the duration. While interview participants noted that this is based on a global 'gold standard' for data collection, questions were raised relating to the value of the current approach. Interview participants noted that the results from the two-week survey resulted in survey fatigue and pointed to other research highlighting that a 24-hour recall approach tended to produce similar results. In the context of limited resources, a balance needs to be met between ensuring quality, cost effectiveness and collecting data that is fit-for-purpose.

At a broader level, interview participants noted that the conduct of surveys could be coordinated more effectively, particularly among the donors and international organisations. There was sometimes the tendency for international organisations to not clearly coordinate the work they were undertaking, leading to multiple surveys in the same place, sometimes with similar data being collected. While this was noted as less of an issue now, coordination between different stakeholder groups was still considered as important.

Capacity and resourcing challenges

Key findings

- Significant capacity and resourcing challenges exist within the Pacific that limits the production of high quality statistical data. This includes issues such as access to technology, qualification of key personnel and staff numbers.
- Capacity building and training activities need to be fit-for-purpose and targeted to the requirements of the particular country. There is a requirement to consider a tiered approach to support provision, which reflects the different capabilities of NSOs across the region.
- A lack of country-based demand presents a barrier for the production of better statistics, however this was noted by participants as improving.

The World Bank's Statistical Capacity Indicator is an objective measure of capacity that includes aspects of quality that can be used to compare countries. It provides 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 calculated as simple average of all three-area scores on a scale of 0-100 (World Bank, 2016).

The Indicator scores for PICTs in 2015 are compared against each other, to other country groups and against their performance in previous years in .

Table 4. Results highlight capacity and quality concerns. The average for the PICTs (for which data are available) in 2015 is 44.6. This is considerably lower than the value for Small States (on average) and for low-income countries. It is also lower than the PICTs average in 2009 of 45.1. Broadly, it demonstrates that there has been variable progress made within the PICTs since 2009. A thorough examination of data quality in the Pacific and how to improve capacity and quality remains a very important future area for examination. Part of this will be considering the appropriateness of this indicator as a measure of progress applicable to all PICTs.

Table 4 – Statistical Capacity Indicators for PICTs and Selected Country Groupings

Country name*	Score as of 2015	Score as of 2013	Score as of 2011	Score as of 2009
Fiji	61.1	71.1	70	56.7
Kiribati	34.4	35.6	37.8	33.3
Marshall Islands	37.8	53.3	46.7	41.1
Micronesia	35.6	37.8	27.8	34.4
Palau	42.2	33.3	30	34.4
Papua New Guinea	45.6	37.8	37.8	48.9
Samoa	53.3	53.3	48.9	53.3
Solomon Islands	48.9	50	42.2	33.3
Tonga	47.8	46.7	58.9	58.9
Tuvalu	37.8	30	–	–
Vanuatu	45.6	43.3	53.3	56.7
PICT Average	**44.6**	**44.7**	**45.3**	**45.1**
Small states	59.8			
Caribbean small states	67.2			
Low income	59.8			
Middle income	71.2			

* No indicator was available for Cook Islands, Guam, Nauru, New Caledonia, Niue, Tokelau and Wallis and Futuna.

Interview data supported the findings of the World Bank's Statistical Capacity Indicator in noting that there are significantly varying levels of capacity among the Pacific NSOs. Interview participants noted that the NSOs function in vastly different circumstances across the Pacific, particularly in terms of personnel capability and access to ICT. The 2009 Benchmark Study investigated this issue and highlighted the different staff levels within NSOs, their qualification and access to basic ICT such as computers, appropriate statistical programs, and emails. While our assessment did not directly assess these issues, they clearly emerged as significant in the interviews.

Capacity and resourcing issues related to processing of data were observed as key factors that limited data accessibility. Interview participants noted that while in some circumstances field data had been collected it was not processed in a timely fashion, if at all, for two primary reasons. First, capacity issues were noted where the stakeholder in certain NSOs were good at the collection activity but got stuck on the processing activity. Second, resourcing issues were noted as limiting factors particularly where a small NSO was faced with the task of processing large amounts of data without adequate assistance.

Capacity building and training

The current approach to training and support is based on a model that acknowledges the diversity of circumstances that exist across PICTs. Reflecting this, it was clear from discussions with interview participants that a one-size-fits-all approach to training and capacity building would be not considered appropriate in the Pacific. The acknowledgement of the need for flexibility is reflected within the SDD Business Plan, as well as through the Pacific Vital Statistics Action Plan, which recognises country categories based on their size, capacity, level of progress and type of administrative systems.

While this is acknowledged within the current framework for the provision of support to NSOs, participants noted that the requirement for greater consideration to be given to ensuring the provision of support to PICTs was appropriate based on their circumstances. This was being factored into future models of support by technical assistance providers, with discussion focusing on a tiered approach to providing support based on what each country needs. The support under this approach included both supplementation and capacity building. For the former, there are countries for which capacity building will not be feasible; supplementing skills and placing key personnel in these scenarios is likely to be required in an on-going basis to ensure the quality and availability of statistics. In other countries, there is scope for capacity building or the provision of targeted support for particular activities. It is beyond the scope of this report to provide a nuanced outline of what such a tiered approach might look like. This should be further considered, including the criteria to be used group PICTs. This process should be done in consultation with PICTs.

Consideration could also be given to the types of training and capacity building currently provided to NSOs. Interview participants noted that a lot of training takes staff away from their work with the NSOs. If the training is not producing sustainable outcomes with the staff not applying the skills they have been trained in, then the effectiveness of the activity is limited. Reviewing the approach to training could also be considered as part of a broad consideration of capacity building, with a potential new avenue focusing on targeted training reflecting the different priorities of NSOs.

Some interview participants suggested that changing the approach to training, like changing the approach to some data collection, would potentially be resisted by NSO staff who personally benefit from the training, not just in terms of building capacity, evidence of training and professional development, but also through travel opportunity and associated per diems. This problem would need to be carefully navigated.

Domestic challenges for NSOs

Interview participants noted that NSOs in the Pacific often face domestic challenges that also undermine their influence and quality of work. Part of this issue is because NSOs in the Pacific are not highly regarded.

At a staff level, the low regard of NSOs was linked to the issue of 'brain-drain' – many high performing staff move to 'better' jobs within other ministries, such as finance or treasury.

At an organisational level, the NSOs were reported as not always being respected or included in decisions by other more powerful ministries. Interview participants reported anecdotes where staff from organisations such as the IMF went to gain access to data from other ministries who would not engage with the NSOs.

Overall, interview participants contended that the low regard for NSOs reflected a broader lack of value for statistics in the Pacific. While many noted that this had improved, the lack of country-based demand for good statistics was identified as a systemic challenge to the improvement of NSO performance and

resourcing. That NSOs are often not included in planning processes for other ministries is a significant challenge in aligning the production of data and evidence to influence local policy. This highlights the importance of the NSOs engaging in advocacy to promote their profile and engagement with local data users. These issues are important to resolve to promote the use of administrative data alluded to in the sections above.

6. CHANGES COMPARED TO THE 2009 BENCHMARK STUDY

Key findings

- Noting methodological differences between the studies, the gaps identified by the 2009 Benchmark Study are largely consistent with those presented in this report.
- Interview and survey participants expressed beliefs that the quality of data has improved during the past five years, however this has not occurred to as quickly, or to the extent, expected.

Determining whether the collection and reporting of statistics has improved since the 2009 Benchmark Study is difficult. The previous study focused on a different set of core statistics. It also approached NSOs directly for the data they collect and included data from other relevant government organisations, such as Ministries of Education and Ministries of Health, and the Pacific Survey Catalogue. In contrast, this assessment is restricted to an examination of what is publicly available on NSO websites. Another point of difference was that the current project broke down available data to the level of statistics, where the previous study grouped statistics within thematic areas.

The methodological differences between the studies make direct comparison difficult. However, noting the limitations of the comparison the gaps between the 2009 Benchmark Study and the current assessment remained relatively consistent. There was not significant improvement in measures across the region, however the change recorded was mostly trending towards a slight improvement. Reflecting the limits above, this observation does not include improvements reported by the SPC related to CRVS and EMIS since the 2009 Benchmark Study[11]. This is detailed in Annex G – Changes Since the 2009 Benchmark study.

Survey and interview data provided a more positive insight into broader changes that participants identified related to statistics in the Pacific. In the survey, both producers and users reported that they felt the quality of data had improved in the last five years, as presented in Figure 7 and Figure 8.

