



Food and Agriculture  
Organization of the  
United Nations

# Microdata dissemination in the Pacific

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# Outline

- Introduction to the Pacific region
- Outline of project “Improving data dissemination and use in the Pacific region”
- Challenges and opportunities
- Proposed recommendations

# The Pacific Region

- 22 Pacific Island states
- <0.4% of Earth's land area
- <0.2% of total population
- The Pacific Community (SPC)  
[www.spc.int](http://www.spc.int)



# Improving data dissemination and use in the Pacific region

- The Pacific Microdata Library

<https://microdata.pacificdata.org/>

- Harmonising census and survey microdata
- Sampling methods in small island states

**PACIFIC DATA HUB** **MICRODATA LIBRARY**

HOME MICRODATA LIBRARY COLLECTIONS CITATIONS DATA DEPOSIT TERMS OF USE POLICY AND

HOME

## Latest additions

**Federated States of Micronesia - Household Income and Expenditure Survey 2013-2014**  
Nov 12, 2019

**Niue - Household Income and Expenditure Survey 2015-2016**  
Nov 12, 2019

**Cook Islands - Household Income and Expenditure Survey 2015-2016**  
Nov 12, 2019

**Kiribati - Household Income and Expenditure Survey 2006**  
Nov 08, 2019

# Acknowledgement

The World Bank  
and  
Food and Agriculture Organization of the United Nations

# The Pacific Microdata Library

- **Data deposit:** preservation of Pacific development microdata
- **Data discovery:** metadata production and dissemination
- **Data accessibility:** microdata curation, anonymization and governance
- **Data comparability and use:** microdata harmonisation
- **Data interoperability:** metadata harvester and microdata harmonisation
- **Data quality:** Pacific-relevant sampling methodologies
- **Monitoring use:** citations and microdata library register



Discovery  
and re-use



Governance  
and access



Raise  
awareness



Identify  
documentation

The screenshot displays the Pacific Microdata Library website. The top navigation bar includes links for HOME, MICRODATA LIBRARY, COLLECTIONS, CITATIONS, DATA DEPOSIT, TERMS OF USE, POLICY AND PROCEDURES, and ACKNOWLEDGEMENTS. The main content area is titled "Central Data Catalog" and features a search bar with options to search by keyword in study or variable descriptions. Below the search bar, there are filters for Country (22) and Year. A list of "Latest additions" is shown, including surveys from Kiribati, Solomon Islands, and Guam. A detailed view of the "Household Income and Expenditure Survey 2013-2014" is overlaid, showing 573 surveys, 43,788 variables, and 1,065 citations. The detailed view also includes an identification section with metadata such as title, year, and country code.

