

Data Portal

Overview of new materials

User guide, Tips & Tricks, Best practices, Videos,...

Environmental data management

- A national and regional challenge - Inform project

- All 14 Pacific Island Countries have data storage management and use issues
- This has become clear through the SOE process and others
- SPREP developed a project to address this, called “Inform”

The Inform Project



DATA PORTALS:
create a network of national and regional data repositories to store and share environmental data, to monitor the state of the Pacific's environment.



REPORTING TOOL:
assist Pacific islands with meeting multiple national and international reporting requirements, by reusing indicator based reporting.



DATA ANALYSIS:
facilitate the use and analysis of environmental data for national planning and sustainable development.



DATA SHARING:
support a change in practices to enhance the sharing of environmental data. Support legal, policy and planning frameworks.

The Inform Project

What stakeholders say...



Data Portal

- **Repository** where data is stored
- **Backups**
- **Sharing data** on different levels
- Collaborate within **Groups** (departments / agencies)
- Publishing platform
- **Open source** tools: DKAN Open Data Platform (<https://getdkan.org/>)
- Cloud or in-country hosting

Other Examples:

- Data.gov
- Data.gov.uk
- Data.gov.au
- Data.gov.nz
- Data.europa.eu
- Etc...



1 Regional Portal

14 National Portals



Inform Regional Data Portal
Environmental Information for Decision Making

<https://pacific-data.sprep.org/>



Cook Islands Environment Data Portal
Environmental Information for Decision Making



Papua New Guinea Data Portal
Environmental Information for Decision Making



Niue Environment Data Portal



Federated States of Micronesia Environment Data Portal



Republic of Marshall Islands Environment Data Portal
Environmental Information for Decision Making



Fiji Environment Data Portal
Environmental Information for Decision Making



Kiribati Environment Data Portal
Environmental Information for Decision Making



Nauru Environment Data Portal
Environmental Information for Decision Making



Palau Environment Data Portal
Environmental Information for Decision Making



Samoa Environment Data Portal



Solomon Islands Environment Data Portal
Environmental Information for Decision Making



Tonga Environment Data Portal
Environmental Information for Decision Making



Tuvalu Environment Data Portal



Vanuatu Environment Data Portal
Environmental Information for Decision Making



Inform Regional Data Portal

Environmental Information for Decision Making

SEARCH TOOL



Datasets About Groups Stories Dashboards Topics ▾

MENU

Log in



Atmosphere and
Climate



Land



Biodiversity



Built Environment



Coastal and Marine



Culture and Heritage



Inland Waters

THEMES

1 Regional portal
14 National portals (PIC's)

User guide to the Pacific Islands Data Portal



Portal link:

<https://pacific-data.sprep.org/dataset/data-portal-manuals>



User guide to the Pacific Islands Data Portal

1. Frequently Asked Questions
2. Data portal setup
3. Managing Users and Groups (for Site Managers and Administrators only)
4. Adding a Dataset
5. Editing or deleting a dataset
6. Creating Visualizations
7. Stories and Dashboards
8. Social media
9. Tips and tricks
 - Good practices
 - Finding data
 - Grouping Datasets
 - Tagging Datasets
 - Working with CSV Files
 - Working with GIS Files
10. Video tutorials

1. Frequently Asked Questions

1. How do I become a new user to the portal?

You have to register first. New users can be added by a Site Manager or Administrator using the 'People' menu. Read more in [Adding New Users](#).

