13 February 2014

Assessment of the Current Status of the National Statistical System of the Cook Islands

Sustainable Human and Social Development Sector

13 February 2014

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List of Acronyms and Abbreviations

ADB	Asian Development Bank
CISO	Cook Islands Statistics Office
GDDS	General Data Dissemination System
IMF	International Monetary Fund
MFAI	Ministry of Foreign Affairs and Immigration
MOCD	Ministry of Cultural Development
MOE	Ministry of Education
MOH	Ministry of Health
MOJ	Ministry of Justice
MOIA	Ministry of Internal Affairs
NSO	National Statistics Office
NSDP	National Sustainable Development Plan
NSDS	National Strategy for the Development of Statistics
PARIS21	Partnership in Statistics for Development in the 21st Century
SPC	Secretariat of the Pacific Community

Definitions

Accessibility	The ease and conditions under which statistical information can be obtained.
Administrative data	Information primarily collected for the purpose of record-keeping, which is subsequently used to produce statistics. Some examples include data from registrars, hospital morbidity data, housing assistance data and child protection data.
Agency	Denotes either a Ministry, Department, State Owned Enterprise o Division of a Department
Data capture	The process by which collected data are put into a machine-readable form.
Data revision	Any change in a value of a statistic released to the public by an official statistical agency. Preliminary data are revised when more and better source data become available. "Data revision" describes the policy and practice for identifying the revision status of the data, as well as the availability of revision studies and analyses.
Data validation	Process of monitoring the results of data compilation and ensuring the quality of the statistical results. Data validation describes methods and processes for assessing statistical data, and how the results of the assessments are monitored and made available to improve statistical processes. In this process, two dimensions can be distinguished: (i) validation before publication of the figures and (ii) validation after publication.
Dissemination	Distribution or transmission of statistical data and metadata to users. Dissemination covers all activities by statistical producers aiming at making data and metadata accessible to users. For data dissemination, various release media are possible, such as electronic format including the internet, CD-ROM, paper publications, files available to authorised users or for public use; fax response to a special request, public speeches, press releases.
Impartiality	An attribute confirming that statistical authorities develop, produce and disseminate statistics in a neutral manner, and that all users must be given equal treatment. A critical pre-requisite for production of high quality statistics.
Institutional environment	Set of rules and the organisational structures that are used as the basis for producing statistics.
Metadata	Data that defines and describes other data.
Methodological soundness	The extent to which the methodology used to compile statistics complies with the relevant international standards, including the professional standards enshrined in the Fundamental Principles for Official Statistics.
National statistical system	The national statistical system (NSS) is the ensemble of statistical organisations and units within a country that jointly collect, process and disseminate official statistics on behalf of the national government.
Periodicity	Frequency of compilation of the data (i.e., the relevant period covered by a data observation, e.g., annual, quarterly, monthly, weekly, daily, etc.).
Prerequisites of quality	Institutional conditions for the pursuit of data quality.
Relevance	The degree to which statistics meet current and potential users' needs. Relevance is concerned with whether the available information sheds light on the issues that are important to users. In assessing relevance, one approach is to gauge relevance directly, by polling users about the data. Indirect evidence of relevance may be found by ascertaining where there are processes in place to determine the uses of data and the views of their users or to use the data

	in-house for research and other analysis. Relevance refers to the processes for monitoring the relevance and practical usefulness of existing statistics in meeting users' needs and how these processes impact the development of statistical programmes.
Reference period	The period of time or point in time to which the measured observation is intended to refer.
Respondent burden	The effort, in terms of time and cost, required for respondents to provide satisfactory answers to a survey. This burden can lead to providers experiencing annoyance, anger, frustration, etc., at being requested to participate, with escalation of these feelings generated by the complexity, length and/or frequency of surveys.
Revision policy	A policy or set of policies, aimed at ensuring the transparency of disseminated data whereby preliminary data are compiled that are later revised when more and better source data become available. Data may also be subject to ad hoc revisions as a result of the introduction of new classifications, compilation frameworks and methodologies which result in the compilation of historical data that replaces previously released data.
Data security	The measures taken to prevent unauthorized access or use of data.
Serviceability	Set of practical aspects describing how well the available data meet users' needs. Serviceability is a term that captures the practical aspects of usability of data. The emphasis on "use" thus assumes that data are available. Thus, key aspects of usability include relevance, timeliness and frequency, consistency, revision policy and practices and availability of metadata.
Stakeholders	People or organisations with an interest in the output and various other aspects of an agency.
Standards	Documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics, to ensure that materials, products, processes and services are fit for their purpose. Documents, established by consensus and approved by a recognized body, that provide, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.
Statistical process	The complete set of sub-processes needed to support statistical production.
Statistical data	Characteristics or information that have been collected for statistical purposes, or processed from no statistical sources, to contribute to the production of official statistics.
Statistical output	Results from a statistical process to be accessed by the final users. Can take the form of aggregate statistics, analysis, and micro data releases and can include different forms of media (e.g. the Internet and paper reports).
Timeliness	Length of time between data availability and the event or phenomenon they describe. Timeliness refers to the speed of data availability, whether for dissemination or for further processing, and it is measured with respect to the time lag between the end of the reference period and the release of data.
User	Recipient of statistical information, who transforms it into knowledge needed for decision making or research. The ultimate client of the statistical authority, who will make the judgment as to whether the data or services are fit for purpose.
User needs	Data or metadata requirements of persons or organisations to meet a particular use or set of uses. User needs refers to the description of users and their respective needs with respect to the statistical data.

Executive Summary

The purpose of the Economic Sector data audit is to assess the availability of statistical information of the sector vis-à-vis the long-term and medium-term national development plans through the preparation of a sectoral/thematic data collection and information management assessments (audits).

This report presents the assessment of agencies in the Sustainable Human and Social Development sector. The information presented in this study will be synthesised as part of a national assessment and inform the development of a National Statistics Development Strategy (NSDS).