As of **February 12, 2020**  
the catalog contains

**578**

Surveys

**45,649**

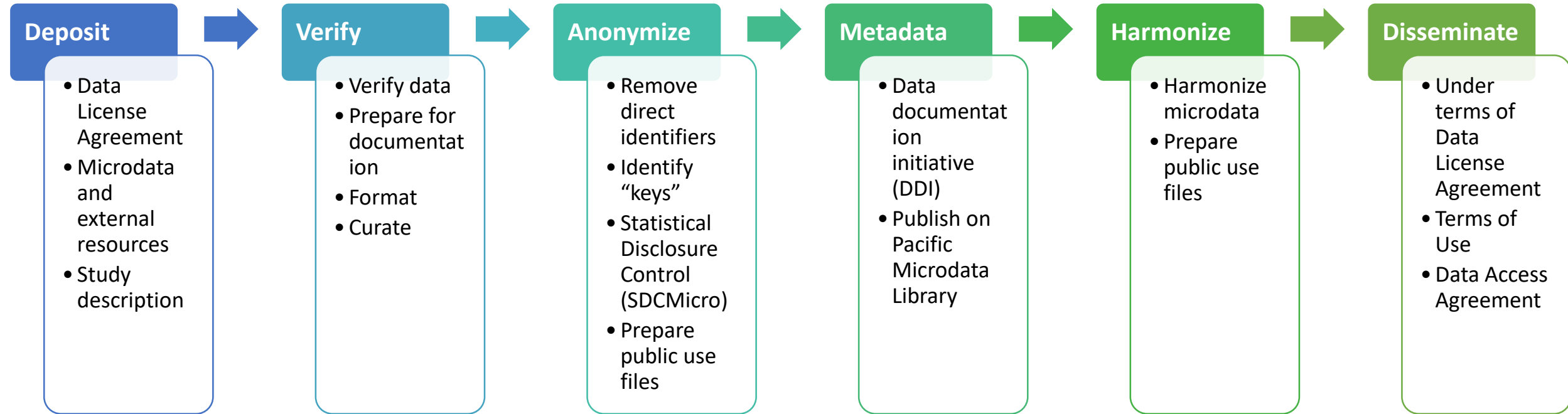
Variables

**1,068**

Citations

[Data Catalog](#)

# Data deposit to data dissemination



# Data deposit

1  
Project  
Information



(You are here)

2  
Study  
Description

3  
Data files  
and other  
Resources

4  
Citations  
(optional)

5  
Review and  
Submit

Deposit



Verify



Anonymize



Metadata



Harmonize



Disseminate



## DATA LICENSE AGREEMENT

Name of Licensor

This Data License Agreement (Agreement) is between the Pacific Community (SPC) and  (Licensor). SPC together with the Licensor are each referred to as a Party or collectively as the Parties. The Parties hereby **agree** to work together on activities outlined in this Agreement related to the sharing and use of Development Data under the terms and conditions provided herein.

### I. NAME AND DESCRIPTION OF DATASET(S)

(a) Name of Dataset(s):

Please enter the name and any other unique identifier (abbreviation, identification number) for the dataset(s) being shared under this Agreement.

(b) Description of Dataset(s) and data type:

Please provide a brief description of the Dataset(s), including the type of data (Microdata, Administrative Records, Geospatial), the country or countries, the year and other succinct, basic information about the Dataset(s).

### II. IMPLEMENTATION

(a) **Effective date of this Agreement:** This Agreement shall come into force and effect upon signature by both Parties on the following date: (The date can be specified as the signing date of the Agreement, or a specific date in future, or as the number of days/months after the signing date)

Date: \_\_\_ / \_\_\_ / \_\_\_

(b) **Please specify term of the Agreement.**


- i. Unless modified or terminated as provided below in Article 5 ("Modification and Termination"), the term of this Agreement shall not expire.
- ii. There is a fixed period over which the Agreement is effective (e.g. one year from the signing date, or specific set of start and end dates).

If none of the above options comply with the agreement reached with the Licensor, the Term of this Agreement is as follows:



# Data discovery

HOME / CENTRAL DATA CATALOG / GUM / SPC\_GUM\_1960\_AGC\_V01\_M\_DEVELOPMENT




## Agriculture Census 1960

Guam, 1960 Guam Under Development

US Department of Agriculture

Last modified August 26, 2019 Page views 220 Metadata [DDI/XML](#) [JSON](#)



## Agriculture Census 2015

Tonga, 2015 Tonga

Tonga Statistics Department, Tonga Ministry of Agriculture, Food, Forestry and Fisheries

Last modified May 20, 2019 Page views 1871 [Documentation in PDF](#) Metadata [DDI/XML](#) [JSON](#)

**STUDY DESCRIPTION** DOCUMENTATION DATA DESCRIPTION GET M...

Identification  
Version  
Scope  
Coverage  
Producers and sponsors  
Sampling  
Data Collection  
Data Processing  
Data Appraisal  
Data access  
Disclaimer and copyrights

### Identification

**IDNO**  
SPC\_TON\_2015\_AGC\_v01\_M

**TITLE**  
Agriculture Census 2015

**COUNTRY**

| Name  | Cou |
|-------|-----|
| Tonga | TON |

**ABSTRACT**  
Importance of Agriculture Census (AC)  
Agriculture is the predominant activity in the Kingdom of Tonga.

## Documentation

Download the questionnaires, technical documents and reports

**Questionnaires**

- 2015 Tonga National Agricultural Census

**Reports**

- Main Report - 2015 Tonga National Agricultural Census

**Technical Documents**

- Manual for Enumerators
- Manual for Supervisors
- Data Entry Manual
- Crops and Trees Code