---

[11] An outline of recent work in the CRVS space is available from: http://www.pacific-crvs.org/docs?view=download&format=raw&fileId=103
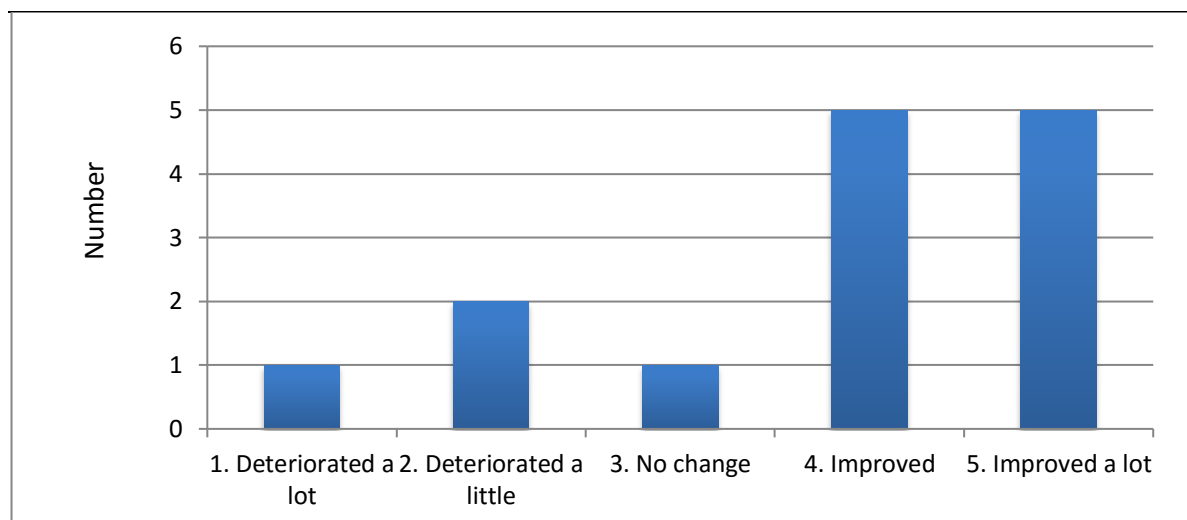
Figure 7 – Producer perceptions of change in quality of the statistics they produce in the last 5 years (N=14)
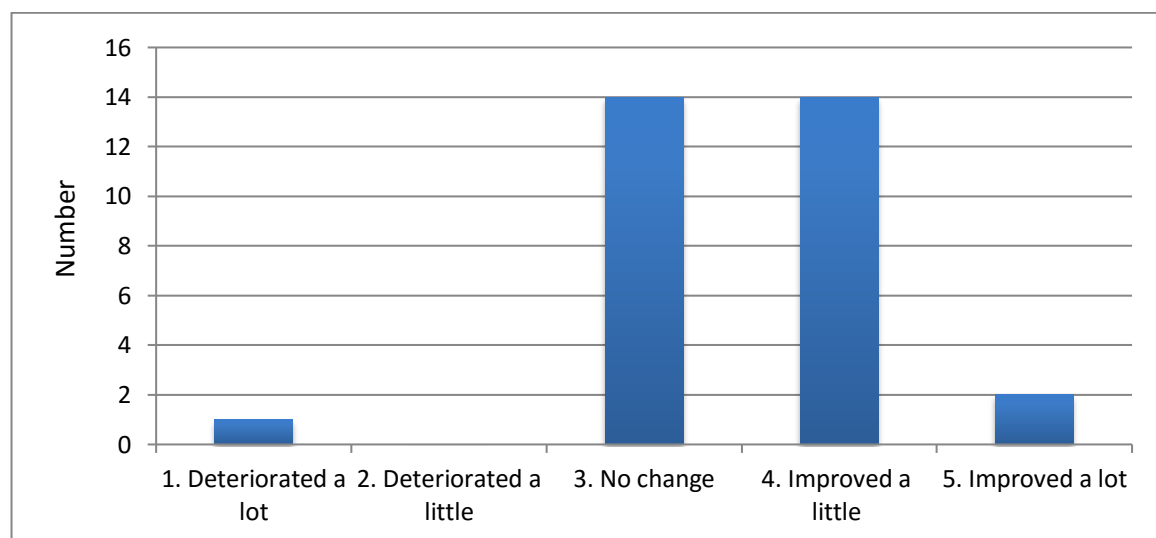

Figure 8 – User perceptions of change in quality of the statistics they produce in the last 5 years (N=31)

Interview participants suggested that there had been an increased demand for improved data from Pacific leaders, politicians and policy makers. While overall the demand for improvements in statistics were still driven by donors, the growing desire at a country level for accurate information for decision making was a clear improvement. There is still significant scope for this to improve, however it was positive that a number of participants spoke of an 'increasing momentum' in the internal demand for statistics. The political interest in the SDGs could provide a window of opportunity to further galvanise interest and motivation for the production of better statistics.

Interview participants noted that progress in the implementation of the TYPSS had not occurred at the rate expected. Part of this was related to the ambitious original scope of the TYPSS and the accompanying high expectations. While interview participants noted that the PSSC was not currently presenting a cost-effective means of implementing the TYPSS, it was noted as having assisted in building relationships between planners and NSOs between different PICTs. Interview participants noted that this had contributed to the provision of South-South assistance, which was considered a desirable outcome.

However, others noted that while building relationships with and between the NSOs had been a clear benefit, these were not the outcomes that might have been expected of the investments.

As one participant noted, the improvements that have been made should not be underplayed. While there has not been as much change as desired, that there has been improvements is undeniable. In a positive sign, many stakeholders highlighted that there are an alignment of opportunities to make more significant improvements in the next five years. Some of these options are presented in the next section.

7. NEXT STEPS FOR THE PACIFIC

The results from the stocktake, survey and interviews revealed a range of important issues that are outside the scope of the TORs. The following section provides a brief outline of their significance and merit for further investigation.

Leveraging opportunities presented by the Sustainable Development Goals

The SDGs could present both challenges and opportunities to advancing the state of statistics in the Pacific. This was expressed by interview participants regarding how the PICTs and regional support for statistics should respond to the SDGs. The scope of the SDGs is extremely broad, including 17 goals, 169 targets and 231 indicators, and interview participants noted this presented risks in fragmenting data collection and coordination efforts. For example, international users noted that the Pacific NSOs were stretched in fulfilling their responsibilities with the MDGs, which in relative terms were clearer. Extending the focus of the PICTs too broadly could the risk stretching current resources and capacities too thinly.

The SDGs also present a number of key opportunities for progressing statistics in the Pacific. Interview participants noted that Pacific Island leaders had been active in considering which indicators were of central relevance and importance to the Pacific. The process led by the PIFS, with involvement from SPC and UNESCAP, was noted as an important piece of work in facilitating this process through a bottom-up approach. Interview participants reported that it had received good buy-in from the region's leaders. This is complemented by other work done at individual country levels, such as in Samoa, to prioritise the SDGs as they align with their national development context.

Align the CSPS development with the priorisation process for the SDGs for the Pacific
The buy-in from Pacific Island leaders in prioritising the SDGs and aligning their own work with that process provides a significant opportunity for building local demand for statistics. An immediate next step should be to cross reference the list of prioritised SDGs with the CSPS. An important component of pursuing an agreed upon basic set of statistics for the Pacific will be ensuring they reflect the needs to local users, which interview participants noted the current PIFS process has facilitated. This is also reasonable given it is the choice of each individual country to identify their priority areas under the SDGs.

While the Pacific prioritised SDGs and CSPS both sets of statistics might not completely match, the process would build great cohesion in the development of priority datasets in the region. It would also assist in gaining a unified regional direction with expectations on disaggregation of data. The premise of the SDGs is to 'leave no-one behind', and has resulted in an emphasis on a broad range of disaggregation required, including disability as well as gender, region and age. This would complement the opportunity outlined above.

Align the SDG process with the NSDSs

Given the NSDSs include an NSS assessment within each PICT, it is worth investigating how the Pacific prioritised set of SDGs is going to fit in with NSDS and other future plans for statistics in the Pacific. If this is done in parallel with the alignment of the SDGs and CSPS, it could provide an opportunity to connect these global and regional processes in a locally relevant way and help build ownership within PICTs.

Refine and limit the key statistics within the CSPS

The project identified that there are multiple priority sets of statistics and indicators that are being developed in the Pacific. This includes the SDG prioritisation process noted immediately above, as well as other processes in relation to health, education and agriculture. While this is based on the common understanding that there is limited capacity and resources in the region, a current challenge is the range of different issues being identified as priorities among stakeholders and whether there is the capacity and resources to service them all. These different priorities were observed at a number of levels – between and within the PICTs, international organisations, donors and technical providers.

The interviews revealed that demand for statistics in the Pacific was still driven by international organisations and while there has been a shift in the last five years, a challenge moving forward is the lack of local demand for the use of statistics. Pursuing ways to increase local demand and ownership is critical for the sustainability of the TYPSS and broader regional statistics programme. In future, refinement of the CSPS, the NSOs and relevant PICTs government ministries will need to be engaged to promote ownership.

