Pacific iCLIM Climate Change Data and Information Stocktake - Fiji, Tonga and Vanuatu, June to August, 2015: Final Report

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Acronyms

BOM	Australian Bureau of Meteorology
CCCPIR	Coping with Climate Change in the Pacific Islands Region
CCD	Climate Change Division
CLiDE	Climate Data for the Environment
EIA	Environmental Impact Assessment
FLIS	Fisheries Information System
FNU	Fiji National University
GEBCO	General Bathymetric Chart of Oceans
GEF	Global Environment Facility
GGGI	Global Green Growth Institute
GIS	Geospatial Information System
GPFD	Government Partnerships for Development
GU	Griffith University
HCFCs	Hydrochlorofluorocarbons
HIS	Health Information System
IFMIS	Inshore Fisheries Management Information System
LiDAR	Light Detection and Ranging
MEA	Multilateral Environmental Agreement
MEIDECC	Tonga Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change & Communications
MESCAL	Mangrove Ecosystem Conservation and Livelihood
MSD	Management Services Division, Fiji Ministry of Fisheries and Forests
NDMO	National Disaster Management Office
NGO	Non-Government Organisation
NIWA	National Institute of Water and Atmospheric Research, New Zealand
ODS	Ozone Depleting Substance
OGCIO	Office of the Government Chief Information Officer
PACGEN	Pacific Genetic Resources Database
PACGEO	Open Access Geospatial Data Repository for the Pacific Region
PCRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
PMU	Project Management Unit, Vanuatu National Advisory Board on on Climate Change and Disaster Risk Reduction
SLM	Sustainable Land Management
SOPAC	SPC GeoScience Division
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
TUF-ART	Artisanal Tuna Fisheries Database System
TUFMAN	Tuna Fisheries Database Management System
UNEP	United National Environment Programme
VANRIS	Vanuatu Resource Information System
VEMIS	Vanuatu Education Management Information System
VMGD	Vanuatu Meteorology and Geohazards Division
VNSO	Vanuatu National Statistics Office
WAF	Water Authority of Fiji
WHO-WPRO	World Health Organization Western Pacific Region
USP IAS	University of the South Pacific, Institute of Applied Science
USP PACE-SD	University of the South Pacific, Pacific Centre for Environment and Sustainable Development

Contents

Introduction

Griffith University under the Government Partnerships for Development (GPFD) program (an Australian Government Department of Foreign Affairs and Trade initiative) is providing support to the Secretariat of the Pacific Regional Environment Programme (SPREP) in implementing a regional approach to climate change data and information management throughout the Pacific. The project is also working directly with the Governments of Fiji, Tonga and Vanuatu to improve their management of, and access to, climate change-related data and information.

Ensuring that the climate change data and information developed throughout the Pacific Region is effectively managed, discoverable, accessible and reusable will support both regional bodies and national governments to undertake more effective climate change adaptation and resilience planning.

The Pacific iCLIM project commenced in March 2014 and will be delivered over the next two and a half years. (Source: Griffith University Pacific iCLIM website)

Background

National policies and strategies in Fiji, Tonga and Vanuatu outline the need to increase access to government information for the public in all areas of life, including climate change and disaster risk management information (for further discussion of relevant policies see Brown et al. 2015, *Barriers to effective adaptation and resilience planning in the Pacific: an information management perspective).*

Increased access to information and data can lead to many benefits for governments, including:

- Information of national importance is readily available and not unduly restricted
- National decisions and policy can be made based on the best evidence
- Duplication of effort can be avoided and time and money saved
- Gaps in information can be easily identified
- Information can be preserved and protected as an archive
- Increased opportunities for people to use information in new and innovative ways.

Each of the three government departments participating in the Pacific iCLIM project currently manages a web portal for the provision of climate change-related data and information (Fiji: www.climatechange.gov.fj; Tonga: ecc.gov.to; Vanuatu: www.nab.vu). These portals were established between 2012 and 2014 with support from the GIZ Coping with Climate Change in the Pacific Islands Region Program (CCCPIR). Portal information officers report they have experienced difficulties in convincing information custodians to share their content via the climate change portals.

As part of the Pacific iCLIM Project, data sharing workshops were held in 2014/2015 in Fiji, Tonga and Vanuatu to discuss the need for the open sharing of data and information related to climate change adaptation and mitigation activities in the Pacific Region. During these workshops one of the issues strongly identified was that many people working in the area of climate change (e.g.

government officers, consultants, and NGO officers) find it difficult to discover and access baseline information and data. It was noted that current data sharing arrangements tend to be informal, ad hoc and rely on personal contacts in departments, which tend to change rapidly and therefore deteriorate easily.

It was therefore decided that Pacific iCLIM project officers would visit each of the three countries and work with local government officers to undertake data and information stocktakes.

The stocktakes were carried out in Vanuatu (June 2015), Fiji (July 2015) and Tonga (August 2015).

Stocktake Purpose

The purpose of the climate change data/information stocktake in the three pilot countries was to:

- Discover what data and information assets (related to climate change planning and decision making) are being created and held within departments or organisations
- Explore how those data and information assets are currently stored and shared
- Identify the custodian or contact point for these information assets
- Identify any risks e.g. sensitivities, confidentiality, misuse around these assets
- Learn about departmental attitudes towards data and information sharing
- Identify any opportunities for increased exposure or sharing of information
- Compile an inventory of this information and share as appropriate
- Improve accessibility to this information where possible (through the national climate change portals)
- Assist UNFCCC Third National Communication (TNC) project officers with the collection of reportable data
- Build on the stocktake work done at the inception of the CCCPIR Project to document land-based resource sector data and database systems in Fiji, Tonga and Vanuatu (GOPA 2011).
- Build and strengthen positive relationships between climate change departments and other government departments and agencies on which they depend for information
- Increase awareness and promote the concepts of information sharing and open data.

It was envisaged the inventory could be formatted in a number of different ways:

➢ an online data custodian "map" or other searchable set of web pages:

  o "A map which contains information on which line ministries, government departments and other relevant organisations are keepers of different types of climate-change related data, including the main points of contacts and their details", was noted in the Fiji Climate Change Portal User Needs Assessment as an important first step in the content sharing, accessibility and discoverability issues that are currently being faced. (The Greenhouse studio 2015).

➢ a data registry for the national climate change portals – similar to a directory this is a database or table listing organisations and agencies and summarising the climate change data/information that they currently manage and the contact person to contact in order to access this information.

Stocktake scope

A wide range of information and data is potentially relevant to climate change planning and decision making. It was decided that the stocktake would focus on information and data covering any of the following areas:

- Meteorological and weather information
- Agriculture, forestry and fisheries
- Materials and waste
- Natural resources and the environment (land and water)
- Human Settlements, e.g. Land tenure and use
- Industry, e.g. Tourism, Transport, Waste management
- Energy
- Infrastructure
- Water treatment, storage and supply
- Education, Employment and Training
- Health and Social Development
- Disaster Risk Management
- Economic Development
- Governance and Policy

Methodology

Interviews were arranged amongst the various stakeholders listed below in the three countries. Stakeholders were chosen based on their role as likely or known producers of information relevant to climate change activities within each country. Choice of stakeholders was based on recommendations from the project's local partners based in the relevant climate change government office.

A list of interviewees for each country is included in Annex I of this report.

A template to guide the interview questions and an excel spreadsheet to record the information was developed. The template is available as Annex II of this report.