### g3\_r1c4 Vaccination - pigs

#### Vaccination - pigs (g3\_r1c4)

Data file: [TON\\_2015\\_AGC\\_SectionG3\\_v01](#) [CSV](#) [JSON](#)

**Overview**

|            |                   |
|------------|-------------------|
| vald 983   | Interval discrete |
| invd 15229 | Decimal 0         |
| min 1      | Range 1 - 2       |
| max 2      |                   |

**Questions and instructions**

LITERAL QUESTION  
Did this household use any of the Veterinary services in the past 12 months?  
Vaccination - pigs

**CATEGORIES**

| Value  | Category | Cases                  |
|--------|----------|------------------------|
| 1      | Yes      | 506 <span>51.5%</span> |
| 2      | No       | 477 <span>48.5%</span> |
| System |          | 15229                  |



# Data License Agreement: producer defined access arrangements

- SPC internal use
- Use under license: Data Access Agreement in Pacific Microdata Library
- Open data: accessible to all
- Preservation: inaccessible to anyone
- License between producer and user: national Data Access Agreement

## III. DATA USE AND SHARING OF DATASET(S)

The following data access protocols apply to the Dataset(s) shared under this Agreement.

| Data Sharing Protocol   | Please select            |
|---|--------------------------|
| General approval for SPC internal use                               | <input type="checkbox"/> |
| For use under a License by individual parties                       | <input type="checkbox"/> |
| Open Data e.g. Creative Commons and Open Database License           | <input type="checkbox"/> |
| For data preservation/archiving purposes and metadata documentation | <input type="checkbox"/> |
| For dissemination under licence between data producer and user      | <input type="checkbox"/> |

Deposit



Verify



Anonymize



Metadata





Harmonize





Disseminate

 Open Data

 Public use files

 Licensed files

 SPC Internal use

 External repository

 No Access

# Data access

## Household Income and Expenditure Survey 2015-2016

Cook Islands, 2015 - 2016 [Cook Islands](#)

Cook Islands Statistics Office

Last modified November 12, 2019 [Page views 22](#) [Documentation in PDF](#) [Metadata](#)



STUDY DESCRIPTION DOCUMENTATION DATA DESCRIPTION **GET MICRODATA**

### Application for Access to a Licensed Dataset

Fields marked with \* are mandatory.

The information provided on this page will be kept confidential and will be used for internal purposes only.

|              |                  |
|--------------|------------------|
| First Name   | Michael          |
| Last Name    | Sharp            |
| Organization | 0                |
| Email        | michaels@spc.int |

### Data access agreement

The representative of the Receiving Organisation agrees to

1. Access to the licensed data will be granted on the basis of the Data Access Agreement, unless otherwise stated.
2. Copies of the restricted data of the Data Access Agreement, unless otherwise stated.
3. The data will only be processed for the purpose of the investigation of specific individuals.
4. The Lead Researcher must submit a request for access to be provided of the datasets to the Data Access Agreement.
5. The Lead Researcher undertakes to ensure that no disclosure is made inadvertently.

### Limitations on access by approved users

1. The *Terms of Use* recognise obligations common to the national laws of SPC member countries which have produced the data, and the integrity of statistical sources, as well as any legal obligations specific to the Licensor, where they require researchers to obtain a Declaration of Secrecy before viewing any microdata.
2. Microdata will not in any way be used for any administrative, proprietary or law enforcement purposes.
3. Access to approved microdata is limited at all times to the Lead Researcher and other members of the research team limited to those who can be made or shared with those beyond the organisation of the applicant.
4. The Lead Researcher will implement security measures to prevent unauthorised access to licensed microdata acquired from the *Library*. The microdata approved for access, or any data created on the basis of the original data, will not be copied or otherwise used as mentioned in the Data Access Agreement (DAA).
5. If the Lead Researcher for any request does not have the authority within their organisation to meet all the *Terms of Use* of the Data Access Agreement (DAA), then the authorising person of that organisation for any Data Access Agreement (DAA) must be a person who is authorised to do so.
6. These conditions come into force on the date that approval is given for access to the restricted microdata files by way of the Data Access Agreement. The conditions remain in force until the completion date of the project or an earlier date if the project is completed ahead of time.
7. Neither the original collector of the microdata (Licensor) nor the *Pacific Data Hub - Microdata Library*, nor the relevant funding agency, will be held responsible for the use of the data or for interpretations or inferences based upon such uses.
8. Breaches of the conditions of access will be taken seriously. SPC will take action against those responsible for the lapses. Failure to comply with the *Terms of Use* of the *Pacific Data Hub - Microdata Library* will be deemed to be a major breach of the Data Access Agreement (DAA) and may involve recourse to legal proceedings.
9. SPC will maintain and share with partners a register of those individuals and organisations which have been responsible for the use of the data. SPC will impose sanctions on release of future microdata to these parties.
10. The matching of the restricted microdata with any other micro-dataset is not permitted under the conditions of access.
11. Any microdata held outside of the SPC *Pacific Data Hub - Microdata Library* must be destroyed upon the completion of the project. Destruction of the microdata will be confirmed in writing to SPC by the Lead Researcher.