Refine the CSPS

The draft CSPS should be further refined to align with producer and user priorities, as well other work being undertaken to prioritise statistics in the Pacific. This process should complement the alignment of the CSPS with the Pacific prioritised SDGs and within reasonable resource limits should be done through consultation with both producers and users to maximise buy in from the relevant stakeholders. Steps should be taken to ensure these prioritised statistics are comparable internationally.

In addition to this, the assessment has revealed a number of changes to be made to the draft CSPS. These could be to:

- Consider the addition of urbanization and adult mortality as areas of focus. Interview participants noted these are both significant development challenges in PICs, particularly with the growth of informal settlements in the region and on-going issues with adult deaths from non-communicable diseases.
- Overall, reduce the number of statistics outlined in the CSPS to a level that would be more manageable given the resources and capacity within PICTs NSS. Different interview participants suggested figures in the range 20-50 as being appropriate.
- Develop a subset of priority statistics that are realistic to deliver for smaller PICTs where there is lower capacity. Interview participants reflected that even a consolidated priority set of statistics would be unrealistic for some of the smaller NSOs.

Assess the different 'priorities' for statistics among stakeholders

The different priorities of key stakeholders in the region related to statistics needs to be acknowledged and understood in future work identifying 'priority' statistics for the region. Undertaking an assessment of the

various priorities across the PICTs, SPC, international organisations and development partners would be a useful step. This would assist with the transition to a fit-for-purpose approach to the production of statistics in the Pacific through establishing a clear baseline and understanding among key stakeholders.

Regional coordination and governance

Stakeholders noted the need for clearer governance and coordination functions within the Pacific. While noting significant effort from both users and producers in the Pacific, interview participants observed that work was not well coordinated. A key challenge is the coordination of donor inputs and technical assistance that is inline with NSO and Pacific government priorities. Another challenge is the identification of clearer means for different users and producers to engage in the regional meetings. This is a particular consideration given the revised status of donors in the PSSC.

Develop a high level plan for stakeholder engagement in the Pacific

The production of a high level plan for data collection and dissemination activities would be useful. This should include explicit publication of the types of data collection (i.e. surveys) that donors are planning, the support provided by different technical providers, and the designation of lead and support organisations for those activities. If published in a central location, this would assist with the coordination and implementation of activities under the TYPSS among key stakeholders. This would also minimise risk of countries being over surveyed, better coordinate training and capacity building, and potentially provide donors a clearer idea of where funds have been invested.

Facilitate donor focused meetings

As part of the development of a high level plan for stakeholder engagement, donors should consider establishing a meeting to better coordinate their efforts in the region. This would be separate to their engagement with the PSSC. This would provide a platform to better coordinate their work in the region. It will still be critical for donors and international organisations to engage with the PICTs through other regional processes.

Facilitate broader engagements outside specific PSSC meetings

Specific subject focused working groups could provide a productive mechanism for improving elements of statistics in the Pacific. This would allow for more detailed discussion on specific elements of the statistics program that are outside the current scope of the PSSC to deal with in depth. Given resource limitations in the region, these groups would need to be cost and resource efficient, including a targeted membership, limited meetings, clear focus and concise reporting. It could also look for drawing on ICT as a means of communicating remotely and keeping costs to a minimum.

Establish a centralised reporting function for coordinating resourcing

Interview participants identified there was the need for clearer cost accountability in the region, specifically in relation to the resources applied to various steps in the production, analysis, and dissemination of Pacific statistics. This was connected to a broader effort to increase the cost efficiency and effectiveness in the program. A next step could be the establishment of a centralised reporting function for report costs across funding organisations.

Data dissemination

International users reflected that, ideally one set of statistics would be produced for PICTs and made publicly available at a central location. This would provide a one-stop shop and overcome issues of comparability and questions of which sources of statistics provide the highest quality data. However, this is not feasible in the short term and other steps could be taken to improve the dissemination of data in the Pacific.

Develop a regional data dissemination strategy

Establishing a clear strategy for regional dissemination would be beneficial. It would allow for key organisations to clearly identify their aims, as aligned with internal capacity, and stakeholders to better understand the various roles different organisations will play.

Access to confidential unit record files and micro data

Further work should be considered in relation to facilitating access to confidential unit record files, and the potential challenges and limitations attached to it. There are confidentiality concerns related to accessing this type of data within PICTs and, if not dealt with sensitively, this can raise issues of sovereignty. It would be useful to investigate what would be required to achieve improved dissemination of this type of data in the Pacific. This would include considering whose priorities the access to this type of data served as well as best practice around the handling of sensitive data processes to ensure anonymity.

Consider Pacific Social and Environmental Monitor

Consideration could be given to the potential and demand for a regular Pacific Social and Environmental Monitor to complement the ADB's Pacific Economic Monitor. Such a publication should provide the latest social and environmental statistics for PICTs and address thematic issues and topics of interest. This would help ensure that statistics are compiled and released in a timely manner. This could also be an avenue for joint publication between the SPC and other international or research organisations.

Data quality that is fit-for-purpose

Further investigation should be undertaken on the type of data both domestic and international users need. This should attempt to align user needs with local needs and data available to the extent possible. Interview participants noted that there were different requirements for data accuracy between programming (where they required detailed, up to date data) and advocacy (where a 'close enough' mantra was sufficient).

Many international users reflected that the data they had access to at a broad level was fit for their purpose. While they noted greater access to data, particularly disaggregated or confidential unit record files, would assist there are limits to how useful this would be. The broader question this raises is where the highest return on investment would be obtained to maximise benefit to data users.

Investigating user needs

Further investigation into the specific use of data in the Pacific will provide further insight into how to align data production with user needs at both domestic and international levels. This could be part of a fit-for-purpose approach to data production and use.

Investigating producer constraints

Identify the specific constraints that are preventing NSOs from providing up-to-date, timely and comprehensive sets of statistics. The specific reasons as to why PICTs sometimes have very low Statistical Capacity Indicator scores need to be examined. This includes considering whether the Statistical Capacity Indicator is a suitable tool for assessment all PICTs. Conducting a producer constraint assessment could be considered.

Extended stocktake

A number of stakeholders indicated they felt it could be beneficial to conduct an extended stocktake activity. This could provide a greater level of detail than was possible within the scope of the current assignment. This could include:

- Identifying the reason why a statistic is unavailable (for example, whether they have not been incorporated into the database; whether they have not been calculated; or whether the data have not been collected).
- Identifying the presence of data over a long time series. While the scope of this assignment was focused on comparisons to the 2009 Benchmark, an extended version could look at change over multiple decades to establish longer-term change.
- Identifying more explicitly information on the availability of each statistic per database (for example, who produced the underlying dataset; who produced the indicator; the timeliness and frequency of the production of the statistic; and who disseminates the data to users and in what form).

ANNEX A – DETAILS ON STOCKTAKE CONDUCT

NSOs are the government departments that are responsible for taking the lead on collecting and publishing statistical information on a country. NSOs are often the first port-of-call for anyone seeking statistics as other agencies often source their statistical information from them. Statistics are collected according to national priorities and funding constraints but will nearly always include demographic, economic and social information at both a national and sub-national level. NSOs often have schedules of regular surveys that are undertaken.

The NSO sites were reviewed on between 2-4 August 2016. The review focused on what was available at the website itself and does not reflect the sum of the total data that exists, but rather what is publically available at this time. Certain NSO sites were not functional at the time of the review (for example, Niue) or had a number of links which were not working (for example, Papua New Guinea).

The **SPC** has two websites which are relevant to statistics in the Pacific: the NMDI (http://www.spc.int/nmdi/) and PRISM (http://prism.spc.int/). For the purpose of the review, the NMDI was focus on given its more comprehensive range of indicators presented.

The **SPCs NMDI** provides indicators that have been deemed as "must haves" by experts to assess a countries development. The database includes MDG indicators and is the official source of data when reporting against MDG progress. Indicators are groups according to the following categories: population and development, human development, agriculture and forestry, fisheries and aquaculture, communication and infrastructure, public health and the MDGs.

Preference is given to national sources of data wherever possible. The SPC explicitly recognises the challenges of reconciling different values for the same indicator from different data sources in its compilation of the NMDI. This was due to discrepancies between many national MDG reports and other planning documents and official statistics published by Pacific island countries; different values for the same indicator reported by national and regional/international agencies; and by different values for the same indicator reported by different international agencies (SPC, 2016).

The **World Bank's** online Databank provides extensive time series data for 264 countries, territories or country groupings for 1,410 indicators relating to education, the environment, economic policy and debt, financial sector, health, infrastructure, social protection and labour, poverty, private sector and trade and the public sector. Data are available on an annual basis from 1960.

The **IMF** has numerous datasets providing time series data for all countries relating to financial statistics, external sector statistics, national accounts, government finance and monetary statistics. Specific databases that were accessed include: Balance of Payments and International Investment Position, Government Financial Statistics and International Financial Statistics.