Fiji Stakeholders

Ministry or Department
1. Fiji Climate Change Division Ministry of Foreign Affairs and International Cooperation
2. Department of Housing and Urban Development Ministry Of Local Government, Housing, Environment, Infrastructure & Transport
3. Department of Education Ministry of Education, Heritage & Arts & National Archives Of Fiji
4. Department of Energy
5. Department of Environment Ministry Of Local Government, Housing Environment, Infrastructure & Transport
6. Ministry of Fisheries and Forestry
7. Ministry of iTaukei Affairs
8. Ministry of Health & Medical Services
9. Fiji Meteorological Services
10. Land Resource Planning & Development Ministry of Agriculture, Resource Planning and Development
11. Fiji Geospatial Information System Ministry of Lands and Mineral Resources
12. National Disaster Management Office
13. Department of Strategic Planning, Ministry of Finance
14. Pacific Risk Resilience Programme United Nations Development Programme
15. Pace-SD University of the South Pacific
16. Secretariat of the Pacific Community Land Resources Division
17. Water Authority of Fiji

Tonga Stakeholders

Ministry or Department
1. Climate Change Division, MEIDECC
2. Curriculum Development Unit, Ministry of Education
3. Department of Energy
4. Department of Environment
5. GIS Unit, Department of Lands
6. Ministry of Infrastructure
7. Tonga Energy Roadmap

Ministry or Department
1. Vanuatu Meteorology and Geohazards Division
2. Department of Agriculture
3. Department of Energy
4. Department of Environment
5. Department of Fisheries
6. Department of Water
7. GIZ
8. Live and Learn
9. National Statistics Office

Interviewees were visited by Pacific iCLIM project officers (Rebecca Brown from Griffith University and Makelesi Gonelevu from SPREP) along with one or two representatives from the local climate change department or division.

Draft data registries were sent to interviewees for validation (and any additions or corrections as required) before final publication.

Challenges and lessons learned

Key challenges faced during the stocktake visits were:

➢ Difficulties in meeting with some departments or agencies. Appointments were often cancelled at the last minute and could not always be rescheduled within the timeframe of the in-country visits.

➢ Getting access to departmental staff with both a comprehensive knowledge of information sources and systems within their Ministry/Department and with the authority to share that information. This led to fragmented or incomplete information being provided about the data holdings in each Ministry/Department.

➢ The level of detail in our interview template. It proved unrealistic to gather such detailed information about each resource within the allotted time for the interviews, and often the interviewee wasn't able to provide the level of detail asked for.

➢ Concerns amongst information custodians about sharing their data with other departments or the public. Common issues mentioned were:

  o Age and accuracy of data (data is out of date or accuracy can't be verified)

  o Possible loss of income (data is currently sold by department so unwilling to share for free)

  o Loss of control of data (concerns about what would be done with the data once it is available to others, and whether department could be held responsible)

     o Loss of ownership of data (concerns about storing information created by one department on the website of another department; not being correctly attributed as information creators)

Key lessons learned and recommendations:

➢ Do as much background research as possible before visiting agencies. For example, do they already have a website? Do they sell information to the public? Do they provide data or information to regional or international bodies? Are they currently involved in any relevant projects which use or generate data or information? Is there any national level policy in place regarding the sharing of information?

➢ Set up appointments with staff who have the necessary knowledge about information sources and systems, and authority to share it. This may involve meeting with more than one person, e.g. an information officer and a director.

➢ Explain the purpose of your visit explicitly when setting up the meetings. Outline the types of questions you will be asking. This will help the interviewee prepare for the meeting.

➢ Emphasise that you want to make a record of the information they hold, not to collect the actual resources.

➢ Emphasise the benefits of information sharing to the organisation and try to frame your stocktake as something that can help them, e.g. by giving them an opportunity to showcase their information, or by saving them time in not having to continually deal with requests for information.

➢ Be realistic about how much information you can collect about each resource during a single interview. If further detail is needed, follow up by email or phone at a later date. During the interview focus on key points:

     o Identification or name of the dataset or collection
     o A description of the data – how is it collected and what is it for?
     o Current data location
     o Who is the custodian or asset manager
     o How do people get access to the data? What is the process to be followed? Are there issues about sharing the data?
     o Would there need to be a data sharing agreement in place before it could be shared?

➢ Ideally interviews should be conducted by a pair of interviewers: one to ask questions and one to record answers. We considered recording interviews but decided that bringing out a voice recorder added too much complexity to the interview and would inhibit the interviewee's responses.
➢ Interviews worked best when the local climate change department representative took ownership of the process, and arranged and led the meetings.

Findings

Findings for each country are presented in graphical form ("custodian map") and in table form ("data registry") below. Findings are presented as a snapshot of what was recorded during interviews and should be considered as a "work in progress". It is hoped that the data registries will be stored on the country climate change portals and updated as more information is provided by stakeholders or discovered by knowledge managers.

In some cases, extra information has been added to the findings over and above what was recorded in interviews. This is either because:

➢ A third-party resource was mentioned by an interviewee as being important or useful (e.g. a resource produced or collected and provided by a regional or international organisation)

➢ An interview with a key department or agency did not go ahead, but follow up research revealed data or information held by that department and publicly available.

Fiji Climate Change Data/Information Custodian Map

Fiji Climate Change Data/Information Registry

Ministry/ Department/ Organisation	Agency visited Y/N	Title of Resource	Brief Description	Owner or Publisher	Resource type	Format	Location of Resource	Contact person	Can public currently access information ? How?
Department of Energy	y	Energy Database (to be developed)	Energy database which is to have GIS maps, projects, capacity and contributions.	Department of Energy	Dataset, data collection	To be deter-mined.	With department	Director of Energy, Email: eneryinformation@fdoe.gov.fj.	Yes, upon request
Department of Energy	y	Department website	Information on the Department of Energy including projects and publications.	Department of Energy	Document, report	.pdf	http://www.fdoe.gov.fj/	Director of Energy, Email: eneryinformation@fdoe.gov.fj.	Yes, via website
Department of Environment	y	National environmental projects database (to be developed)	Intended to address project coordination at a national level due to duplication of project implementation.	Department of Environment	Dataset, Data Collection; Maps	To be deter-mined.	To be determined.	Director of Environment; or Rahaul Chand, Senior Environment Officer, Department of Environment, Suva, rahul.chand@govnet.gov.fj	To be determined.
Department of Environment	y	Ozone Depleting Substances Portal	For methylbromide, HCSGs, CFCs though limited data collected in 2014 for HCFCs.	ODS Secretariat	Dataset, Data Collection; Maps	Database	http://ozone.unep.org/en/	http://ozone.unep.org/en/contact-secretariat; or Rahaul Chand, Senior Environment Officer, Department of Environment, Suva, rahul.chand@govnet.gov.fj	Fill in online contact form.
Department of Environment	y	State Of Environment report 2014 (not yet published)	Report (last updated in 2014) contains information on 7 thematic areas.	Department of Environment	Document, report	.pdf	With Department	Director of Environment; or Rahaul Chand, Senior Environment Officer, Department of Environment, Suva, rahul.chand@govnet.gov.fj	Requests for information can come via memo.

Department	y/n	Source	Description	Custodian	Data Type	Format	Web Link	Contact	Access
Department of Environment	y	InforMEA	Contains a list of all MEAs to date and progress of activities under the Stockholm convention.	United Nations Environment Programme	Document	.pdf	http://www.informea.org/countries/fj	http://www.informea.org/contact	Yes, via website
National Trust of Fiji	n	Website (currently offline)	Information on biodiversity hotspots, vulnerable areas, protected areas.	National Trust of Fiji	maps	GIS format	http://www.nationaltrust.org.fj/index.html (site is currently offline)	info@nationaltrust.org.fj	Requests for information can come via memo.
Department of Environment	y	GEF website	Contains a list of all GEF projects implemented in Fiji under the Fiji Country Profile.	Global Environment Facility	Dataset, Data Collection;	.html	https://www.thegef.org/gef/gef_projects_funding	GEF Fiji Focal Point: Mr. Samuela Namosimalua, Permanent Secretary, Ministry of Local Government, Urban Development, Housing and Environment, Suva, Fiji, Email: snamosimalua@govnet.gov.fj	Yes, via website
Department of Environment	y	Biodiversity Clearing House Mechanism Fiji: Flora, Fauna and Protected Areas Database (database not operational on website)	Flora and fauna data and natural resources inventory. Lists all strategies and projects etc.	Biodiversity Clearing House Mechanism, Fiji	Dataset, Data Collection; Document, report	.pdf; data	https://chmfiji.wordpress.com/ (N.B. database not operational)	https://chmfiji.wordpress.com/contact/	Yes, upon request
Department of Housing and Urban Development	y	Socio-economic and physical surveys on settlement conditions	Survey of informal settlements for water, electricity etc	Department of Housing and Urban Development	Dataset, Data Collection	.xls	With Department	Permanent Secretary/ Anuragh Narayan	yes, upon formal request
Department of iTaukei Affairs	y	Vulnerability and Assessments	2 reports available for Kadavu and Narikoso	Department of iTaukei Affairs	Document, report	.pdf	With Department	Director, Department of iTaukei Affairs	yes, upon formal request