Overall, commonalities across the sector form the basis for sector based strategies that also link to the mandates of the sector agencies. In taking the assessment forward it is recommended that:

- All stakeholders within the Cook Islands National Statistics System develop an understanding of what the NSS is, how it should function, and its role in promoting improved collection and use of high quality statistical information in order to improve evidenced-based decision making across government.
- Guiding principles be developed that promote an integrated approach, foster cooperation, maximise the efficient use of existing facilities, staff and resources, draw on the expertise of those outside the sector .
- Objectives and outcomes are set that are based on international and national standards and contribute to monitoring the progress towards achieving NSDP results.
- Support and resources are mobilised to implement NSDS strategies.

❖ Recommendations for Prerequisites of Quality

Legal and Institutional Environment
- The Statistics Act 1967 must be reviewed and updated to accommodate current national statistical needs.
- Update NSDP to include smart goals.

Resources
- Agencies must allocate budgetary resources to future statistical development based on identified statistical needs.
- Long term efforts must be made to build and retain a core contingent of trained staff within the sector.

Relevance
- Agencies must conduct formal consultations with a wide range of stakeholders in order to stay updated on users evolving data needs.

❖ Recommendations for Statistical Processes and Outputs:

<u>Sound methodology</u>

- Sector agencies should consult with CISO to identify with a view to adopt consistent and appropriate classification codes.
- CISO should actively engage with sector agencies to review what classifications are in use or could be used to ensure consistency across official statistical outputs.

<u>Accuracy and reliability</u>

- All agencies expressed an interested in improving their data analysis and interpretation capabilities. Opportunities to improve these skills across the public service should be encouraged. CISO should consider what assistance it can provide in improving agency's data management capabilities – for example, annual or six-monthly MS Access training workshops.
- Clear and transparent procedures for assessing and validating the quality of information should be put in place and made available to the public through metadata documentation.

<u>Serviceability</u>

- Agencies should consider preparing and implementing a publication release schedule. This could then be consolidated for a sector wide release schedule.
- All agencies should seek opportunities to up skill their staff in basic data management software packages, such as MS Excel and MS Access

<u>Accessibility</u>

- All agencies should develop dissemination strategies for public information to ensure wide use of important information. Establish and adopt standards to ensure timely dissemination of publications by appropriate means.
- Agencies that produce statistical information for the public should ensure that adequate metadata information is available for publically released data.
- Improve and utilise agency websites to disseminate information to wider audience than sector stakeholders or members, aggregating data, where necessary, to protect confidentiality.

Introduction

The Government of the Cook Islands has an increasing desire to ensure and continually improved evidence-based decision making. In line with this goal, the Ministry of Finance and Economic Management's (MFEM) Cook Islands Statistics Office (CISO) has undertaken to design, implement, and monitor a National Strategy for the Development of Statistics (NSDS). With the assistance of the Partnership in Statistics for Development in the 21st Century (PARIS21), a work programme is currently underway which includes an assessment of data and capacity need across four sectors – Sustainable Economic Development, Sustainable Human and Social Development, Sustainable Natural Resources Environmental Management and Governance.

This report presents the assessment of agencies in the Sustainable Human and Social Development Sector. The information presented in this study will be synthesised as part of a national assessment and inform the development of a National Statistics Development Strategy (NSDS).

Purpose

The purpose of the Social Sector data audit is to assess the availability of statistical information of the sector vis-à-vis the long-term and medium-term national development plans through the preparation of a sectoral/thematic data collection and information management assessments (audits).

Detailed tasks

The work involved the following tasks:

a. Conduct a review of the statistical system, with a focus on existing data collection and information management systems, and the availability of statistical indicators required for evidence-based decision making and the monitoring of development progress by examining the following:
   - Institutional and legal arrangements for statistical activities of data producing agencies
   - Current calendars of data collection activities and production of statistical outputs
   - Data needs and gaps
   - Assessment of data quality and reliability aspects of statistical outputs
   - Use of information technology in statistical data collection, processing, and analysis
   - Data dissemination practices
   - Human resources and training
   - Availability of internal and external resources for statistics
b. Review the past and on-going activities of donor agencies in building statistical capacity and their impact on statistical capacity building (SCB) and learning
c. Identify the strengths, weaknesses, and binding constraints that hinder the development of statistics and assess the gap between demand and supply of statistics, keeping in view the data needs of poverty assessment and MDG indicators, and other critical data needs

for developing indicators necessary for policy formulation, planning and monitoring of development targets

d. Check if and how cross-cutting issues such as gender, disability, children, youth intersect with the sector

e. Prepare an assessment report to include the recommendations on how to address the possible shortcomings and how to further improve existing sectoral databases and information management systems.

f. Present assessment findings in the workshops to be convened.

Methodology

The audit was undertaken using a mix data gathering methods which included a review of existing documents and conducting interviews using a pre-determined questionnaire that was used for all four sector assessments (Annex 1 provides a list of those consulted for this sector audit). Overall, 29 agency representatives were interviewed.

A sector workshop was also held with Ministry representatives from the Social sector to report preliminary findings.

Report Structure

This report is divided into five sections. The introductory section profiles the Social sector, its agencies, datasets and outputs. Section 2 assesses the prerequisites of quality which includes the legal and institutional environment, resources and relevance of statistical information in the sector. Section 3 assesses statistical processes and outputs. Section 4 focuses on the data needs and challenges for the sector. The concluding section sets out next steps for the sector.

I.   Sector Introduction

For the purpose of the NSDS assessment, the Sustainable Human and Social Development Sector consists of seven government agencies. The focus of this assessment targeted the main data producing agencies which excluded CSOs from the interviewing process. However, CSOs were invited to the review workshop to provide input on their data needs.

The agencies assessed included in the Sustainable Economic Development Sector include the following:

1. Ministry of Foreign Affairs and Immigration
2. Ministry of Cultural Development
3. Ministry of Education
4. Ministry of Health
5. Ministry of Internal Affairs
6. Ministry of Justice
7. Cook Islands Police

A total of 28 datasets and outputs were identified from the seven agency audits. A full list of all sector datasets and outputs for the sustainable Economic Development Sector is provided in **Annex 2**.