The scope of this stocktake had **limitations**. It was not a comprehensive assessment of the broad range of datasets made available by different organisations. For example, at the international level the Asian Development Bank and UNESCAP are both noted as having broad coverage. Other datasets include those focused on particular area of data such as the UN Population Division and the U.S. Census Bureau International Database. At a regional level, the SPC have PRISM, PopGIS and the Pacific Survey Catalogue

which provide other resources for data sharing. At a domestic level, Ministries of Education and Health will also have data not compiled in the central NSO website. The assessment of these was beyond the scope of the project.

ANNEX B – INTERVIEW PARTICIPANT LIST

Organisation	Position/Area	Name
Australia Bureau of Statistics	Director, International Relations	Roksana Khan
	Assistant Director, International Relations	Cameron Allen
	Program Coordinator, International Relations	Kara Williams
DFAT	Health & Education	Rebecca Dodd
	Gender, Equality and Disability Inclusiveness	Tracey Newbury
	Infrastructure	Peter Kelly
	Development Economics and Tax	Cate Rogers
	Pacific Economic Growth	Chakriya Bowman
New Zealand Ministry of Finance (MFAT)	Principal Development Manager, Planning and Results Team, Development Strategy and Effectiveness Division	Andre Van Der Walt
	Business lead – Data & Statistics, Programme and Activity Management Project, International Development Group.	Jason Symons
Statistics New Zealand (StatsNZ)	Deputy Government Statistician	Teresa Dickinson
	Chief Methodologist	Vince Galvin
Asian Development Bank (ADB)	Senior Economist	Christopher Edmonds
	ADB Office (Suva)	Caroline Currie
World Bank (WB)	Sydney Office	Imogen Halstead
	Poverty Economist	Manohar Sharma
International Monetary Fund, Pacific Financial Technical Advisory Centre (PFTAC)	Coordinator	Scott Roger
	National Accounts Consultant	Richard Wild
OECD – PARIS21	Regional Programme Coordinator, Asia-Pacific and SIDS	Millicent Gay Tejada
United Nations ESCAP	Chief, Population & Social Statistics Section, Statistics Division	Yanhong Zhang
Secretariat of Pacific	Director Statistics for Development Division	Dr Ofa Ketu'u

Community (SPC)	Agricultural Statistician	Anna Fink
University of South Pacific (USP)	Senior lecturer and Coordinator, Population and Demography and Official Statistic Programmes	Alessio Cangiano
Pacific Island Forum Secretariat	MDGs Regional Advisor	Raymond Prasad
	Regional Planning Adviser	Charmina Saili

ANNEX C – INTERVIEW GUIDE

What is your role in relation to the use of statistics in the Pacific?

What statistics do you use in your job and from where do you get them?

Are the statistics publicly available?

How do you use these statistics?

Are currently available statistics meeting your needs? If no, why not?

What are the gaps in the statistics that you use and how should they be filled?

Have you had a specific instance of when a significant decision you were trying to make wasn't supported by statistical information, when you thought this should have been possible? Could you provide examples?

Are the statistics you use disaggregated in anyway? (gender/subnational/income/confidentialised unit records).

Do you know if there are administrative data that exist which could help you with your work if they were made available?

Would you like to see a greater level of disaggregation? If yes, disaggregated by what?

Do you know if the statistics you use are collected using international standards?

Do you trust the statistics you use? Are they reliable? If not, why not?

Has the quality of the statistics you are using changed over the past 5 or so years?

Could the way that your statistics are made available be improved? Are the statistics provided electronically/in a useful format/tables/figures/graphics etc?

What are the main problems concerning statistics that you face in your work?

What are the main improvements with respect to the statistics that you would like see?

ANNEX D – SURVEY QUESTIONS

This survey is funded by the Australian Department for Foreign Affairs and Trade (DFAT). It is part of a project that examines the availability and quality of statistics for Pacific countries and the extent that existing statistics are meeting the needs of users.

As a producer or user of statistics for the Pacific, we would like to invite you to participate in this survey. The survey will take you no more than 10 minutes to complete.[12]

Section 1: Background

Q1. Are you primarily a user or producer (supplier) of statistics for the Pacific?

- Producer
- User

Section 2: Provision of Statistics

Producer-Q1. What organisation are you from?

Producer-Q2. Would you be happy with your organisation being identified as one of many respondents in the reporting for this project?

- Yes
- No

Producer-Q3. For which Pacific Island Countries do you produce statistics? (please mark all that are relevant)

- Regional statistics for the Pacific
- American Samoa
- Cook Islands
- Fiji
- Federated States of Micronesia
- French Polynesia
- Guam
- Kiribati
- Marshall Islands
- Nauru
- New Caledonia
- Niue
- Northern Marianas
- Palau
- Papua New Guinea
- Pitcairn Islands
- Samoa

---

[12] This survey is based on a User Satisfaction Survey conducted by the Statistics for Results Facility Catalytic Fund, World Bank Data Development Group, June 2010.

- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu
- Wallis and Futuna

Producer-Q4. As a producer of statistics, please rate the quality of the statistics that are released on a scale of 1 to 5.

1	2	3	4	5
Very poor	Poor	Neither poor or good	Good	Very good

Producer-Q5. What concerns have the users of your statistics expressed about the quality of the statistics that you produce?

Producer-Q6. As a producer of statistics, are there statistics that you know would be useful to users but are not currently collected?

Producer-Q7. What are these statistics?

Producer-Q8. What is the main reason why the statistics are not produced? (mark all that apply)

- It is not a requirement of the Government
- A regional organisation collects/should collect these statistics
- We do not have the capacity to collect the statistics
- We do not have the resources to collect the statistics
- Other (please specify)

Producer-Q9. Are confidentialised unit records publicly available?

- Yes
- No

Producer-Q10. How would you like the statistics that you produce disaggregated? (mark all that apply)

- No disaggregation
- Gender
- Geographic location
- Income
- Age
- Race
- Ethnicity
- Migratory status
- Disability
- Other (please specify)

Producer-Q11. How has the quality of the statistics that you produced changed over the past 5 or so years?

1	2	3	4	5
Deteriorated a lot	Deteriorated	No change	Improved	Improved a lot

Producer-Q12. What are the main concerns you have regarding the statistics that you produce?

Producer-Q13. What are the main improvements you would like with respect to the statistics that you produce?

Producer-Q14. As a producer of statistics, do you receive any form of technical assistance?

- Yes
- No

Producer-Q15. If Yes, who do you receive technical assistance from? (mark all that apply):

- Pacific Community
- PFTAC
- ABS
- StatsNZ
- UN
- Paris21
- Other, please specify

Producer-Q16. How do you rate the adequacy of the amount of assistance you receive?

1	2	3	4	5	
Very Inadequate	Inadequate	Neither Adequate or Inadequate	Adequate	Very Adequate	No opinion

Producer-Q17. How do you rate the quality of this assistance?:

1	2	3	4	5	
Very Poor	Poor	Adequate	Good	Very Good	No opinion

Producer-Q18. Are there statistics that you planned to collect but were unable to do so due to a lack of funding?

- Yes
- No

If Yes, what are they? _____

Producer-Q19. Do you publish the statistics your produce?

- Yes
- No

If Yes, where? _____

Producer-Q20. Do you have a National Strategy for the Development of Statistics (NSDS)?

(Go to Section 4: Data access and quality)

Section 3: Your use of statistics

User-Q1. What organisation are you from?

User-Q2. Would you be happy with your organisation being identified as one of many respondents in the reporting for this project?

- Yes
- No

User-Q3. For which Pacific Island Countries do you produce statistics? (please mark all that are relevant)

- Regional statistics for the Pacific
- American Samoa
- Cook Islands
- Fiji
- Federated States of Micronesia
- French Polynesia
- Guam
- Kiribati
- Marshall Islands
- Nauru
- New Caledonia
- Niue
- Northern Marianas
- Palau
- Papua New Guinea
- Pitcairn Islands
- Samoa
- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu
- Wallis and Futuna

User-Q4. Which statistics do you use regularly in your work? (please mark all that apply)

Economic

- National Accounts (GDP) Statistics
- Trade Statistics
- Balance of Payments Statistics
- Financial/Monetary Sector Statistics

- Public Sector Finance Statistics
- Price Indices
- Business Statistics

Social

- Population/Demographic Statistics
- Employment Statistics
- Health Statistics
- Education Statistics
- Income and Poverty Statistics
- Gender Statistics

Environmental

- Air and Climate
- Agriculture
- Forestry
- Fishing and Aquaculture
- Energy
- Ecosystems and Biodiversity
- Water and Sanitation
- Waste
- Natural Disasters

Other (please specify)

User-Q5. Where do you obtain most of the statistics from? (please mark all that are relevant)

- Pacific Country National Statistics Office
    - Official Publication
    - Website
- Central Bank
    - Official Publication
    - Website
- Regional Organisation Publications and Websites (SPC, SPREP)
- International Organisation Publications and Websites (IMF, World Bank, United Nations)
- Non-Pacific Country Governments (StatsNZ, ABS)
- On request from (please enter institution)
- Other (please specify)

User-Q6. For what purpose do you use these statistics?