Fiji Bureau of Statistics	n	Fiji Bureau of Statistics website	Census of Population & Housing (latest 2007); Population GIS Maps (latest 2007); various Social Statistics including Health (latest 2013), Education (latest 2009), Employment (latest 2011), Household Income & Expenditure (latest 2009); Current and past Economic statistics.	Fiji Bureau of Statistics, Fiji Ministry of Health, Fiji Ministry of Education	reports, maps, tables	various	www.statsfiji.gov.fj	info@statsfiji.gov.fj	Summary statistics and tables are presented via website. Complete and more detailed reports based on the results of surveys can be obtained from the Bureau. Queries about health statistics should be emailed to info@health.gov.fj
Fiji Meteorological Services	y	CLIDE	Stores climatological data	Fiji Meteorological services	Dataset, Data Collection	Data	With Department	Director Fiji Meteorological Office PMB NAP 0351 Nadi Airport Email: climate@met.gov.fj	yes, upon formal request
Fiji Meteorological Services	y	TIDATA	Stores meteorological and hydrological data	Fiji Meteorological services	Dataset, Data Collection	Data	With Department	Director Fiji Meteorological Office PMB NAP 0351 Nadi Airport Email: climate@met.gov.fj	yes, upon formal request
Fiji Meteorological Services	y	CLICOM	Stores climatological data	Fiji Meteorological services	Dataset, Data Collection	Data	With Department	Director Fiji Meteorological Office PMB NAP 0351 Nadi Airport Email: climate@met.gov.fj	yes, upon formal request
Ministry of Agriculture	y	Land GIS Mapping	Soils data and taxonomy classification from 1990s. More recent maps can be found at SOPAC with Wulf Forester and Vilisi Tokalauvere	Land Use Section, Ministry of Agriculture	Dataset, data collection, maps	GIS format	Ministry server	Director, Land Use Planning	yes, upon request

Ministry of Agriculture	y	Agricultural statistical data	Data on agricultural statistics and crop production including: Market surveys 2015, Agricultural Commodity Prices (Market Watch) 2010-2015, Agricultural Census 2009, Crop Production 2009, Agricultural Imports 2008, Agricultural Import Commodities Trend 2008-2011, Agricultural Exports 2008	Economic Planning and Statistics Division, Ministry of Agriculture	Dataset, data collection, Document, report	.pdf	http://www.agriculture.gov.fj/index.php/market-info/agriculture-statistics	Economic Planning and Statistics Division, Ministry of Agriculture http://www.agriculture.gov.fj/index.php/divisions/economic-planning-statistics	Some data and statistics available via website: http://www.agriculture.gov.fj/index.php/market-info/agriculture-statistics. Otherwise, upon formal request.
Ministry of Education	y	Syllabus materials	Information on CC/DRR in line with syllabi	Ministry of Education	Educational Materials	.pdf	With Ministry	Metiusela Gauna, Statistics Division	Yes, upon request
Ministry of Finance Strategic Planning Office	n	Ministry of Finance website	Policy and guidelines, national development plans, capital project information	Ministry of Finance	Documents	.pdf	http://www.finance.gov.fj/	http://www.finance.gov.fj/about-us/networking.html	Yes, via website
Ministry of Fisheries and Forests, Management Services Division	y	Forestry data and cover maps	Forest cover maps to include mangroves, native species etc	Ministry of Fisheries and Forests, Management Services Division	Dataset, Data Collection, Maps	GIS format	With Division	Noa Vakacegu, Acting PMO	yes, upon formal request
Ministry of Fisheries and Forests	y	Forestry data	Timber production, export/import data on timber utilisation, planting data is with extension. Timber production is with headquarters.	Ministry of Fisheries and Forests	Dataset, Data Collection	Data	with Ministry	Viliame Rokovu, Ministry of Fisheries and Forests (MFF) PO Box 2218, Government Building, Suva, Fiji Islands; Takayawa Building, 360 Toorak Road, Suva Tel: (679)3301611	yes, via formal request
Ministry of Fisheries and Forests: REDD+	y	Carbon stock calculations	FCPF (Forest Carbon Partnership Facility) funding the databases	FCPF	Dataset	Data	With Division	Eliki Senivasa, Deputy Conservator of Forests - Services. Email eliki.senivasa@gmail.com.	yes, via formal request

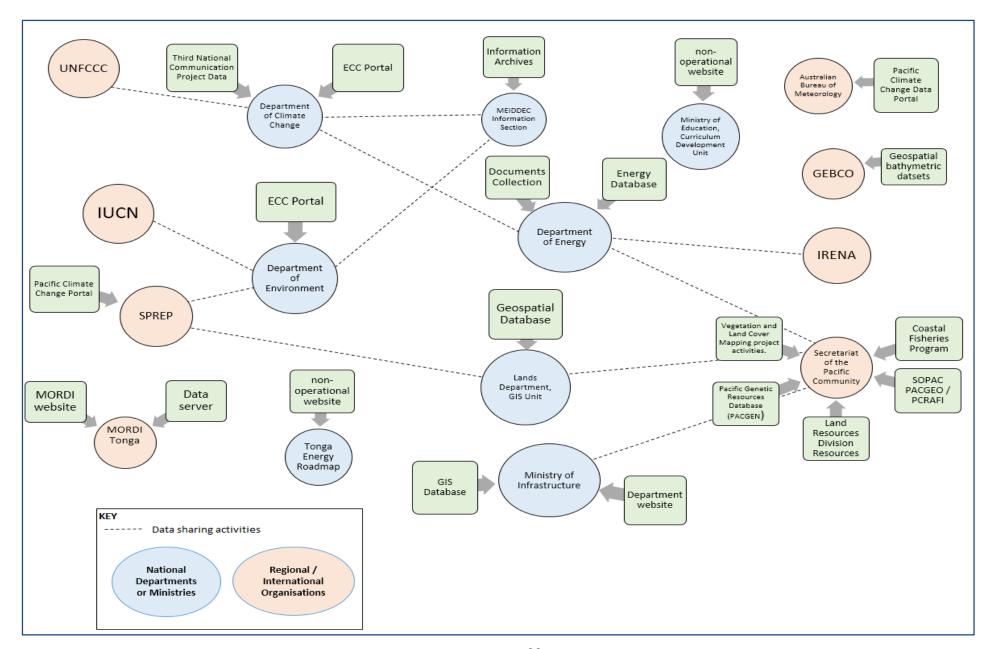|									
Ministry of Fisheries and Forests, Fiji REDD+	y	Fiji REDD+ website	Holds information on projects and publications.	Ministry of Fisheries and Forests; GIZ	Document, report; Project outputs	.pdf	http://fiji-reddplus.org/	Marama Tuivuna, Vilisi Naivalulevu and Anjeshni Narayan Postal Address: Ministry of Fisheries and Forests (MFF) PO Box 2218 Government Building Suva, Fiji Islands, Takayawa Building 360 Toorak Road, Suva Tel: (679)3301611	Yes, via formal request
Ministry of Fisheries and Forests: REDD+	y	Navosa grassland survey 2014 (report to be finalised)	The survey aimed to: 1) assess the biological diversity of the area surrounding the village; 2) map out current land use practices and 3) take biomass measurements of grassland.	USP IAS, MSD and SOPAC	Dataset, Data Collection, Maps	GIS format	With Ministry	Anjeshni Narayan; Mr Eliki Senivasa, Deputy Conservator of Forests - Services. Email eliki.senivasa@gmail.com	Yes, upon formal request
Ministry of Fisheries and Forests: Fiji REDD+	y	Mataqali Emalu REDD+ Pilot Site Surveys 2012-2013: Socio-economic survey, Biodiversity survey, Cultural mapping, Forest Inventory, carbon measurements, Land Use Survey.	Range of surveys carried out as part of the ecological and social documentation of the area and to assess the current forest carbon stocking of Emalu forest.	Ministry of Fisheries and Forests; GIZ; USP IAS	Document	.pdf	Summary of surveys is at http://fiji-reddplus.org/sites/default/files/MatEmalu_SumInfo.pdf. Detailed results are with Ministry	Vilisi Naivalulevu, Anjeshni Narayan; Mr Eliki Senivasa, Deputy Conservator of Forests - Services. Email eliki.senivasa@gmail.com	yes, via formal request