Business Planning and NSDP

All government agencies are required each year to update the agency Business Plan that includes a Statement of Intent that corresponds with the expectations from the Minister for the agency and a formal commitment from the Head of the agency to meet the expectations of the Government. This includes identifying key objectives in the NSDP (2011-2015) that are of relevance to the agency. The data audit and assessment has listed the NSDP goals and strategies for each of the agencies in **Table 1** below.

Table 1   Social Development sector NSDP goals and targets

Goal	Target	Ministry
Goal 4 – A Cook Islands where all people who reside in our islands can enjoy opportunities to fulfil their potential, prosper and participate in the social, economic, political and cultural life of our communities and nation.	95% enrolment for early childhood education	MOE
	≥65% Year 4 literacy in Maori	MOE
	90% NCEA Level 1 numeracy rate	MOE
	90% NCEA Level Literacy rate	MOE
	62% achievement in NCEA Level 1 qualification	MOE
	70% retention rate from Year 11-12	MOE
	50% increase in the rate of tertiary qualified Cook Islanders	MOE
	50% increase in the rate of vocational education and training achievement	MOE
	>90% antenatal coverage	MOH
	Low infant and under five years mortality rate	MOH

Low maternal mortality rate	MOH
≥ 90% immunisation coverage	MOH
Reduce NCDs by 10%	MOH
Reduce teenage pregnancy by 30% for 13-16 years	MOH
Reduce STIs by 30%	MOH
Maintain nil or low rate of tuberculosis	MOH
Maintain 0 or low rate of HIV/AIDS infections	MOH
Reduce by 50% the number of overweight children	MOH
% of women in business and professional occupation	MOIA & MFEM (NSO)
% of women in politics	MOIA & MFEM (NSO)
% rate of domestic violence	Police, Punanga Tauturu, MoJ
Reduce rate of child abuse	Police, Punanga Tauturu, MoJ
Reduce rate of youth crimes	Police & MoJ
Reduce unemployment rate	MFEM (NSO)
Increase disability employment by 50%	MOIA
Increase levels of funding for NGOs and CSOs providing social services	MOIA

The table above shows those government agencies identified as the lead source of data for the fourth goal in the NSDP and the related targets. Overall this shows that not all agencies are actively required to provide information for NSDP reporting purposes.

Table 2   **How well does the Ministry/Agency Inform NSDP Targets?**

	High	Med	Low	Comment
MFAI			✓	
MOCD			✓	No data required
MOE	✓			Range of data required
MOH	✓			Range of data required
MOIA		✓		Data required from other agencies for collation
MOJ		✓		Range of data required
Police		✓		Range of data required

II. Prerequisites of Quality

Prerequisites of quality includes elements and indicators that reinforce the idea that data users, who often cannot replicate or otherwise verify data, must place their trust in the institutions that produce statistics and the people who staff them.

Legal and institutional environment

> **GDDS 0.1**
>
> *The responsibility for collecting, processing and disseminating the statistics is clearly specified; individual reporters' data are to kept confidential and used for statistical purposes only; statistical reporting is ensured through legal mandate and/or measures to encourage response.*

The legal and institutional environment for statistical information collection is guided by a range of legislation, policy mandates and international conventions. A few key pieces of legislation provide a framework for all ministries and agencies. These include the Public Records Act 1984 and the Official Information Act 2008. The Public Records Act 1984 provides for the National Archives to ensure the preservation of public records and gives instructions on how long documents need to be maintained, and the circumstances under and methods by which they can be de destroyed. The Official Information Act 2008 provides a clear definition of 'official information' and outlines a clear principle of availability, unless there is good reason for withholding it. These two key pieces of legislation establish the foundation on which data management and availability are built and are relevant to all agencies.

A range of legislation and policies are in place that provides the regulatory framework for the sector as summarised in the Table 3.   This includes international and regional treaties and conventions along with strategic policy instruments that provide each agency with its operating mandate and functions. A number of cross sectoral conventions are in place. This includes the Convention on the Rights of the Child (CRC), the Convention on the Rights of Persons with Disabilities (CRPWD) and the Convention for the Elimination of Discrimination Against Women (CEDAW).

Table 3 Legal and institutional environment

Agency/ Ministry	Legal Mandate and Legislation	International Conventions	Are there Legislative provisions for collection of data and statistics?
MFAI	Ministry of Foreign Affairs Act 1984 Entry, Residence & Departures Act 1971-72	Nil	No specified requirements
MOCD	Cultural Development Act 1990 Antiquities and Artifacts Act 1994 Cultural Historical Act 1994 Te Reo Maori Act 2003	Nil	No specified requirements
MOE	Education Act 2012	EFA, MDGs, CRC, PEDF	No specified requirements

MOH	Health Act 1995-96 Public Health Act 2004 Food Act 1992-93 Food Regulations 2008 Tobacco Act 2007 Medical and Dental Practices Act 1977 Nurses Act 1986		
MOIA	Social Welfare Act 1989 Prevention of Juvenile Crimes Act 1969 Disabilities Act 2008 Industrial and Labour Act 1964 Dangerous Goods Act 1984 and Regulations 1985 Minimum Wage Order 2007 Films and Censorship Amendment Act 2008 Consumer Guarantees Act 2008 Control of Prices Act 1966	CEDAW, CRC	Reference to CEDAW
MOJ	Cook Islands Act 1915 Coroners Act 1979-80 Crimes Act 1969 Criminal Justice Act 1967 Criminal Procedure Act 1980 Criminal Records Act 1991 Electoral Act 2004 Judicature Act 1980 Juries Act 1968 Land Facilitation of Dealings Act 1970 Land Use Act 1969 Law Practitioners Act 1993 Marriage Act 1973 Matrimonial Property Act 1976 Misuse of Drugs Act 2004 Police Act 1980 Prevention of Juvenile Crime Act 1968 Prisons Act 1967	CEDAW, CRC	No specified requirements
Police	Cook Islands Police Act 2012	CEDAW, CRC	Reference to CEDAW

Apart from the relevant conventions, Public Records Act 1984, Statistics Act 1967 and Official Information Act 2008, there are no other specific provisions for the management of statistical information.