- Analysis of current events for short term decision making
- Analysis of trends for longer-term policy formulation
- Econometric model building and forecasting
- Research purposes

- General economic/social/environmental information
- Other (please specify)

User-Q7. How satisfied are you with the available statistics in meeting your needs and allowing you to carry out the purpose outline in the previous question?

1	2	3	4	5

Very Dissatisfied Somewhat   Neither satisfied   Somewhat Satisfied Very Satisfied

Dissatisfied   or dissatisfied

User-Q8. Please comment on why you responded the way you did in the previous question.

User-Q9. To what extent is the following barrier relevant to you in using statistics?

Lack of knowledge on how to use the statistics:

1	2	3

A Major barrier   A Minor barrier   No barrier

Lack of software to undertake analysis of statistics:

1	2	3

A Major barrier   A Minor barrier   No barrier

Lack of knowledge on how to use software to undertake statistical analysis:

1	2	3

A Major barrier   A Minor barrier   No barrier

Section 4: Data access and quality

User-Q10. Are the statistics you currently require to complete your work publicly available?

- Yes
- No

User-Q11. Are there statistics that would be useful to you but are not currently collected?

- Yes
- No

User-Q12. What are these statistics?

User-Q13. How easy is it for you to access the statistics that you use?

1	2	3	4	5

Very difficult   Somewhat difficult   Neither easy   Somewhat easy   Very easy   No opinion

Nor difficult

User-Q14. How satisfied are you with the frequency of the publication of the statistics that you use?

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Neither satisfied or dissatisified	Somewhat Satisfied	Very Satisfied

User-Q15. Are the statistics accessible in a user-friendly intuitive format?

- Yes
- No

User-Q16. Do you have access to confidentialised unit records to disaggregate statistics yourself?

- Yes
- No

User-Q17. How would you like the statistics that you use disaggregated? (mark all that apply)

- No disaggregation
- Gender
- Geographic location
- Income
- Age
- Race
- Ethnicity
- Migratory status
- Disability
- Other (please specify)

User-Q18. How has the quality of the statistics that you use changed over the past 5 or so years?

1	2	3	4	5
Deteriorated a lot	Deteriorate a little	No change	Improved a little	Improved a lot

User-Q19. What are the main concerns you have regarding the statistics that you use?

User-Q20. What are the main improvements you would like with respect to the statistics that you use?

Section 4: Review of prioritized dataset

Producer/User-Q21. Are economic statistics relevant to you and your work?

- Yes
- No (if No, go to Q24)

Producer/User-Q22. The following is a basic set of **economic** statistics. The set should include the key statistics for stakeholders. Please mark the set(s) that apply to you and your work.

Options as outlined for economic statistics in Annex F – Draft CSPS.

Producer/User-Q23. Are there other statistics that you strongly believe should be added to the list?

Producer/User-Q24. Are social statistics relevant to you and your work?

- Yes
- No (if No, go to Q27)

Producer/User-Q25. The following is a basic set of **social** statistics. The set should include the key statistics for stakeholders. Please mark the set(s) that apply to you and your work.

Options as outlined for social statistics in Annex F – Draft CSPS.

Producer/User-Q26. Are there other statistics that you strongly believe should be added to the list?

Producer/User-Q27. Are environmental statistics relevant to you and your work?

- Yes
- No (if No, go to Q30)

Producer/User-Q28. The following is a basic set of **environmental** statistics. The set should include the key statistics for stakeholders. Please mark the set(s) that apply to you and your work.

Options as outlined for environmental statistics in Annex F – Draft CSPS.

Producer/User-Q29. Are there other statistics that you strongly believe should be added to the list?

Producer/User-Q30. If you would like to have further engagement with the consultations leading project, please provide your preferred contact details below

Producer/User-Q31. Any other comments?

END

ANNEX E – SURVEY RESULTS
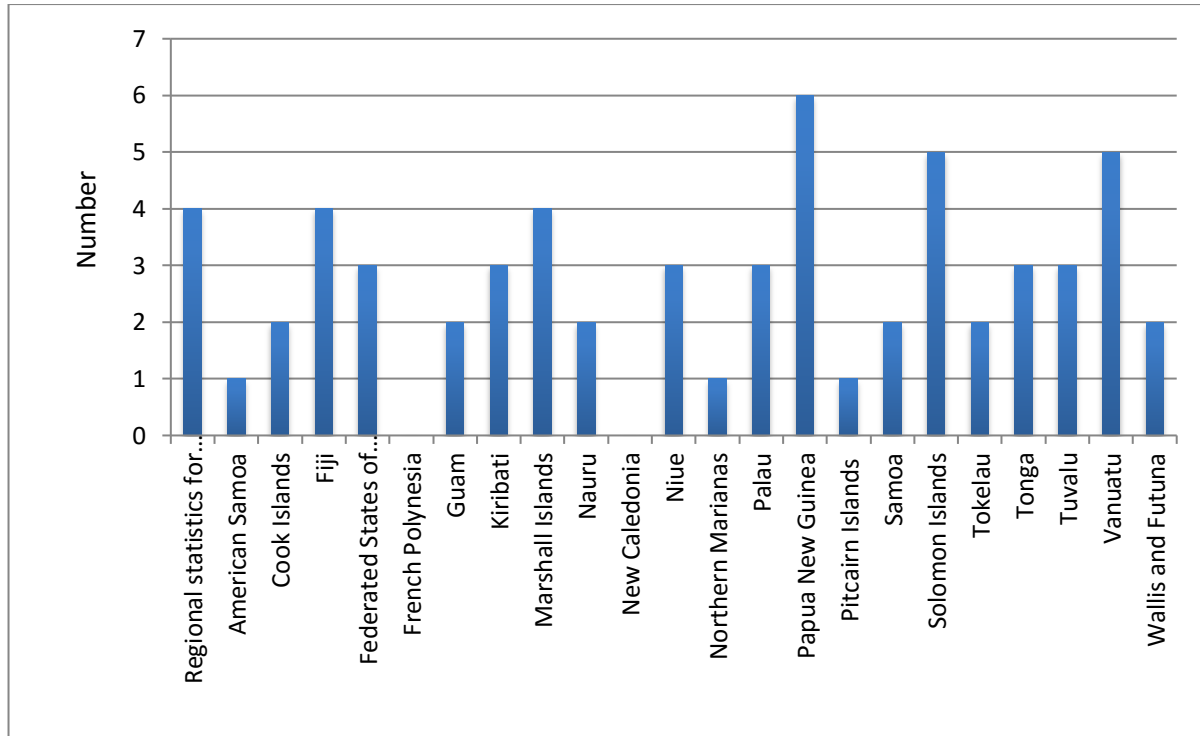
Producer survey results

Figure 9 – the PICTs for which producers note they produce data (N=21)
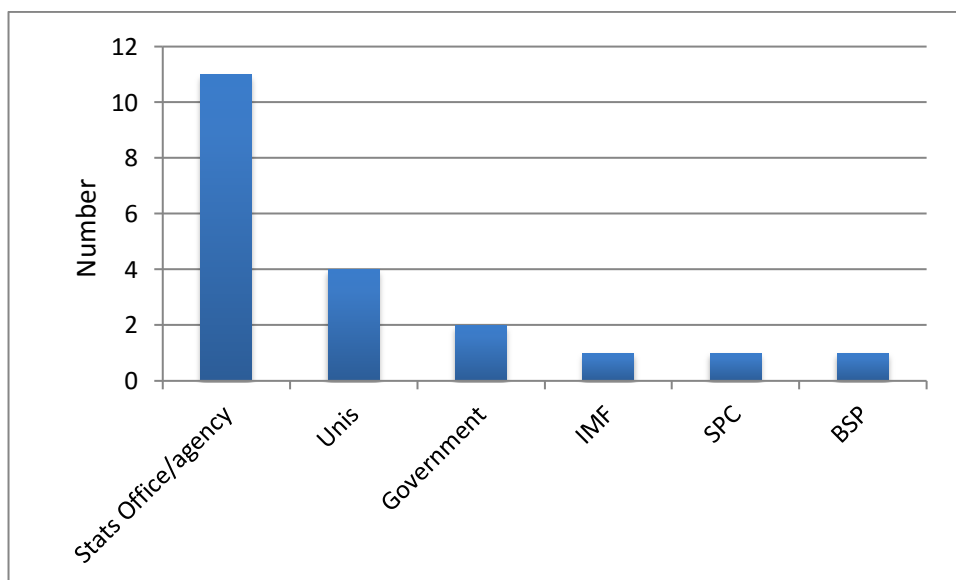