Ministry of Fisheries and Forests: Fiji REDD+	y	Vunivia REDD+ Pilot Site Surveys 2013: Socio-economic & Land Use Survey.	Socio-economic surveys of the Mataqali communities and households and land use mapping of the pilot site and nearby areas. Survey team included the Department of Agriculture Land Use officers from the Central and Northern Division, Emalu landowner youths, Ministry of iTaukei Affairs-Cultural Mapping Unit, Fiji Forestry Department and SPC/GIZ CCCPIR.	Ministry of Fisheries and Forests; GIZ	Document, report	.pdf	With Ministry	Anjeshni Narayan; Mr Eliki Senivasa, Deputy Conservator of Forests - Services. Email eliki.senivasa@gmail.com	yes, via formal request
Ministry of Health	y	Public Health Database	Contains clinical data on vector borne diseases	Ministry of Health	Dataset, data collection, Document, report	?	with Ministry	Mere Y Delai National Health Research Officer, Health Information Research Analysis Division, Ministry of Health, Fiji Phone: (00 679) 32157-70 Fax: (00 679) 3318227 Mailing Address: Ministry of Health, Level 2, Dinem House, 88Amy Street, Toorak, Suva, Fiji	yes, upon formal request
Ministry of Health	y	Environmental Health Database (currently in development)	Will contain 80-90% community profiles.	Ministry of Health	Dataset, data collection, Document, report	?	with Ministry	Mere Y Delai National Health Research Officer, Health Information Research Analysis Division, Ministry of Health, Fiji Phone: (00 679) 32157-70 Fax: (00 679) 3318227	yes, upon formal request

Ministry of Health	y	Fiji Health Research Portal	A platform for an integrated online research management system for all health research in Fiji. Lists current and completed research projects, plus reports and publications from completed projects.	Ministry of Health, WHO-WPRO, FNU	Dataset, Data Collection, Project outputs	.html	http://health.gov.fj/fijihrp/	Mere Y Delai National Health Research Officer, Health Information Research Analysis Division, Ministry of Health, Fiji Phone: (00 679) 32157-70 Fax: (00 679) 3318227	yes, via website. Open access to Research Register; must apply for username and password for some parts of site
Ministry of Health	y	Fiji National Data Repository (currently only holds 1 dataset)	A portal for public health practitioners, government planners, analysts and researchers to access relevant microdata collected under various data collection initiatives.	Ministry of Health	Varies	dataset, data collection	http://www.health.gov.fj/fijindr/index.php/home	Mere Y Delai National Health Research Officer, Health Information Research Analysis Division, Ministry of Health, Fiji Phone: (00 679) 32157-70 Fax: (00 679) 3318227	yes, via website
Ministry of Lands and Mineral Resources	y	Fiji Geospatial Information System	Holds topographical, coastline, aerial baseline and contour data available in electronic format. Recent maps are still being acquired.	Ministry of Lands & Mineral Resources	Dataset, Data Collection, Maps	GIS format	With Ministry	Director of Lands, Director Geospatial Information Management	yes, upon formal request through MOU
Ministry of Lands and Mineral Resources	y	Fiji Hub (in development)	Hub for geospatial information with access granted to various departments and ministries to upload their geospatial information. The ministry currently uses ARCGIS.	Various Ministries	Dataset, Data Collection, Maps	GIS format	To be determined	Director of Lands, Director Geospatial Information Management	To be determined
National Disaster Management Office	y	NDMO Website	Contains disaster related and awareness information.	National Disaster Management Office	Document, report	word, pdf, shps, jpeg	http://www.ndmo.gov.fj/	Akapusi Tuifagalele - Director National Disaster Management Office	Yes, via website or enquire on neocfiji@gmail.com

Water Authority of Fiji	y	Raw Data	Data available are on treated water and reservoirs, waste water treatment plant, environmental: bays and rivers.	Water Authority of Fiji	Dataset, Data Collection	Data	with Water Authority	Kiriti Chandra Manohan Building, Wainivula Road, Nasinu G P O Box 1272 Phone: [679]334-6777 or 5777 (Vodafone, Digicel & Inkk users) E-mail: contact@waf.com.fj	yes, upon formal request
Australian Bureau of Meteorology	n	Pacific Climate Change Data Portal	Provides historical climate information and trends from individual observation sites across the Pacific region and East Timor.	BOM	varies	dataset	http://www.bom.gov.au/climate/pccsp/	For all queries related to the Pacific Climate Change Data portal email pccsp@cawcr.gov.au.	yes, via website
GEBCO (General Bathymetric Chart of the Oceans)	n	Bathymetry geospatial information	Bathymetry DEM for Fiji	GEBCO	Varies	dataset	The General Bathymetric Chart of the Oceans, http://www.gebco.net/	http://www.gebco.net/about_us/contact_us/	yes, via website
Secretariat of the Pacific Community	n	Coastal Fisheries Program	Landsat images, reports, data (total catch statistics). Includes 2015 Annual report to the commission - Part 1: information on fisheries, research, and statistics: Fiji	SPC	maps, reports, data	various	http://www.spc.int/Coastfish/en/countries/fiji-islands.html	http://www.spc.int/coastfish/en/contact-us.html	yes, via website
Secretariat of the Pacific Community, Land Resources Division	y	Pacific Genetic Resources Database (PACGEN)	Pacific Genetic Resources Database contains climate ready collections/climate resilient collection for different crops, value, nutritional information and different gene banks.	SPC/LRD	Dataset, Data Collection	various	http://www.spc.int/lrd/cepactacc/	Anju Mangal (anjum@spc.int), Knowledge Management and Communications Specialist	yes, via website