Overall, the legislative framework relating to statistical management functions for the sector is weak with opportunities to maximise collected data for transparency and accountability purposes underutilised.

Resources

> **GDDS 0.2**
>
> *Staff, facilities, computing resources, and financing are commensurate with needs of statistical programmes.*

Overall, resources within the social sector are inadequate at addressing the needs of their statistical programmes.

Staff Resources

The two large agencies (MOE and MOH) have a dedicated M&E officer and Statistics Officer, respectfully, for the management of their statistical programmes. The other agencies assigned statistical tasks such as basic data collection and data entry to certain staff, usually on top of their existing core job responsibilities. Most staff have limited data analysis capabilities.

With the exception of MOE, all agencies indicated that they were understaffed and couldn't fully perform the required statistical tasks without jeopardising some aspect of data quality. This in turn has lead to a heavy reliance on external help, whether it is from the NSO or technical advisors/consultants.

Most staff had no formal qualifications in the field of statistics or data management. On the job training was the main method of learning identified, seconded by short seminar trainings/workshops in country and in the region.

Facilities and Computing Resources

The physical facilities and computing resources of the MOJ, MOIA and to a lesser extent the MOH, needs urgent attention.

A barrier to data sharing is software incompatibility issues within and across agencies. Data sets are being stored on different software ranging from MS Excel, MS Access to costume made software like the CMIS used by Police.

A full list of resources available to Social Sector agencies is provided in **Table 4** (see **Annex 3**).

Relevance

> **GDDS 0.3**
>
> *The relevance and practical utility of existing statistics in meeting users' needs are monitored.*

Overall, most agencies within the sector are collecting data for internal, administrative purposes. Several agencies also share data with international donors and development partners. Some datasets identified were primarily collected for international reporting purposes.

Data sharing amongst agencies is an area of concern. Timeliness was the biggest issue identified by most agencies when requesting for data.

Agencies also have limited awareness of the data being collected by other agencies. In some cases this has led to agencies collecting the data twice. For example, the MOH and MOIA conducted different surveys with similar questions on domestic violence. So, there is potential for agencies to work together to reduce duplicating data or even using data triangulation to produce a more accurate picture of domestic violence and other social phenomena.

Table 5 Identifying and meeting data user needs

Agency/ Ministry	Main Users of Data		Main Use of the Data	Users consulted?
	Internal (Govt and Sector)	External and Public		
MFAI	Administrative, Central Agencies, Cabinet	Public Regional & International Agencies	Border/Migration monitoring & control National & International Reporting requirements	No
MOCD	Administrative	Public	Government & Historic records keeping.	No
MOE	Administrative CISO, MOH	Public Regional & International Agencies. Development Partners.	Monitoring student achievement. Financial and resource forecasting. National & International Reporting requirements	No
MOH	Administrative, Police, CISO	Public, CSO Regional & International Agencies.	Storage of Patient Records Disease/outbreak monitoring & control National & International Reporting requirements	No
MOIA	Administrative, Police, CISO,	Public &Private sector, CSO regional and international agencies, Development Partners	Social Sector, National & International Reporting requirements.	No for most departmental datasets with the exception of the Youth and Disability Divisions
Justice	Administrative, CISO, Tourism, MOIA, MFAI, MOH, Police	Public	Law & order sector reporting	No
Police	Administrative, MOJ, MOH, MOIA, MOE, CSO, CISO	public	Law and Order, Public Safety	No

❖ **Recommendations for Prerequisites of Quality**

Legal and Institutional Environment

- The Statistics Act 1967 must be reviewed and updated to accommodate current national statistical needs.
- Update NSDP to include smart goals.

Resources

- Agencies must allocate budgetary resources to future statistical development based on identified statistical needs.
- Long term efforts must be made to build and retain a core contingent of trained staff within the sector.

Relevance

- Agencies must conduct formal consultations with a wide range of stakeholders in order to stay updated on users evolving data needs

III.   Statistical Processes and Outputs

International standards, guidelines and good practices are fully observed in the processes used by the statistical authorities to organise, collect, process and disseminate statistics.

Sound methodology

GDDS 2.

The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.

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a. **Concepts and definitions & classifications**

The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices. The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.

Table 6 below shows that agencies reflect a mix of awareness of concepts, definitions and classifications with most interviewees only aware that they exist, but not the finer details.

Table 6 Standards and Classifications

Agency/ Ministry	Awareness of Standards and Classifications	Standard or Classification used
	Yes/No	
MFAI	Yes	Multiple Standards used
MOCD	No	n/a
MOE	Yes	NZCER/NZQA, UNESCO EFA
MOH	Yes	Case definition: WHO Classification Standards. ICD10
MOIA	Some departments	-
MOJ	No	Not applied to 8 data sets.
Police	Yes	Modelled after NZ Police Act

Accuracy and reliability

GDDS 3.

Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.

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a. **Source data**

Source data available provide an adequate basis to compile statistics and are regularly assessed.

All agencies are collecting administrative data that falls out of their day to day business operations. Three of the seven agencies assess (MOH, MOCD and MOIA) also conduct their own surveys.

Agencies have brought up issues of gaining access to data from secondary sources within government. Confidentiality and data error were some of the reasons stated for withholding data.

Table 7 Source Data

Agency/Ministry	Primary Source		Secondary Source	
	Admin	Survey	Admin	Survey
MFAI	✓		✓	✓
MOCD	✓	✓	✓	✓
MOE	✓	-	-	-
MOH	✓	✓	✓	✓
MOIA	✓	✓	✓	✓
MOJ	✓	-	✓	-
Police	✓	-	✓	-

b. **Statistical techniques**

Statistical techniques employed conform to sound statistical procedures. Appropriate statistical procedures, implemented from data collection to data validation, underpin quality statistics.

Most agencies assessed have limited use or understanding of statistical techniques, with the exception of MOE.