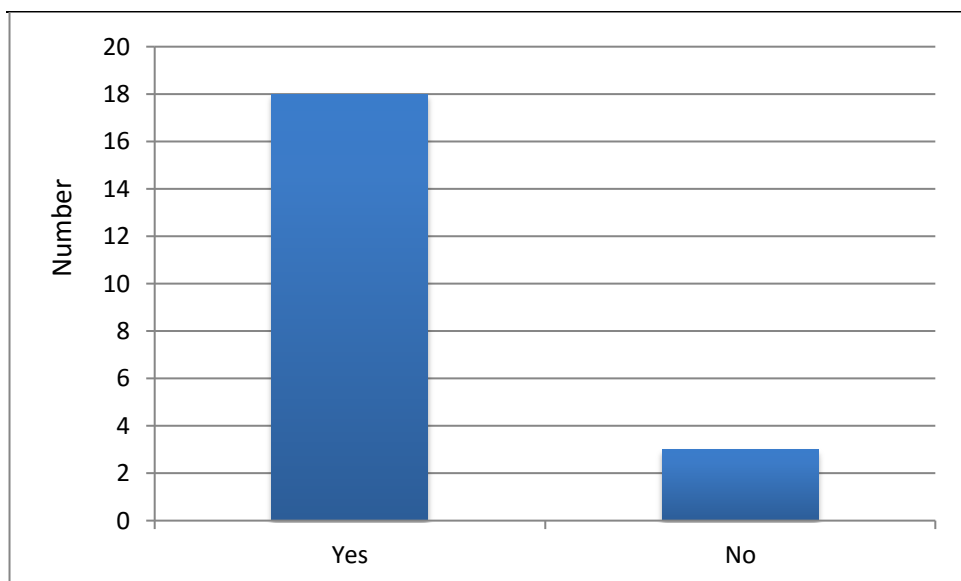**Figure 10 – Producer respondent's organisation affiliation (N=20)**

Figure 11 – Producer responses to whether there are statistics useful to users that are not currently collected (N=21)
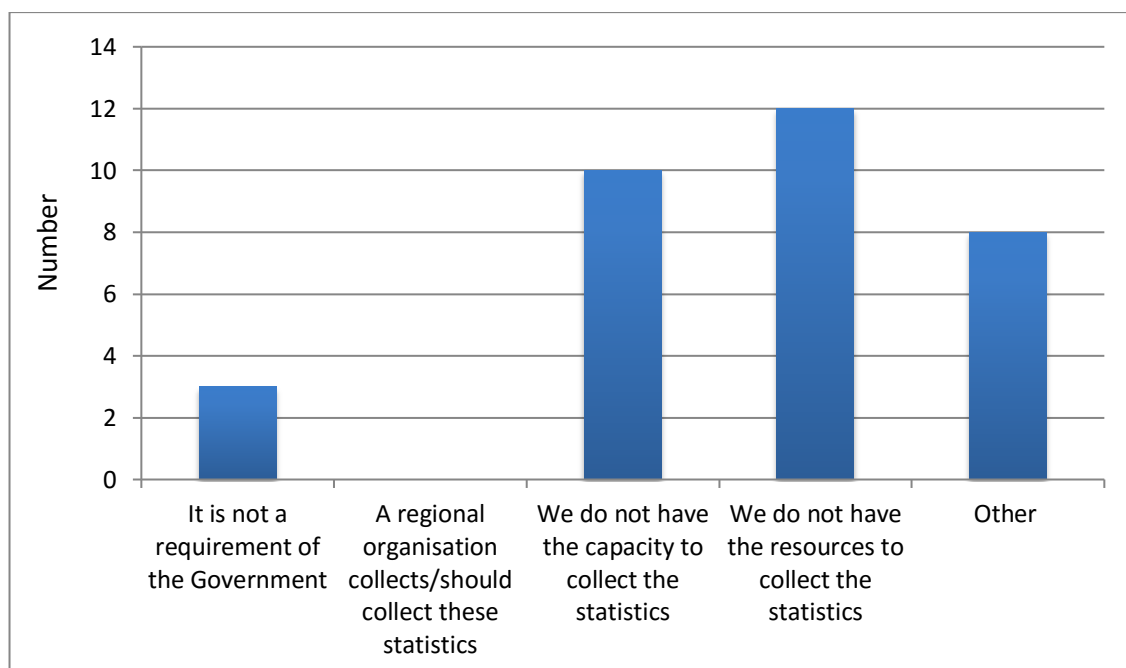

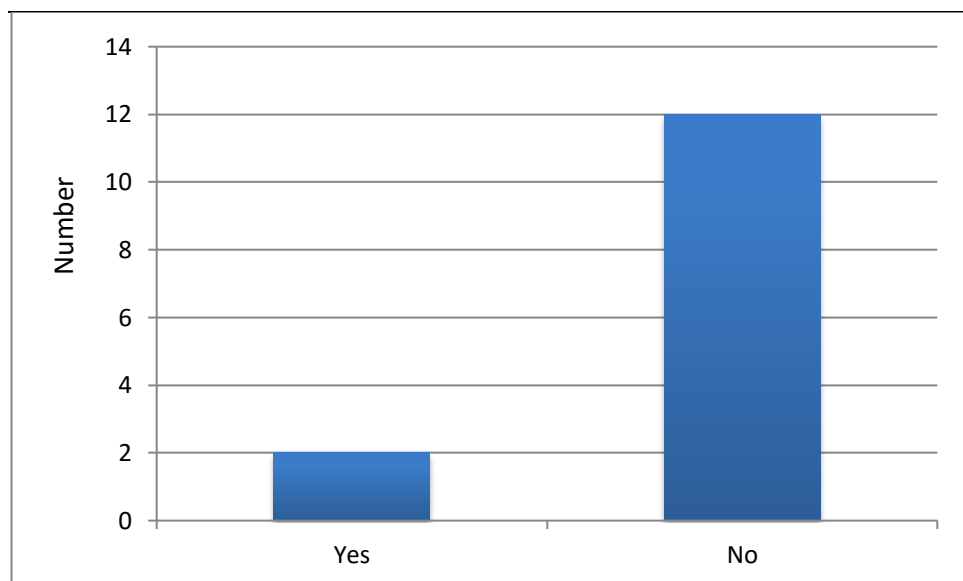**Figure 12 – Producer responses to the main reasons why statistics are not produced (N=21)**

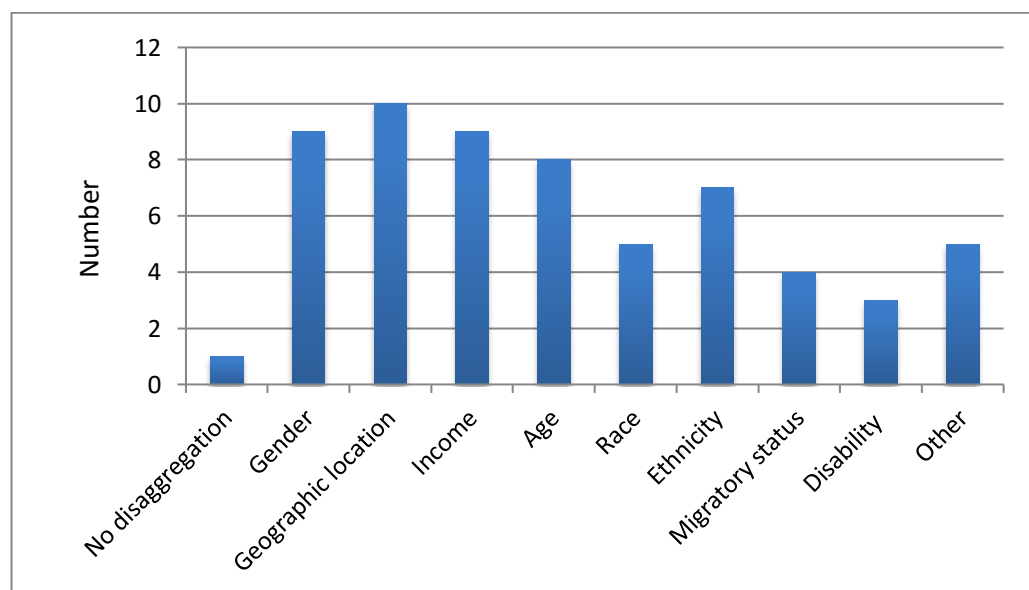**Figure 13 – Producer responses to whether confidentialised unit record files are publically available (N=14)**