Secretariat of the Pacific Community, Land Resources Division	y	Land and Vegetation Cover Mapping completed as part of SPC/USAID project " Enhanced climate change resilience of food production systems in Pacific Island countries and territories"	http://www.spc.int/lrd/focus-areas/climate-change/34/building-resilience-to-climate-change-for-food-security-in-the-pacific-region	SPC/LRD; SOPAC	Dataset, Data Collection; Maps	various	With LRD	Dr Wulf Forester; Dean Solofa, LRD Climate Change Officer (deans@spc.int) or Emil Adams, Information and Communications (emila@spc.int).	Yes, upon formal request
Secretariat of the Pacific Community, SOPAC	n	PACGEO	An Open Access Geospatial Data Repository for the Pacific Region providing geophysical, geodetic, and marine spatial data.	SPC Applied GeoScience and Technology Division	varies	digital maps and geo-referenced datasets	http://www.pacgeo.org/		yes, via website
Secretariat of the Pacific Community, SOPAC	n	PCRAFI	Point infrastructure, polygon infrastructure, building footprints, earthquake ground motion	SPC Applied GeoScience and Technology Division	2014	geospatial data	http://pcrafi.sopac.org/		yes, via website
Secretariat of the Pacific Regional Environment Programme	y	Pacific Climate Change Portal	Hub for climate change information in the Pacific region	SPREP and partners	Projects Database;	PDF, CSV, DOC, various	http://projects.pacificclimatechange.net	Makelesi Gonelevu Knowledge Management Officer SPREP Email: makelesig@sprep.org	Yes, via website
Secretariat of the Pacific Regional Environment Programme	y	Pacific Climate Change Portal	Hub for climate change information in the Pacific region	SPREP and partners	Documents Library	PDF	http://www.pacificclimatechange.net	Makelesi Gonelevu Knowledge Management Officer SPREP Email: makelesig@sprep.org	Yes, via website
University of the South Pacific, Pacific Centre for Environment and Sustainable Development (PACD-SD)	n	Research Outputs and Project Details	Journal Articles, Reports, V&A Assessments, Occasional Papers, Theses, Lectures etc	USP PACE-SD	Research outputs	PDF	http://pace.usp.ac.fj/Home.aspx	Ms. Sarika Chand +679 3231835 E: sarika.chand@usp.ac.fj	Yes, via website

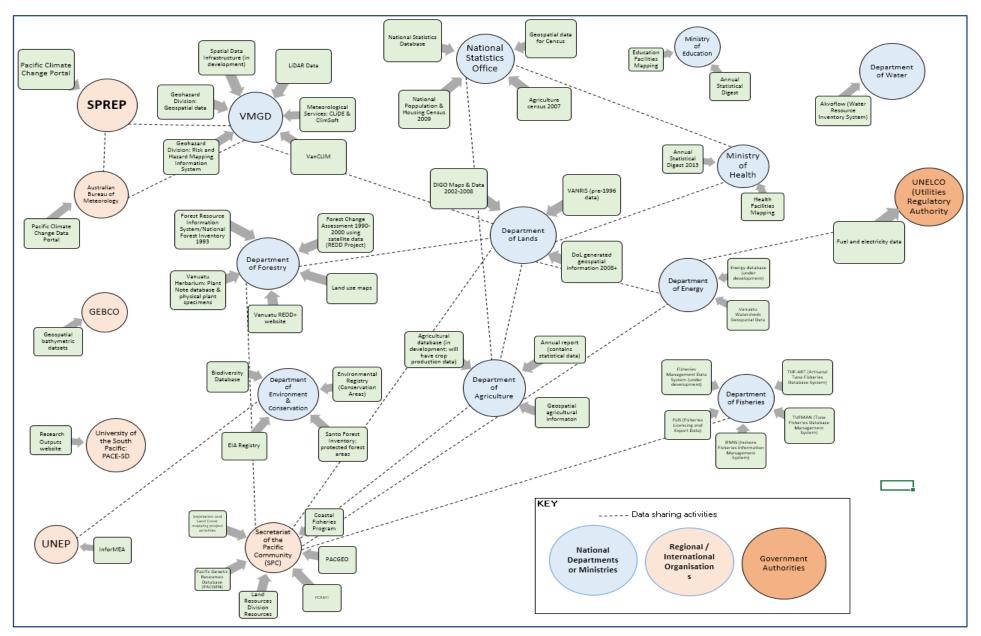# Tonga Climate Change Data/Information Registry & Custodian Map

KEY
- - - - - Data sharing activities

National Departments or Ministries
Regional / International Organisations

Tonga registry

Ministry/ Department/ Organisation	Agency visited Y/N	Title of Resource	Brief Description	Owner or Publisher	Resource type	Format	Location of Resource	Contact person	Can public currently access information? How?
Department of Climate Change: Third National Communication Project	y	Third National Communication	Data for 15 sectors includes agriculture, land use, forestry, waste, energy and GHG inventory, water resources for rural area, coastal area, DRR, meteorology, health, fisheries and biodiversity.	Various	Dataset, Data Collection	.xls	With Climate Change Division	Kaione Loumoli, TNC Officer kaionelou@gmail.com	yes, upon formal request
Department of Climate Change: Third National Communication Project	y	Energy Database	GHG and emissions data	Energy Department	Dataset, Data Collection	.xls	With Department of Energy	Ofa Sefani Assistant Director Energy - ofasefana@yahoo.com	Yes, Through Ministry's website and upon request
Department of Climate Change: Third National Communication Project	y	Fisheries Database	Fisheries data	Fisheries Department	Dataset, Data Collection	.xls	With Department of Fisheries	Dr Vailakau Matoto, vailalam@yahoo.com	please make formal request
Department of Energy	y	Documents Collection	SPC reports, IUCN case studies, PIGGARREP documents.	Department of Energy	Document, report	.pdf	With Department	Ofa Sefani Assistant Director Energy - ofasefana@yahoo.com	Yes, currently upon request. There will be more access via new website currently under development (as at March 2016)

			Has information on EIAs, SLMs, Ozone layer, MESCAL project with SPREP etc.	Department of Environment	Website; Document, report	.pdf; .html	www.ecc.gov.to	Sione Lepa Deputy Director Department of Environment - makitala23@gmail.com or matanga23@gmail.com	yes, upon formal request or via website
Department of Environment	y	ECC Portal							
Lands Department GIS Unit	y	GIS Database	NIMO creating disaster maps. Admiralty chards, aerial photos, vegetation mapping, land cover mapping, forest cover (biofuel project), hazards maps and models reports (2007), coastline and contours layers, baseline maps, bathymetry and contours (2004 Quickbird and LIDAR), cadastral layers, constituency boundaries and power supply information, sea-level layers and model tsunami layers.	GIS Unit, Lands Department	Maps	GIS format	Server and external hard drive	Richard Kaloke, Head of GIS Unit. fangakakau@gmail.com	yes, by purchasing the PDF or hardcopies of the maps
MEIDDEC Information Section	y	Archives	Publications, copies of newspapers and equipment for digitising.	MEIDECC Information Section	Document, report	.pdf	With Information Section	AndrewTuimoana, Director of Information Section, MEIDECC	yes, upon formal request
Ministry of Education, Curriculum Development Unit	y	Ministry of Education website (not operational)	Curriculum materials relating to climate change	Ministry of Education	?	?	?	Dr Tevita Veaila, Curriculum Development Unit - Contact Dr Veaila's CEO Teresa Pahulu - teresapahulu@gmail.com	please make formal request

Ministry of Infrastructure	y	Departmental website	Roadmap for Lands, topographic survey. E-survey equipment that collects data from 1992-2002 and data from AusAid project from 1992-1998 done by technician surveyor.	Ministry of Infrastructure	Dataset, Data Collection; Maps	GIS format	With Ministry	Pesalili Tuiano Acting CEO, Ministry of Infrastructure, pesalilituiano@gmail.com	Yes, upon formal request
Tonga Energy Roadmap	y	Used to be a portal at energy.gov.to but funding has run out	Has information on energy statistics, studies and projects.	Tonga Energy Roadmap	Case studies; Document, report		with Roadmap Unit	Ofa Sefani Assistant Director Energy - ofasefana@yahoo.com	Yes, via DoE /Tonga Energy Road Map facebook page, or by formal request. Website to be launched later.
Australian Bureau of Meteorology	n	Pacific Climate Change Data Portal	Provides historical climate information and trends from individual observation sites across the Pacific region	BOM	dataset		http://www.bom.gov.au/climate/pccsp/		yes, via website
GEBCO (General Bathymetric Chart of the Oceans)	n	Bathymetry geospatial information	range of bathymetric data sets and data products	GEBCO	Bathymetry DEM for Tonga	varies	The General Bathymetric Chart of the Oceans, http://www.gebco.net/		yes, via website
MORDI Tonga (Mainstreaming of Rural Development Innovation Tonga Trust)	n	MORDI Tonga website/server	An up to date database housed contains crop production data and more.	Mainstreaming Rural Development Innovation Tonga Trust	Website; Dataset, Data Collection; Document, report	.pdf; .html; data	www.morditonga.to	http://www.morditonga.to/contact-us/	yes, via website
Secretariat of the Pacific Community	n	Coastal Fisheries Program	Landsat images, reports, data (total catch statistics). Includes 2015 Annual report to the commission - Part 1: information on fisheries, research, and statistics: Tonga	SPC	maps, reports, data	various	http://www.spc.int/coastfish/en/countries/tonga.html	http://www.spc.int/coastfish/en/contact-us.html	yes, via website