 Deposit

 Verify

 Anonymize

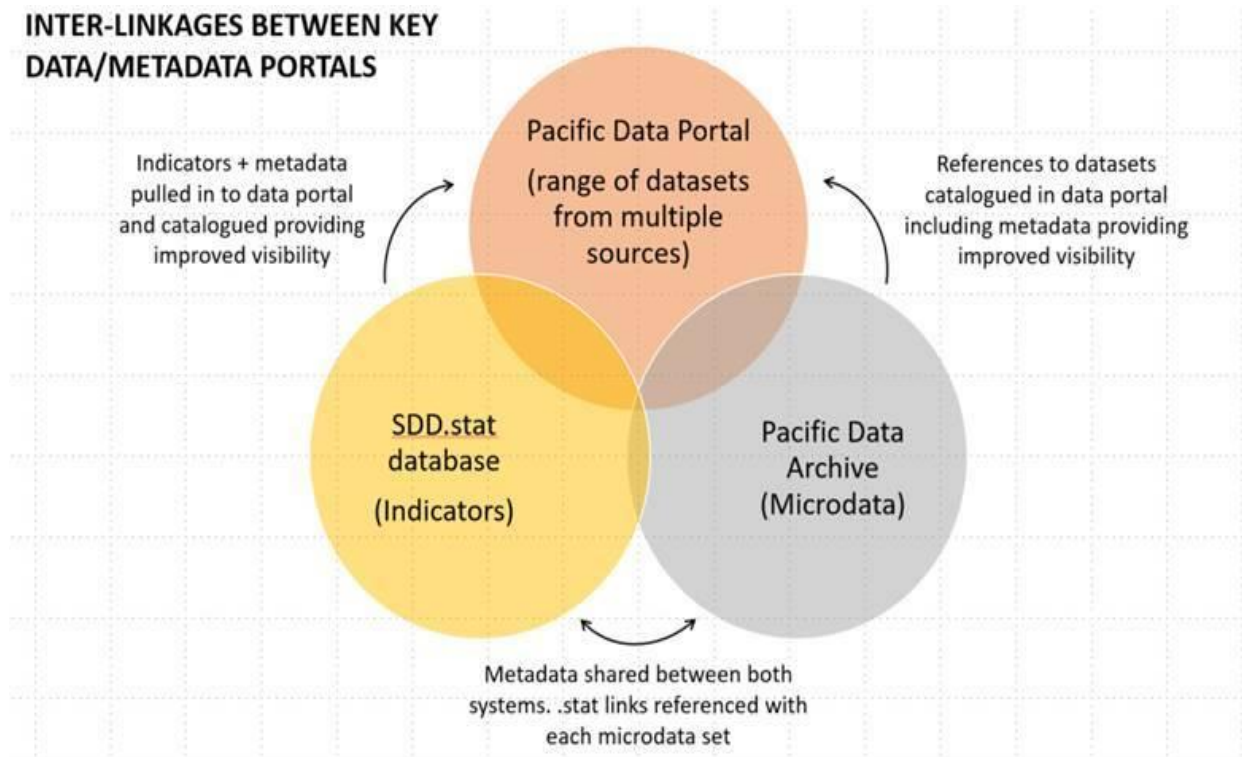
 Metadata

 Harmonize

 Disseminate

# Comparability and interoperability

- Harmonising census and survey microdata
  - Common topics and variables; learning from others; translation tables; guidelines
  - Data Structure Definitions for importing into SDD.stat
- Metadata harvester
  - interacts with the Pacific Microdata Library via an Application Programming Interface (API)
  - Quickly and efficiently request a variety of information on multiple datasets