Table 8 (see **Annex 3**) provides a summary of statistical techniques by agency and statistical output.

c. **Assessment and validation of data and statistical outputs**

Intermediate results and statistical outputs are regularly assessed and validated.

On the whole, agencies have limited capacity and processes in place to assess and validate the quality of their outputs – reports and publications. The triangulation of data with other source data is carried out in some cases. For example, the Police conduct checks on their data against MOH data.

Clear systems do not appear to be in place to check the quality of the information although in some cases it is included in the role of staff to undertake the checking. However this is not necessarily a high priority task against other competing priorities. In order to ensure high quality data is available for sharing, processes for assessing the quality of the data needs to be established across the sector. **Table 9** summarises agency actions in this area.

Table 9 Assessment and Validation

Ministry/ Agency	Identified Responsibility	Is validation done?	Procedures Exists	Comment
	Position	Yes/No	Yes/No	
MFAI	Director of Immigration/CISO	Varied	Yes	Heavy reliance on CISO for most statistical techniques and assessments.
MOCD	No	No	No	Limited statistical data.
MOE	M&E Officer	Yes	Yes	
MOH	2x Statisticians	Varied	Yes	Usually rely on TA for assessing survey data
MOIA	Multiple personnel	Varied	No	Difficult to prioritise task
Justice	Registrar and director level	Varied	Ad hoc	No one centralised approach to all statistical outputs
Police	Divisional Head	Varied	Yes	Procedures not always followed by some staff

Serviceability

> **GDDS 4.**
>
> *Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.*

a. **Periodicity and timeliness**

Periodicity and timeliness follow internationally accepted dissemination standards.

Only the two large agencies (MOH and MOE) publish actual statistical bulletins/reports on a regular basis. **Table 10** below outlines the datasets or outputs produced by each agency, and the periodicity and timeliness associated with each.

Table 10 Periodicity and Timeliness

Ministry/ Agency	Published Data	Periodicity	Timeliness
	List output/ product name	Annual, quarterly, monthly, ad hoc, etc	
MFAI	Nothing Published	N/a	N/a
MOCD	Nothing Published	N/a	N/a
MOE	Education Statistical Report	Annually	Consistent record of publishing on time
MOH	Annual Health Statistics Bulletin	Irregular	Published every other year
MOIA	Nothing Published	N/a	N/a
MOJ	Land and high Court Sitting schedule	Quarterly	3 weeks prior to sitting date – as legal requirement to give notice.
Police	TV police report	Weekly	Weekly – reporting on recent events is timely and useful

b. **Revision policy and practice**

Across the sector, data revision policies and procedures vary. Few agencies have formal procedures in place for revising or documenting changes to data. This includes changes for replacing data with better data sources or introducing new methodologies or classifications. Revisions are also undertaken when software is updated as noted by the Police and MOH. However, these are not routinely set procedure and the two agencies rely on external consultants to guide them through the process.

Table 11 Revision policy and practice

Ministry/ Agency	Review and revise Data	Established procedures
MFAI	No	No
MOCD	No	No
MOE	Yes	Yes
MOH	Yes	Yes
MOIA	Varied	Yes
MOJ	Yes – not for all data sets.	No set procedure other than to update data as received.
Police	Yes	Yes

Accessibility

> **GDDS 5.**
>
> *Data and metadata are easily available.*

a. **Data accessibility**

Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.

Of the agencies assess, MOE, MOH and MOJ make information they collect or produce publically available, without having to request the data. Other agencies provide data

Where information is made publically available it is disseminated using a combination of five methods: in print (MOE, MOH, Police); online (MOE); in digital reports that are e-mailed to a pre-determined distribution list (MOH); via the newspaper (MOJ); and through public consultations/presentations (MOIA, Police).

Most agencies issue newspaper or TV adverts using information sourced from their data collection activities. For example, the Police produce a weekly release for CITV News to report on recent crime activities.

Table 12 (see **Annex 3**) provides a summary of data accessibility by agency and statistical output.

b. **Metadata accessibility**

Up-to-date and pertinent metadata are made available.

As there is limited data that is made publically available within this sector, it also stands that there is limited information about that data. Metadata is crucial for explaining the sources of data as well as methodology used to derive statistical information. All agencies should ensure that adequate information about their data is both available and easily accessible.

❖ Recommendations for Statistical Processes and Outputs:

Sound methodology

- Sector agencies should consult with CISO to identify with a view to adopt consistent and appropriate classification codes.
- CISO should actively engage with sector agencies to review what classifications are in use or could be used to ensure consistency across official statistical outputs.

Accuracy and reliability

- All agencies expressed an interested in improving their data analysis and interpretation capabilities. Opportunities to improve these skills across the public service should be encouraged. CISO should consider what assistance it can provide in improving agency's data management capabilities – for example, annual or six-monthly MS Access training workshops.
- Clear and transparent procedures for assessing and validating the quality of information should be put in place and made available to the public through metadata documentation.

Serviceability

- Agencies should consider preparing and implementing a publication release schedule. This could then be consolidated for a sector wide release schedule.
- All agencies should seek opportunities to up skill their staff in basic data management software packages, such as MS Excel and MS Access

Accessibility

- All agencies should develop dissemination strategies for public information to ensure wide use of important information. Establish and adopt standards to ensure timely dissemination of publications by appropriate means.
- Agencies that produce statistical information for the public should ensure that adequate metadata information is available for publically released data.
- Improve and utilise agency websites to disseminate information to wider audience than sector stakeholders or members, aggregating data, where necessary, to protect confidentiality.

IV.   Data needs and challenges

Through the sector assessment, the following common data needs for the sector have been identified and include:

- Labour force data (gender, age, disability, average wages)
- Income data at household level
- Poverty statistics
- Domestic violence
- Performance reporting
- Population data by single age
- Educational attainments
- Access to crime statistics on a regular basis (not only by request)
- Regular, timely and reliable data

The major challenges within the Economic sector were identified at the July 2013 NSDS launch workshop, which remained constant during the sector assessments:

- Human and systems capacity
- Constraints to accessing data
- Capability to produce data
- Co-ordination between data producers and users
- Limited use of available data
- Limited data sharing among government and non-government agencies
- Concern that data:
  - is high quality
  - is made available in timely fashion
  - is representative
  - is reliable/credible
  - is both available and accessible
  - uses consistent definitions within and across data producers

V.   Next steps

In moving closer towards developing the NSDS, the next steps in the process are focused on the synthesis of this and the other three sector assessments into clear and achievable sector and NSS strategies.