Figure 14 – Producer responses to how they would like to disaggregate their statistics (N=20)
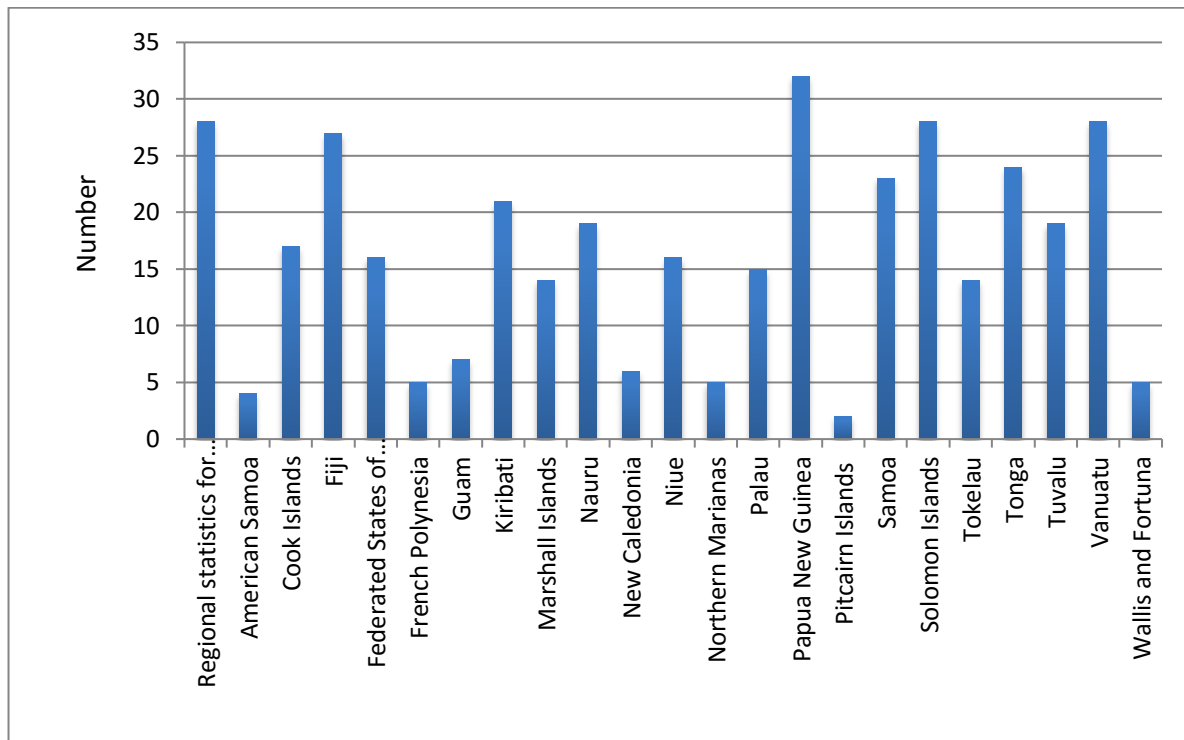
User survey results

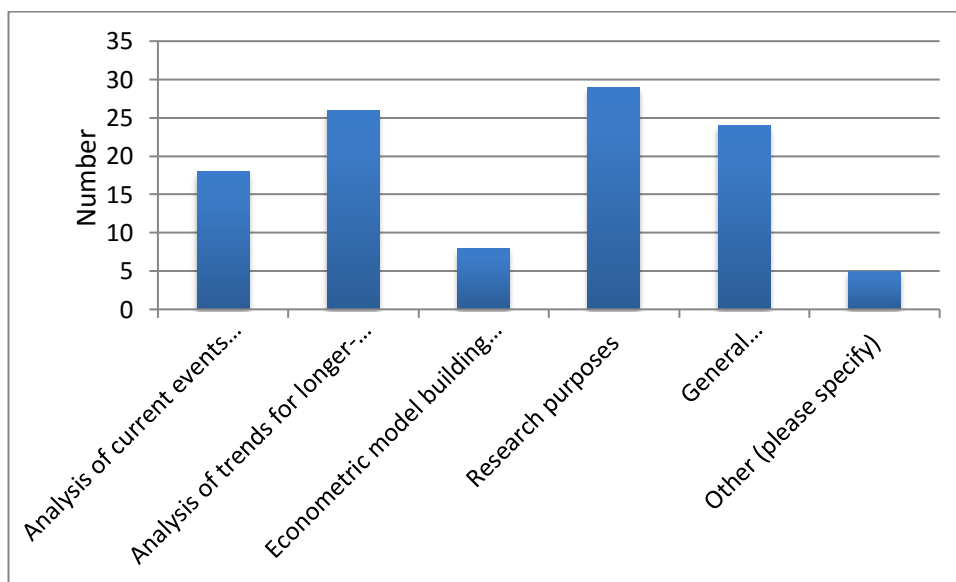**Figure 15 – the PICTs for which users note they use statistics (N=40)**

Figure 16 – Users response to the purpose which they use statistics (N=40)
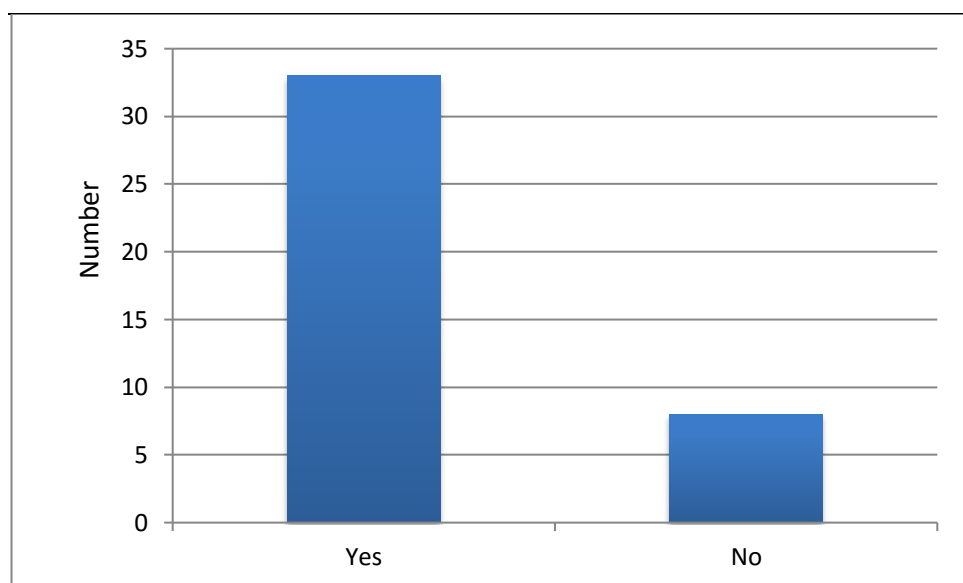
Figure 17 – User responses to whether there are statistics that would be useful to them that are not currently collected (N=41)
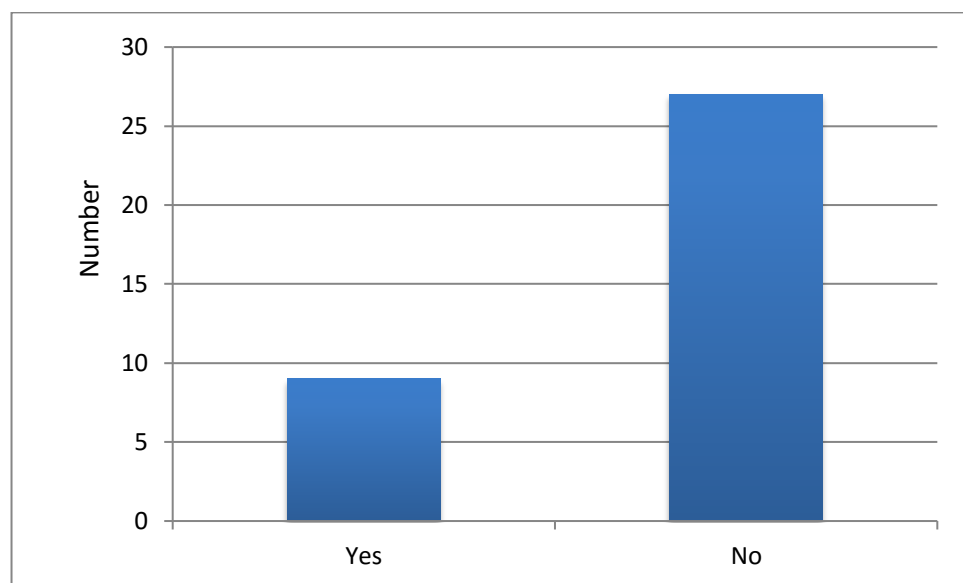