Deposit



Verify



Anonymize



Metadata



Harmonize



Disseminate

# Data quality

- Identifying optimal approaches to sampling in the context of Small Island Developing States
  - HIES, DHS, MICS, disability, labour, agriculture
- Sampling guidelines

## Sample Design for the Social Development Indicator Survey 2018

Bertrand Buffiere<sup>1</sup> and Hans Pettersson<sup>2</sup>

### 1 Background

Kiribati National Statistics Office (KNSO) conducted the last Household Income and Expenditure Survey (HIES) in 2006 and the first Demographic and Health Survey (DHS) in 2009. The sampling strategy used in those surveys was similar; it consisted in the selection of islands in the first stage (Primary Sampling Unit - PSU), then EAs, and then households (3-stage sample).

KNSO is now planning a household survey with the purpose of gathering information on social development. The survey has been named Social Development Survey (SDIS). It will use the MICS survey infrastructure (MICS= Multiple Indicator Cluster Survey) a standard survey developed by UNICEF. The SDIS is a MICS survey with additional modules that come from the previous 2009 DHS, the additional modules being violence against women and HIV. The survey will include a water quality test. Preparations for the survey are well underway, the field work will start beginning of November.

### 2 Constraints on the sample design

Several constraints on the design had to be taken into consideration during the sample design work:

# Monitoring microdata use

- Citations database with 1,000+ citations
  - Import tool that pulls citations data from csv into the Pacific Microdata Library
- Database of registered users, access requests and microdata dissemination

## Citations

Sort results by: [Author\(s\)](#) [Date](#) [Title](#)

Showing 1-30 of 1065

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | > | » |
|---|---|---|---|

### REPORT

Chattier, Priya. [Measuring Poverty As If Gender Matters: Perspectives from Fieldwork in Fiji](#). 2014.

### JOURNAL ARTICLE

Fielder, John L, Keith Lividini, Odilia I Bermudez, and Marc-Francois Smitz. "[Household Consumption and Expenditures Surveys \(HCES\): A Primer for Food and Nutrition Analysts in Low - and Middle - Income Countries](#)." Food and Nutrition Bulletin 33, no. 3 (2012).

### JOURNAL ARTICLE

Ancker, D. "[Constitutional amendment in Palau: Democracy and federalism at collision course](#)." International Journal of Politics and Good Governance 6, no. 6.2 (2015).

### JOURNAL ARTICLE

Gemert, Stooove, Kwarteng, Bulu, Bergeri, Wanyeki, Badman, Malverus, Vella, Tarivonda, and others. "[Chlamydia prevalence and associated behaviours among female sex workers in Vanuatu: results from an Integrated Bio-behavioural Survey, 2011](#)." AIDS and Behavior 18, no. 10 (2014): 2040-2049.

# Challenges and opportunities

## Challenges

- No regionally standardised agriculture survey instrument
- Microdata dissemination is new and data owners are cautious
- Out-of-data statistical legislation
- Trade-off between anonymization and user requirements

## Opportunities

- Established processes, policies and protocols
- Broaden scope beyond core national statistical collections
- Linkages to other data dissemination systems (e.g., FAOSTAT)

# Proposed recommendations

- Develop a standardised and Pacific-relevant agricultural census methodology for the Pacific region.
- Strengthen SPC's and Pacific NSOs/MOAs/MOFs capacity in agricultural census/survey methodologies and microdata documentation and dissemination.
- Scope of microdata documentation and dissemination should be broader than core census/survey and should extend to market surveys, project-specific data collections and geospatial data.
- FAO and SPC to collaborate to identify where the sharing of aggregate statistics can be automated (e.g., via .stat).



**Thank you!**

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