Secretariat of the Pacific Community/Land Resources Division	n	Pacific Genetic Resources Database (PACGEN)	Pacific Genetic Resources Database contains climate ready collections/climate resilient collection for different crops, value, nutritional information and different gene banks.	SPC	Dataset, Data Collection	database file	http://www.spc.int/lrd/cepactacc/	Anju Mangal (anjum@spc.int), Knowledge Management and Communications Specialist	yes, via website
Secretariat of the Pacific Community/ Land Resources Division	n	Vegetation and Land Cover Mapping activities through current project: "Enhanced climate change resilience of food production systems in Pacific Island countries and territories"	Radar-based deforestation analysis; forest cover mapping using VHR imagery	SPC	Maps	GIS format	SPC LRD	Dr Wulf Forester; Dean Solofa, LRD Climate Change Officer (deans@spc.int) or Emil Adams, Information and Communications (emila@spc.int).	please request via SPC
SPC SOPAC	n	PACGEO	An Open Access Geospatial Data Repository for the Pacific Region providing geophysical, geodetic, and marine spatial data.	SPC Applied GeoScience and Technology Division	digital maps and geo-referenced datasets		http://www.pacgeo.org/		yes, via website
SPC SOPAC	n	PCRAFI	Point infrastructure, polygon infrastructure, building footprints, earthquake ground motion	SPC Applied GeoScience and Technology Division	geospatial data		http://pcrafi.sopac.org/		yes, via website

Vanuatu Climate Change Data/Information Registry & Custodian Map

KEY

------ Data sharing activities

- National Departments or Ministries
- Regional / International Organisations
- Government Authorities

Vanuatu registry

Ministry/ Department/ Organisation	Agency visited Y/N	Title of Resource	Brief Description	Owner or Publisher	Resource type	Format	Location of Resource	contact person	Can public currently access information? How?
VMGD	y	Spatial Data Infrastructure (Currently under development)	Will collect spatial data from multiple sources and departments and present in single database	VGMD/Lands Department	Dataset, Data Collection	maps	The intention is to host it at the OGCIO data centre	Director VGMD/Director Lands	currently via formal request, eventually online
VMGD	y	LiDAR data	LiDAR topographic contours, LiDAR DEM (Digital Elevation Model), LiDAR orthophoto mosaic, LiDAR high density Point cloud (las) data. Coverage: 80% of coastal Efate (N-S), 45% Malekula east coast, 20% of Santo east and south coast. Both topographic and bathymetric survey with high resolution data.	VMGD	Maps		On VMGD server	Director VGMD	via formal request
VMGD	y	VanCLIM	Climate data, soil data etc	VMGD	Maps etc	Data set, data collection and GIS	with CLIM Systems awaiting funding for licenses	CLIM SYSTEMS	via formal request
VMGD - Geohazard Division	y	Geohazards geospatial data	ash fall zones, ash safety zones, safety zones, exclusion zones		geospatial data			Director VMGC	via formal request
VMGD Geohazard Division	y	Centralised risk and hazard mapping information system	comprises of scientific and technical databases	MDRR	Dataset, Data Collection	Dataset, Data Collection, Document , report , maps	OGCIO	Phillipe Malsale, VMGD	via formal request
VMGD - Climate	y	Rainfall (weather) Stations - whole country			geospatial data			Director VMGD	via formal request
VMGD - Meteorological Services	y	CliDE; ClimSoft	The Climate Division manages data from its 8 operational synoptic sites. It also includes data collected from a number of voluntary sites around the country and data from its recently established 'national rainfall network'.	VMGD	data collection		VMGD	Director VMGD	

Vanuatu National Statistics Office	y	National Statistics Database	Includes National Census (latest 2009); Household Income and Expenditure Report (latest 2010); Demographic & Health Survey (MICS 2013); Education statistical digests (latest 2013); Agricultural Census 2006-2007; provincial level aggregates, maps, household locations, island boundaries, geographical data, etc.	VNSO	Aggregated data and maps	Dataset, Data Collection ; Document , report	VNSO website: http://www.vnso.gov.vu/	stats@vanuatu.gov.vu	VNSO Website - www.vnso.gov.vu; some data must be applied for
Vanuatu National Statistics Office	y	Geospatial Data associated with Census	Village Locations with pop'n data from 1999 census, census enumeration areas, GPS located households with pop'n data from 2009 census, 2010 national population grid.	VNSO				stats@vanuatu.gov.vu	Yes, by contacting the Department
Vanuatu National Statistics Office	y	Agricultural Census 2006-2007	Census of agricultural activity of households in rural and urban areas	VNSO	Report; Data collection	pdf	VNSO website	stats@vanuatu.gov.vu	VNSO Website - www.vnso.gov.vu
Vanuatu National Statistics Office	y	Demographic and Health Survey - MICS 2013	Multi-Indicator Survey of men and women	SPC	Report; data collection	pdf	VNSO website	Statistics and Demography Division, Secretariat of the Pacific Community, BP: D5, 98848, Noumea Cedex, New Caledonia. (Tel: 687-262000; Fax: 687-263818; Email: spc@spc.int;	via website
Department of Agriculture	y	Vanuatu Agricultural Database (Currently in development)	The intention is to have crop production data.	Ministry of Agriculture	Dataset, Data Collection	?	The intention is to host it at the OGCIO data centre.	Director Dept of Agriculture	Eventually online
Department of Agriculture	y	Annual Report	contain the most up to date agricultural data	Ministry of Agriculture	report; dataset		with Dept	Director Dept of Agriculture	make formal request
Department of Agriculture	y	Agricultural geospatial information	Agronomic Potential; Efate Soils; Vanuatu Geology and Pedology	DAL			with Department	Director Dept of Agriculture	make formal request

Department of Energy	y	Energy database (Currently being developed by Global Green Growth Institute (GGGCI)).		Department of Energy/GGGCI	Dataset, Data Collection	?	?		Director of Energy	make formal request
Department of Energy	y	Vanuatu Watersheds: Geospatial Data	National coverage giving flow rates for all rivers based on the 30m DEM, Computed watersheds for the entire country based on the 30m DEM	Department of Energy				with Department	Director of Energy	make formal request
Department of Environment and Conservation	y	Biodiversity Database	Excel database for marine and terrestrial species	Department of Environment, Protection and Conservation	Dataset, Data Collection	xls		Hard disk drive of laptop or PC	Acting Director, Mr Trinison Tari	Yes, by contacting the Department
Department of Environment and Conservation	y	Environmental Registry	Excel database of registered and unregistered conservation areas.	Department of Environment, Protection and Conservation	Dataset, Data Collection	xls, maps		Hard disk drive of laptop or PC	Acting Director, Mr Trinison Tari	Yes, by contacting the Department
Department of Environment and Conservation	y	EIA Registry	Registry of different projects and EIAs?	Department of Environment, Protection and Conservation	Dataset, Data Collection	xls, documents		Hard disk drive of laptop or PC	Acting Director, Mr Trinison Tari	Yes, by contacting the Department
Department of Environment and Conservation	y	Santo Forest Inventory; protected forest areas	Forest inventories carried out in Santo as part of a large Biodiversity Action Plan.	Department of Environment, Protection and Conservation				with Department	Acting Director, Mr Trinison Tari	make formal request
Department of Fisheries	y	Vanuatu Fisheries Management Data System (under development)	Will have 2 components: offshore/pelagic fisheries (already developed) and coastal/inshore fisheries (still to be developed). All paper records have been digitised.	Department of Fisheries				with Department	Tony Taleo, Data Analyst, Fisheries Dept	make formal request