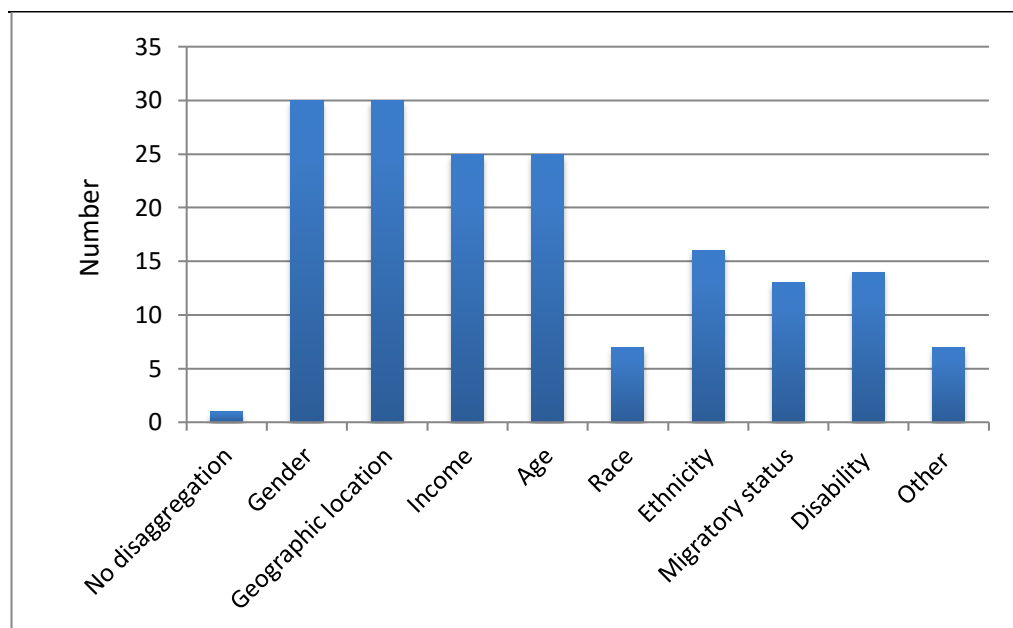**Figure 18 – Users responses to whether confidentialised unit record files are publically available (N=36)**

Figure 19 – User responses to how they would like the statistics they use disaggregate (N=40)

ANNEX F – DRAFT CSPS

ECONOMIC STATISTICS	
Prices and costs	Consumer price index
	Producer Price Index
	Commodity Price Index
	External merchandise trade price indexes
	Wages/Earnings data
	Labour cost index/Wage index
	Exchange rates
	Purchasing Power Parities
Demand and output	Gross Domestic Product (GDP) (production) nominal and real
	Gross Domestic Product (GDP) (expenditure) nominal and real (including implicit price indexes)
	External trade - merchandise
	External trade - services
	Short Term Indicator (STI) - industry output
	STI Consumer demand
	STI Fixed investment
	STI Inventories
	Economy structure statistics
	Productivity
Income and wealth	Integrated national accounts
	Institutional sector accounts
	Balance of Payments
	International Investment Position
	External Debt
	Income distribution

Money and Banking	Assets/liabilities of depository corporations
	Broad money and credit aggregates
	Interest rate statistics
Government	General government operations
	General government debt
Labour market	Labour supply and demand
	Hours worked
Natural Resources and the Environment	Natural Resources
SOCIAL STATISTICS	
Population	Population
	Population growth
	Population distribution
	Birth rate, crude
	Fertility rate
	Death rate, crude
	Life expectancy at birth
	Proportion of population under the poverty line
	Net migration
Health	Government expenditure on health
	Contraceptive prevalence, any method
	Pregnant women receiving prenatal care
	Births attended by skilled health staff
	Maternal mortality
	Infant mortality rate
	Under five mortality rate
	Prevalence of underweight children, weight for age

	Immunisation against infectious childhood diseases
	Diabetes prevalence
	HIV prevalence
	Incidence of malaria and TB (Health)
Education	Government expenditure on education
	Adult literacy
	Youth literacy
	Gender parity index
	Enrolment in primary education
	Primary completion rate
	Enrolment in secondary education
	Enrolment in tertiary education
	Pupil-teacher ratio
Employment	Labour force participation rate
	Unemployment rate
	Youth unemployment rate
	Proportion of own-account workers
	Contributing family workers (unpaid workers)
Gender	Proportion of seats held by women in national parliaments
ENVIRONMENTAL STATISTICS	
Air and Climate	Consumption of ozone depleting substances
	Emissions of greenhouse gases
	CO2 emissions
	NO2 emissions
	SO2 emissions
	NOx emissions
	CH4 emissions

	Annual average precipitation
	Temperature average and variation
Energy	Total production
	Total supply
	Total consumption
	Total production from renewable sources
	Total production from non-renewable sources
Agriculture and land	Land area
	Arable land
	Agricultural land
	Area under crops
Forests	Forest area (proportion of land covered by forests)
	Forest area, protected
	Reforestation
	Afforestation
	Area deforested
Aquatic Resources	Capture fisheries production
	Aquaculture production
Ecosystems and biodiversity	Terrestrial protected areas
	Marine protected areas
	Bird species threatened
	Mammal species threatened
	Fish species threatened
Water	Total water abstracted
Waste	Total wastewater
	Total municipal waste collected
	Total municipal waste treated

Natural Disaster	Total disasters	
	Total deaths	72
	Total economic damages	
	Total people affected	
	Total people injured	
	Total people made homeless	
Population	Population with improved to drinking water	
	Population with improved access to sanitation	
	Households with electricity	

ANNEX G – CHANGES SINCE THE 2009 BENCHMARK STUDY

Based on comparisons between the current assessment and the 2009 Benchmark Study, it appears that there has been some improvement in the recent reporting of some key economic statistics (GDP, CPI and trade statistics). However, far fewer NSOs report budgetary accounts and labour market statistics on their websites than reported in the 2009 Benchmark Study. Similarly, balance of payments data continue to be poorly reported. Further, while the reporting of primary school enrolment statistics has improved, most education and health statistics are more widely reported in the 2009 Benchmark Study. This is noting the caveat that the 2009 Benchmark Study complemented public access information with data sourced from the NSOs. Based on this, the data would be expected to be more comprehensive in the previous study.

Taking into account the inconsistencies in the data collected for the 2009 Benchmark Study and in the CSPS, the timeliness of publication of data by NSOs has remained largely consistent. This is reflected in Table 5. The Samoan NSO demonstrated a slight improvement in timeliness of publication of economic data, reflecting a general prioritisation of economic statistics. For a number of countries including Fiji, the Marshall Islands, Nauru and Samoa, the social statistics available through NSOs were collected between five and 10 years ago. In the cases of Micronesia and Kiribati, the majority of the available NSO data was over 10 years old.

The table below should considered in light of the significant diversity that exists in the size, resourcing and capability of NSOs across the Pacific. These factors, along with population and other social and economic characteristics of a particular country, may mean it is not feasible to conduct collect, analyse and report data in with the same regularity as a larger and better resource NSO.

Table 5 – Comparison between current assessment and 2009 Benchmark Study

Country	Comparison to 2009 Benchmark Study
Cook Islands	Gaps consistent. Increase in frequency of collection of population statistics (5-yearly to annually), decrease in frequency of vital statistics (quarterly to annually). Most statistics up to date (2014/15).
Fiji	Gaps consistent. Population collected 10-yearly. Most available stats collected 5-10 years ago.
Micronesia	Publication improved (more data published), gaps consistent. Some statisticss out of date (more than 10 years old).
Kiribati	Gaps consistent. Some change in frequency, CPI collected quarterly (not monthly) and employment collected 5-yearly (not annually). Some NSO stats out of date (more than 10 years old).
Marshall Islands	Gaps consistent. NSO stats are more out of date than those included in the Benchmark Study. Most stats collected 5-10 years ago.
Nauru	Gaps consistent. Some decrease in frequency from monthly to annually in vital and education statistics. Most stats collected 5-10 years ago (except CPI).
Niue	No NSO data available.
Palau	Gaps consistent. Most available stats collected in the past 5 years (except employment).
Papua New	Minimal data available. Gaps consistent on available data.

Guinea	
Samoa	Most gaps in economic statistics reduced and economic statistics up to date. Most social statistics collected 5 to 10 years ago.
Solomon Islands	Gaps consistent. Data collected between 5 and 10 years ago (most from 2009 census).
Tonga	Gaps consistent. Frequency for some economic statistics decreased from quarterly to annually (BoP, external trade). Most data from within the last 5 years.
Tuvalu	Gaps consistent. Social data not updated since Benchmark study.
Vanuatu	Gaps consistent. Some increase in frequency of economic statistics. Household Income and Education Survey reported as occurring annually.

©Sustineo Pty Limited
Prepared by Tom Sloan and Simon Feeny

27 Torrens Street, Braddon   Canberra   ACT 2612
GPO Box 591 Canberra   ACT   2601   Australia
T: 61 2 6140 4278   E: enquiries@sustineo.com.au

Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0.1						
0.2						
1.0						