Next, the four Sector Task Forces will meet to validate the sector reports and together draft the vision and mission all members see for the future of the NSS. Strategies to improve the

NSS should be based on NSDP targets, agency mandates and the strengths and opportunities identified across the sectors.

Summary of strengths of the sector include:

- Significant amount of data being collected
- Handing out indicators instead of Raw data

Summary of opportunities of the sector include:

- Central database to test variables from different agencies (correlation/regression) Identifying causal factors. E.g preventative measures with crime.
- Central database increase efficiency of data sharing.
- Smaller Agencies pool funds to cover costs for hiring technical personnel (statisticians, IT officers, etc).
- Potential for agencies to collaborate statistical processes

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Annex 1 – List of those consulted for the sector data audit

	Ministry / Agency	Name	Position
1	MOE	Maria Enetama	M&E Officer
2	MOE	Jane Taurarii	L&C Manager/Literacy and Science Advisor
3	MOE	Strickland Upu	C&P Manager/5Numeracy Advisor
4	MOE	Anna Roi	Scholarship Co-coordinator
5	Police	Karen Ngamata	SPU Manager
6	Police	Aporo Kirikava	Police Officer/IT Technician
7	MOJ	Claudine Henry Anguna	Registrar
8	MOJ	Helen Williams	Registrar Officer
9	MOJ	Khamla Narith	IT Manager
10	MFAI	Myra Paitai	Secretary of Foreign Affairs and Immigration
11	MFAI	Vasie Poila	Acting CEO
12	MFAI	Danny Williams	Trading officer
13	MOH	Moeroa Boaza	Statistics Officer
14	MOH	Ana Silatolu	Finance and Planning Director
15	MOH	Tearoa Iorangi	Statistics Manager
16	OPM	Pua hunter	Director
17	OPM	Ano Tisam	IT Technician
18	MOCD	Liz Ponga	Policy Officer
19	MOCD	Pahau Browne	Administration Manager
20	MOCD	Odile Urirau	Library Officer
21	MOCD	Robert Ioaba	National Auditorium Manager
22	MOCD	Sonny Williams	Secretary of Cultural Development
23	MOCD	George Paniani	National Archives & Library Manager
24	MOIA	Helina Glassie	Welfare Officer
25	MOIA	Ed Herman	Price Commissioner
26	MOIA	Ruth Pokura	Gender & Development Director
27	MOIA	Vania Kenning	Youth Director
28	MOIA	Bredina Drollet	Secretary of Internal Affairs
29	MOIA	Nooroa Numanga	Disability Director

Annex 2 – Complete list of sector datasets and statistical outputs

Ministry/ Agency	Dataset/ Output title	Data source(s)	Frequency	Collection type	Accessibility
MFAI	No publication	Immigration Database	n/a	Administrative data	Data published by CISO
MOCD	No publication	Archives (Research Historical and Government Records)	n/a	Administrative data	Most data restricted.
	No publication	Museum Artefact Collection Database	n/a	Administrative data	Available upon request
	Te Maeva Nui Statistics Release	Te Maeva Nui Survey for Economic Impact Assessment (2013)	Annual	Survey Data	Report available upon request
MOE	Annual Statistics Report	Student Scholarship Database	Annual	Administrative data	Most data restricted.
		All school enrolment	Annual	Administrative data	Summarised & raw data available: Softcopy- Website. Hardcopy- MOE
		Numeracy	Annual	Administrative data	
		Literacy	Annual	Administrative data	
		NCEA results	Annual	Administrative data	
		Teacher qualifications	Annual	Administrative data	Most data restricted.
		Term Returns: Student and Teachers	Quarterly	Administrative data	Softcopy Available upon request
		Performance Assessment Tests (PAT).	Annual	Administrative data	Softcopy-Website. Hardcopy- MOE
		Technical Vocational Education and Training (TVET) enrolments	Annual	Administrative data	Softcopy Available upon request

Ministry/ Agency	Dataset/ Output title	Data source(s)	Frequency	Collection type	Accessibility
MOH	STEPS Statistical Report	STEP Survey	Dependent on Funding. Roughly every 5 years.	Survey Data	Media Release. Hardcopies (limited) are available at MOH
	Global School Health Statistics Report	Global School Health Survey		Survey Data	
	Global Youth Tobacco Stats Report	Global Youth Tobacco Survey		Survey Data	
	Cook Islands Family Health & Safety Stats Report	Cook Islands Family Health & Safety Survey		Survey Data	
	Rarotonga School Physical Health Exam Summary Report	Rarotonga School Physical Health Exam	Bi-Annual	Survey Data	TV/Newspaper
	National Dental/Oral Health Study	National Dental/Oral Health Survey	1st Baseline Study	Survey Data	Not published yet
	MOH Statistics Bulletin	MEDTech 32 Database (Morbidity, NCDs, Vital/Deaths/Births/ Admissions Referrals)	Annual	Administrative Data	raw data available: Softcopy-Website. Hardcopy- MOH
	Quarterly Internal Update Reports	MEDTech 32 Database (Morbidity, NCDs, Vital/Deaths/Births/ Admissions, Referrals)	Quarterly	Administrative Data	Internal Use. Directors only
MOIA	Annual Disability Report (to parliament)	C.I.s National Disability Database	Not currently produced	Administrative Data	Not Published
	CRDP Report		Once (2011)	Administrative Data	Formal Request
	Cook Islands Disability identification Survey Report	Disability Survey	Once (2001)	Survey Data	Formal Request