Department of Fisheries	y	IFMIS (Inshore Fisheries Information Management System)	Inshore Fisheries, SPC cloud based;	Department of Fisheries	Dataset, Data Collection; Maps	SQL database, MapInfo	OGCIO	Director, Department of Fisheries	Generally people should go directly to the FAO or SPC websites for fisheries data. If they don't find what they want, contact Director of Fisheries Dept for further assistance.
Department of Fisheries	y	FLIS (Fisheries Licencing and Export Data)	Licensing export data	Department of Fisheries	Dataset, Data Collection; Maps	SQL database, MapInfo	OGCIO	Director, Department of Fisheries	Generally people should go directly to the FAO or SPC websites for fisheries data. If they don't find what they want, contact Director of Fisheries Dept for further assistance.
Department of Fisheries	y	TUFMAN (Tuna Fisheries Database Management System)	A DBMS developed by SPC. TUFMAN supports many types of tuna fisheries data and supports the major gears (longline, purse seine, pole-and-line) as well as artisanal vessels. The types of data supported include: Licensing, Port sampling, Logsheets, Unloadings, Observer trips, Packing lists, Vessel Activity Reports, Vessel Position Reports, VMS	?	Dataset, Data Collection; Maps	SQL database, Microsoft Access, MapInfo	OGCIO	Director, Department of Fisheries	Generally people should go directly to the FAO or SPC websites for fisheries data. If they don't find what they want, contact Director of Fisheries Dept for further assistance.
Department of Fisheries	y	TUF-ART (Artisanal Tuna Fisheries Database System)	Artisanal Tuna fisheries. Devel0ped by SPC.	?	Dataset, Data Collection; Maps	SQL database, MapInfo	OGCIO	Director, Department of Fisheries	Generally people should go directly to the FAO or SPC websites for fisheries data. If they don't find what they want,

Organization	Live and Learn?	System/Dataset	Description	Held/Origin	Type	Format	URL/Report	Held	Custodian	Access
										contact Director of Fisheries Dept for further assistance.
Department of Forestry	**No, information is from Live and Learn**	Forest Resource Information System	FRIS was an output of the National Forest Inventory (1993). It holds outdated inventory data from 1990-1993. The data was also incorporated into VANRIS.	Department of Lands and Forestry	Dataset, Data Collection, maps	?		with Department	Department of Forestry	
Department of Forestry	**No, information is from Live and Learn**	Land use maps	Incorporated into VANRIS: now outdated	Department of Forestry				with Department	Department of Forestry	
Department of Forestry	**No, information is from Live and Learn**	Forest Change Assessment 1990-2000 using satellite data	REDD project: Vanuatu Carbon Credits Project: Vanuatu Forests – Reducing Emissions From Deforestation. Completed by University of Wellington. Report contains maps of land cover change. Not clear who holds original maps and data.	University of Wellington	report with satellite maps	pdf	Report on SPC website: http://www.spc.int/lrd/lrd-publications/doc_download/424-vanuatu-forest-change-assessment-1990-2000-using-satellite-data-external	?		Report can be accessed via SPC website.
Department of Forestry: Vanuatu Herbarium	**No, information is from Live and Learn**	Plant Note System and physical plant collections	Flora of Vanuatu: The herbarium counts more than 13000 specimens. Information gradually being added to Plant Note.	Dept Forestry				with Department	?	make formal request
Department of Lands	n	VANRIS	Includes a wide range of pre 1996 data. Infrastructure, Settlements, Hydrographic (marine) features, Topographical info, Hazards mapping, Mineral exploration, forestry, conservation areas, language areas. Mostly superceded by DIGO and other departmental data	Dept of Lands	Dataset, Data Collection, maps			with Department	Surveyor General, Department of Lands	Yes, through request to Surveyor General

Dept of Lands	n	DIGO Maps and Data	see detailed worksheet in Inventory spreadsheet		Maps	maps	with Dept	Surveyor General, Department of Lands	Yes, through request to Surveyor General
Dept of Lands	n	DoL generated geospatial information	see detailed worksheet in Inventory spreadsheet		maps, layers		with Dept	Surveyor General, Department of Lands	Yes, through request to Surveyor General
Department of Water	y	Akvoflow (Water Resource Inventory System)	Contains records on water supply, water quality, water points, groundwater, surface water. GIS maps of water points (groundwater, surface water)	Department of Water	Maps; data collection	Data set, data collection and GIS	Department of Water	Director of Department of Water	On request to Director of Water Department
Ministry of Health	n	Health Facilities mapping	National Health Facilities, some with GPS coordinates	Ministry of Health			with Ministry		make formal request
Ministry of Education	n	Annual Statistical Digest		Ministry of Health	data collection	pdf	Digest on VNSO website; data with Ministry	vemisdatarequest@vanuatu.gov.vu; Telephone (678) 22309 Facsimile (678) 24569	Via VNSO website
Ministry of Education	n	Education Facilities mapping	National Education Facilities, most with GPS coordinates	Ministry of Education			with Ministry		make formal request
Australian Bureau of Meteorology	n	Pacific Climate Change Data Portal	Provides historical climate information and trends from individual observation sites across the Pacific region and East Timor.	BOM	dataset		http://www.bom.gov.au/climate/pccsp/	For all queries related to the Pacific Climate Change Data portal email pccsp@cawcr.gov.au.	yes, via website
GEBCO (General Bathymetric Chart of the Oceans)	n	Bathymetry geospatial information	Bathymetry 30"arc resolution DEM for all Vanuatu	GEBCO	varies	dataset	The General Bathymetric Chart of the Oceans, http://www.gebco.net/	http://www.gebco.net/about_us/contact_us/	yes, via website
Secretariat of the Pacific Community/Land Resources Division	n	Pacific Genetic Resources Database (PACGEN)	Pacific Genetic Resources Database contains climate ready collections/climate resilient collection for different crops, value, nutritional information and different gene banks.	SPC/LRD	Dataset, Data Collection	database file	http://www.spc.int/lrd/cepactacc/	Anju Mangal (anjum@spc.int), Knowledge Management and Communications Specialist	yes, via website

Secretariat of the Pacific Community/Land Resources Division	n	Vegetation and Land Cover Mapping activities on Santo through current projects: Climate Protection through Forest Conservation in the Pacific Islands" and " Improving Food Security for Building Resilience to a Changing Climate in Pacific Island Communities"	Radar-based deforestation analysis; forest cover mapping using VHR imagery	SPC/LRD	Dataset, Data Collection; Maps	various	with LRD	Dr Wulf Forester; Dean Solofa, LRD Climate Change Officer (deans@spc.int) or Emil Adams, Information and Communications (emila@spc.int).	yes, upon formal request
Secretariat of the Pacific Community	n	Coastal Fisheries Program	Landsat images, reports, data (total catch statistics). Includes 2015 Annual report to the commission - Part 1: information on fisheries, research, and statistics: Vanuatu	SPC	maps, reports, data		http://www.spc.int/coastfish/en/countries/vanuatu.html	http://www.spc.int/coastfish/en/contact-us.html	yes, via website
SPC SOPAC	n	PACGEO	An Open Access Geospatial Data Repository for the Pacific Region providing geophysical, geodetic, and marine spatial data.	SPC Applied GeoScience and Technology Division	digital maps and geo-referenced datasets		http://www.pacgeo.org/		yes, via website
SPC SOPAC	n	PCRAFI	Point infrastructure, polygon infrastructure, building footprints, earthquake ground motion	SPC Applied GeoScience and Technology Division	geospatial data		http://pcrafi.sopac.org/		yes, via website
United Nations Environment Program	n	InforMEA	Contains a list of all Multilateral Environmental Agreements to date and progress of activities under the Stockholm convention	UNEP	Dataset, Data Collection; Document, report; Environmental Impact Statements	various	http://www.informea.org/countries/vu	http://www.informea.org/contact	yes, via website

| University of the South Pacific: Pacific Centre for Environment and Sustainable Development (PACE-SD) | n | Research Outputs website | refereed papers; books/chapters; technical documents; research proposals, concept papers and consultancy reports - many available for download | | report, scientific paper, conference paper, technical report | pdf | http://pace.usp.ac.fj/ResearchOutputs.aspx | Ms. Sarika Chand +679 3231835 E: sarika.chand@usp.ac.fj | Yes, via website |
| UNELCO (Utilities Regulation Authority) | n | | Fuel consumption data; electricity demand, fuel sources | | | | with UNELCO | | |