Ministry/ Agency	Dataset/ Output title	Data source(s)	Frequency	Collection type	Accessibility
MOIA	MOIA Annual Report	Family Violence Referrals Dataset	Annually	Administrative Data	Raw Data Restricted. Formal Request to PSC needed to gain access to the Report.
		Welfare Dataset			
		Labour Management Information			
		Censorship Data			
		Dangerous Goods Licences			
		Foreign Work Permit			
		Child and Family Dataset			
		Price Control Goods Dataset			
	Youth Suicide Prevention Report.	YSP Parents Survey	Once	Survey Data	Stakeholder Presentations. TV/Newspaper
		YSP Youth Survey			
MOJ	Tourism and Migration Statistics Release	Births Deaths & Marriages	quarterly	administrative data	CISO website
	no publication	Land Register of Titles	no publication	administrative data	Print - Daily Newspaper release
	no publication	Land Survey Maps	no publication	administrative data	not published
	Annual Public Notice	Incorporated Societies	annual	administrative data	Newspaper Advertisement
	Annual Public Notice	Private Companies	annual	administrative data	Newspaper Advertisement
	Land Court Sitting Public Notice	Criminal & Civil Court Proceedings	approx. quarterly	administrative data	Newspaper Advertisement
	n/a	Prison Service Case Management System	no publication	administrative data	not published
	n/a	Probation Service Case Management System	no publication	administrative data	not published
	General Electoral Roll	Electoral Roll	4 yearly/bi-elections	administrative data	TV/Newspaper Advertisement
Police	weekly Media release	Crime Management Information System	weekly	administrative data	Cook Islands Television Weekly News Report

Annex 3 – Large tables

Table 4   Available Resources for Statistical Outputs

Ministry / Agency	Staffing	Training Adequate to Stats Needs	Computer Resources	Facilities, Storage, and buildings	Budget	Development Partners
	Full time equivalent (FTE)	On the job, Training provided by	Adequate, Inadequate	Adequate, Inadequate	Recurrent, Specific, Adequate, etc.	
MFAI	Estimated 0.5 FTE CISO is the custodian of MFAI Statistical programmes	On the job: Basic MS Access Training provided by CISO.	Adequate	Adequate	n/a- Statistical outputs produced by CISO	-
MOCD	0 FTE	No training	Adequate	Inadequate-limited physical storage space for archive records	-	-
MOE	1 full time M&E Officer Estimated 0.33 FTE for 3 other staff Plus 0.25 FTE for staff across all outputs(data entry)	On the job: NZQA provides training in the use of the online NCEA Results database.	Adequate	Adequate	No additional budget	UNESCO, SPC. NZQA
MOH	2 full time Statistics Officers Plus 0.25 FTE for staff across all outputs(data collection/entry)	On the job: SPC, WHO, and UNFPA provide training in how to administer a survey, data collecting and data entry. SPC runs in country workshops on M&E and Data Management for staff.	Adequate	Inadequate	Recurrent & Specific funding per Survey provided by donors Surveys are well funded. Admin data processing is under funded. MOH stats office is down from 4 fulltime Statisticians to only 1 + data entry personnel.	WHO, SPC, UNFPA

MOIA	Estimated at 0.33FTE of 18 Staff across all outputs.	On the job: IT server management for Welfare Database (OPM). Regional Workshops- on disability data needs & reporting. Gender Statistics training and budgeting.	Inadequate – Computers are old and crash regularly	Inadequate – Old buildings in need of repair. Salt spray from being in close proximity to the sea Shortens computer life span.	Inadequate Extra funding provided for Youth Suicide Prevention by Government.	AUSAID C EDAW
MOJ	Estimated at 0.33FTE of 63 Staff across all outputs	Continuous On the job training provided by IT Manager	Inadequate. Databases running on outdated hardware and software.	No off site back up for data storage.	Inadequate	CITAF Land Titles NZ-Online Companies Registry
Police	2 FTE plus estimated .3 FTE of Staff	On the job.	Adequate. Software upgrade will be an advantage.	Adequate	Software Subscription	Australia Federal Police

Table 8　　　　　Statistical Techniques

Ministry/ Agency	Dataset	Statistical Method	Capacity to design Forms, Database and Queries	Capacity to Analyse and interpret Data	External Assistance
		MS Excel, Access	Yes/No/Limited	Yes/No/Limited	Who?
MFAI	Immigration Database	Access	No	Limited	CISO
MOCD	Archives (Research Historical and Government Records)	Excel	No	No	CISO
	Museum Artifact Collection Database	Excel	No	No	-
	Te Maeva Nui Survey for Economic Impact Assessment (2013)	Access	No	No	CISO
MOE	Student Scholarship Database	Access	Yes	Yes	-
	All school enrolment	Excel	Yes	Yes	-
	Numeracy	Excel	Yes	Yes	-
	Literacy	Excel	Yes	Yes	-
	NCEA results	Custom made Online Database	-	Yes	NZQA
	Teacher qualifications	Excel	Yes	Yes	-
	Term Returns: Student and Teachers	Excel	Yes	Yes	-
	Performance Assessment Tests (PAT).	Excel	Yes	Yes	-
	Technical Vocational Education and Training (TVET) enrolments	Excel	Yes	Yes	-
MOH	STEP Survey	Customised Database	Limited	No	WHO
	Global School Health Survey	Customised Database	Limited	No	SPC
	Global Youth Tobacco Survey	Customised Database	Limited	No	SPC

Ministry/ Agency	Dataset	Statistical Method	Capacity to design Forms, Database and Queries	Capacity to Analyse and interpret Data	External Assistance
	Cook Islands Family Health & Safety Survey	Customised Database	Limited	Limited	UNFPA Local Consultant
	Rarotonga School Physical Health Exam	Customised Database	Yes	Yes	-
	National Dental/Oral Health Survey	Customised Database	Yes	Yes	-
	Morbidity, NCDs, Vital/Deaths/Births/ Admissions Referrals Datasets	MEDTech 32 Database	Limited	Yes	-
MOIA	C.I.s National Disability Database	Access	Limited	Yes	-
	Disability Survey	Unknown	No	Limited	TA from NZ
	Family Violence Referrals Dataset	Excel	Limited	Yes	-
	Welfare Dataset	Excel	Limited	Limited	-
	Labor Management Information	Excel	Limited	Yes	-
	Censorship Data	Excel	Limited	Yes	-
	Dangerous Goods Licenses	Excel	Limited	Yes	-
	Foreign Work Permit	Excel	Limited	Yes	-
	Child and Family Dataset	Access	Limited	Yes	-
	Price Control Goods Dataset	Excel	Limited	Yes	-
	YSP Parents Survey	Excel & SPSS	Limited	No	Local Consultant
	YSP Youth Survey	Excel & SPSS	Limited	No	Local Consultant
MOJ	Births Deaths & Marriages	Access	Yes	yes	-
	Land Register of Titles	Access	Yes	Limited	-
	Land Survey Maps	Manual	Yes	Limited	-
	Incorporated Societies	Excel	Yes	Limited	NZAP
	Private Companies	Excel	Yes	Limited	NZAP
	Criminal & Civil Court Proceedings	Manual	Yes	Limited	-
	Prison Service Case Management System	Excel	Yes	Limited	-

	Probation Service Case Management System	Excel	Yes	Limited	-
	Electoral Roll	Manual	Yes	Limited	-
Police	Crime Management Information System	Customised Database	Limited	Limited	JADE Company (Aus)

Table 12   Data Accessibility

Ministry / Agency	Dataset	Data Request Protocol	Dissemination to the Public		Inter-Agency and Cross Sector Sharing of Data		Brief Minister
		Formal, By Request	Type	Media release	Provide Data Output	Receive Data Input	
MFAI	Immigration Database	No	n/a	No	Yes	Yes CISO	No
MOCD	Archives (Research Historical and Government Records)	Formal. Sensitive data are restricted for a predetermined number of years before the general public has access	n/a	No	Yes	Yes	No
	Museum Artifact Collection Database	By Request	n/a	No	Yes	n/a	No
	Te Maeva Nui Survey for Economic Impact Assessment (2013)	No – 1st time pilot survey. Report not completed	n/a	n/a	n/a	n/a	n/a
MOE	Student Scholarship Database	Restricted access	Summary Report	Yes-TV, Newspaper	Yes	n/a	Yes
	All school enrolment	By Request	Print- report and Online	No	Yes	n/a	Yes
	Numeracy	By Request	Print- report and Online	No	No	n/a	Yes
	Literacy	By Request	Print- report and Online	No	No	n/a	Yes
	NCEA results	By Request	Print- report and Online	Newspaper, TV, Website.	No	n/a	Yes
	Teacher qualifications	By Request	Print- report and Online	No	No	n/a	Yes
	Term Returns: Student and Teachers	By Request	Print- report and Online	No	No	n/a	Yes
	Performance Assessment Tests (PAT).	By Request	Print- report and Online	No	No	n/a	Yes
	Technical Vocational Education and Training (TVET) enrolments	By Request	Print- report and Online	No	Yes	n/a	Yes
MOH	STEP Survey	By Request	Print & Email	TV	Yes	Yes- MOE	-
	Global School Health Survey	By Request	Print & Email	TV	Yes	Yes- MOE	-
	Global Youth Tobacco Survey	By Request	Print & Email	TV	Yes	No	-
	Cook Islands Family Health & Safety Survey	By request and at discretion of MOH.	Report hasn't been completed	n/a	n/a	n/a	-

	Rarotonga School Pysical Health Exam	By Request	n/a	n/a	No	No	No
	National Dental/Oral Health Survey	No – 1st time pilot survey. Report not completed	Report hasn't been completed	n/a	n/a	n/a	n/a
	Morbidity, NCDs, Vital/Deaths/Births/ Admissions Refferals Datasets	By Request	Online	No	Yes-Some delays	Yes-Police	No
MOIA	C.I.s National Disability Database	By request	n/a	No	Yes	Yes-MOH	No
	Disability Survey	Outdated	No	-	Outdated	Outdated	-
	Family Violence Referrals Dataset	Restricted access	n/a	n/a	Yes-Punanga Tauturu	Yes- Police, MOJ	-
	Welfare Dataset	By Request	No	No		Yes- MOH, MOJ. Some delays	Yes
	Labour Management Information	By Request	-	-	-	-	
	Censorship Data	By Request	-	-	-	-	-
	Dangerous Goods Licenses	By Request	-	-	-	-	-
	Foreign Work Permit	By Request	-	-	-	-	-
	Child and Family Dataset	Restricted access	No	n/a	-	Yes-MOJ	-
	Price Control Goods Dataset	By Request	Yes		-	-	-
	YSP Parents Survey	Formal and Informal	Provided Data Analysis to P4Y group and supported them with Stakeholder presentations,	Yes	Yes	n/a	Yes
	YSP Youth Survey	Formal and Informal	Stakeholder presentations, Television (aired a video of the presentation at public meeting), have provided hardcopies to public queries but would prefer to email copies of public presentation,	Yes	Yes	n/a	Yes
MOJ	Births Deaths & Marriages	Formal and Informal	n/a	No	Yes	Yes- MOH	Yes

	Land Register of Titles	Formal and Informal	n/a	No	Yes	No	Yes
	Land Survey Maps	Formal	n/a	No	Yes	No	
	Incorporated Societies	Formal	newspaper annually for registration update purposes	Newspaper	Yes	No	Yes
	Private Companies	Formal	newspaper annually for registration update	Newspaper	Yes	No	Yes
	Criminal & Civil Court Proceedings	Formal and Informal	Newspaper	Yes	Yes	Yes CLO, Police	Yes
	Prison Service Case Management System	Restricted access	n/a	No	Yes	Yes-police	Yes
	Probation Service Case Management System	Restricted access	n/a	No	Yes	Yes-police	Yes
	Electoral Roll	Formal	Print publications available at selected venues		Yes	Yes- CISO	Yes
Police	Crime Management Information System	By request and at discretion of Police.	Print-Summary Report. Verbal Report at monthly stakeholder meetings	Yes Weekly TV updates	Yes-Some delays	Yes- MOH	No