Annex I: Stakeholders consulted

Fiji Stakeholders consulted

1)	Peter Emberson Director Fiji Climate Change Division Ministry of Foreign Affairs and International Cooperation Suva	2)	Anuragh Narayan, Data Analyst Department of Housing and Urban Development
3)	Ruci Soko, Finau Nabobo, Anisha, Sisilia, Mohammed Kalif, Apenisa Tagivetaua (GIZ), Ravinesh Prasad, Waisea Tabua Department of Education, Waisomo House Suva	4)	Eric Ravai, Deputy Permanent Secretary and Kelera Oli, PCCAPH Project Manager Ministry of Health, Suva
5)	Ravinesh Nand & Mikaele Belena Department of Energy, Fiji Islands.	6)	Vilimaina Civavonovono Land Use Section, Land Resource Planning & Development Ministry of Agriculture, Resource Planning and Development Raiwaqa
7)	Rahaul Chand and Vika Rogers Department of Environment, Suva	8)	Kirti Chandra Water Authority of Fiji Nasinu
9)	Director Akata Takala, Principal Geospatial Officer, Malakai Vakautawale Ministry of Lands and Mineral Resources FIJI GEOSPATIAL INFORMATION SYSTEM SUPPORT(FGISS)	10)	Marama Tuivuna REDD+ and Jerry Naureure Data Officer Ministry of Fisheries and Forests Suva, Fiji
11)	Alifereti Tuifagalele National Disaster Management Office Knolly Street	12)	Semi Rogoyawa Department of iTaukei Affairs
13)	Bipen Prakash Fiji Meteorological services Vatuwaqa	14)	Savita Chandra and Irami Goneva Fiji Government ITC
15)	Jacqui Berrel and Setaita Tavanabola UNDP PRRP United Nations Development Programme (UNDP) Fiji Multi-Country Office Suva, Fiji	16)	Savita Chandra, Jone Tuipelehaki USP Pace-SD and ITC section, University of the South Pacific Laucala Bay Suva
17)	Valerie Tuia, Nic Nonga and Gibson Susumu SPC/Land Resources Division, Nabua		

Tonga Stakeholders consulted

1) Luisa Tuiafitu Malolo Director Climate Change Division MEIDDEC	2) Pesalili Tuiano Acting CEO Ministry of Infrastructure
3) Inoke Vala Director Tonga Energy Roadmap	4) Kaione Loumoli TNC Officer Third National Communication
5) Sione Lepa Deputy Director Department of Environment	6) Roderick Bing Vavatau Technology Tonga
7) Andrew Tuimoana Director of Information Section, MEIDECC	8) Sione Fulivai 9) Department of Climate Change
10) Ofa Sefani Assistant Director Energy	11) Dr Tevita Veaila Curriculum Development Unit
12) Richard Kaloke Head of GIS Unit, Lands	

Vanuatu Stakeholders consulted

1) Brian Phillips Project Management Unit Manager, Vanuatu Meteorology and Geohazards Division	2) Dr. Christopher Barttlet GIZ
3) Benuel Lenge National Statistics Office	4) Niel Kalotukor Database Officer Department of Water
5) Sylvian Todman GeoHazards mapping	6) Trinison Tari Acting Director Department of Environment
7) Jackson Miake, Office of the Government Chief Information Officer (OGCIO)	8) Tim Gunson
9) Alfred Joel Energy Department, Energy efficiency and Conservation	10) Anjali Nelson Live and Learn
11) Mark Vurobaran Department of Agriculture	12) Tony Taleo Data Analyst Fisheries

Annex II: Stocktake template for individual information assets

Section/Question	Available responses
General information	
Date	
Department or Organisation	
Name of Interviewee	
Do you think that your department produces or holds any information relevant to climate change?	Yes/no/not sure
Is there any inventory or record of what information is produced or held by your department?	Yes/no/not sure/details
Does your department/organization have a nominated information/knowledge manager or data custodian?	Yes/no/not sure/details
Copyright and licensing: - Does your department/organisation use any licences or other terms and conditions of use on their information before they release it?	yes/no/not sure/details
Do you have any MOUs or data sharing agreements in place with other departments or organisations?	Yes/no/not sure/details
Information asset description	
Information ID	An ID number assigned by the interviewer e.g. FJCCD001
Title of information asset	
Description of information asset	
Individual item?	(tick)
Collection? e.g. set of related documents, collections of data over time	(tick)
If a Collection - how many individual items in collection?	
Publication Year/ age of material	
Material type	eg datasets, output from technical instruments, images, GIS data, video, powerpoint presentations, maps, inventory or directory, case studies, lessons learned, fact sheets, vulnerability assessments, EIAs, M&E reports, project outputs, educational materials
Format of material	e.g. paper copy, pdf, jpeg, arcgis format, csv, xls
Does the material need proprietary/special software to access or read information?	e.g. Excel, ARCGis software, SPSS

Information storage and custodianship	
Electronic material only - Where is the information stored?	e.g. Hard drive of laptop or PC, external hard drive, local server, ICT server, third party storage (in country or cloud-based), CD/DVD, USB/flash drive, other
Print material only - where stored?	e.g. library, records office, personal office, other (Please specify)
Electronic material - size (MB)	
Information owner	Name of Department or Office
Information holder/custodian	Name of Department or Office
Is there a nominated contact person?	yes/no/not sure/details
Is there any planned retention period?	yes/no/not sure/details
Information sharing and accessibility	
Current accessibility: who has access to the information at the moment?	e.g. shared with public, other govt depts, regional organisations, NGOs, commercial organisations, within Dept only
Are there any data sharing agreements or MOUs in place to formalise sharing arrangements?	yes/no/not sure/details
If you currently share this information, is it sold or shared free of charge?	sold/free/details
How do you currently provide the information to user groups?	e.g. information already on a website, via email, photocopies provided, put files on CD or USB stick
Do you have any concerns about sharing the information?	e.g. commercial value, Intellectual Property Rights, danger of misinterpretation, time/effort required to prepare, data not fully documented, data in a format that is no longer widely readable, ethical sensitivities (e.g. Traditional Knowledge, confidentiality restrictions), national security sensitivities
Access controls - Is there a need to restrict or control access to the data to or from particular parties?	yes/no/details e.g. licensing restrictions already in place that prohibit sharing, not for commercial use
Embargo period - Is there an embargo period before releasing the information publicly, and if so how long an embargo would be needed. What is the nature of and reason for the embargo?	yes/no/details
Copyright and licensing: - Is there any licence or other terms and conditions of use applied to this information?	yes/no/details
If this information is not currently shared, would you be willing or motivated to have it listed on the climate change Portal?	What are the interviewee's feelings/reservations/willingness towards sharing the information via the Portal?
Level of sharing - If you are willing to have this information asset listed in the CC Portal, what level of sharing would you be happy with?	1. The information is not online, but the Portal can tell people the information exists and who to contact to get access to it. 2. The information is not online but the Portal can hold a copy of the information in full. 3. The information is already online elsewhere and the Portal can point to it.

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