2. I forgot my password, what do I do now?

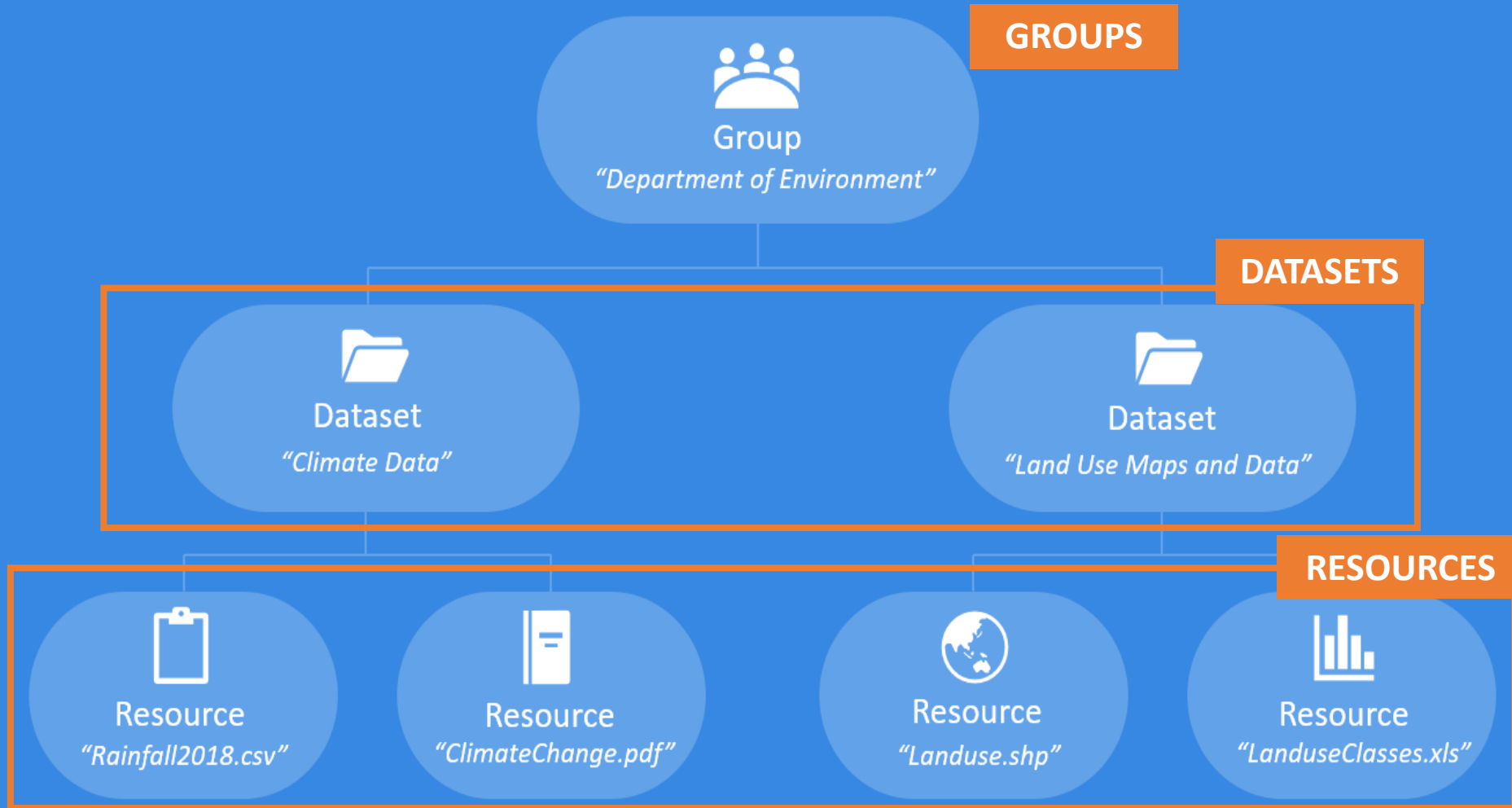
A Site Manager or Administrator can change your password. Once logged in with the new password, click your username on the blue panel and then change the password to your own choice via the 'Edit' button.

3. How do I upload new data on the portal?

New data can be added to the portal by selecting 'Dataset' under the 'Add content' menu. Read more in [Adding a Dataset](#).

...

2. Data portal building blocks



Dataset vs Resource

DATASET



RESOURCE



DATASET



Rainfall data Marshall Islands

 *Environmental Policy and Planning*

 *Atmosphere and Climate*

Historical rainfall data from the Climate Change Knowledge Portal, World Bank Group (Website: http://sdwebx.worldbank.org/climateportal/index.cfm?page=downscaled_data_download&menu=historical)



RESOURCE



RMI precipitation 1901-2015

 *Environmental Policy and Planning*

 *Rainfall data Marshall Islands*



3. Managing Users and Groups

For Site Managers and Administrators only

- Every new user needs to be registered and added to a group
- User accounts can be blocked or deleted

Roles and permissions

- Define what you can do on the portal (viewing data, download data, upload data,...)
- Maintain security of the portal
- 1 user can have multiple roles

Roles

- **Anonymous User:** site visitor who is not logged in
- **Content Creator:** logged in, can upload data
- **Site Manager:** create/manage groups, administer users
- **Administrator:** modify DKAN themes, settings,...

4. Adding a Dataset

3 step process

1) ADD DATASET

Nauru Sea Levels

Dataset title

Coastal and Marine

Sea level data by month and year 1993 to 2017

2) ADD RESOURCES

Multiple resources (downloads)

Data and Resources



Sea levels by month

Preview

Download



Sea levels by year

Preview

Download

Download All

Metadata

(data about the dataset)

3) ADD METADATA

Field	Value
Publisher	Department of Commerce, Industry and Environment
Modified Date	2018-02-02
Release Date	2018-02-02
Frequency	Monthly
Homepage URL	http://www.bom.gov.au/ntc/IDO70055/IDO70055SLD.shtml
Identifier	a5a1f3f1-4f0d-47ef-a358-a4a671f18a34
Spatial / Geographical Coverage Area	POLYGON ((166.7374420166 -0.65285700418652, 166.7374420166 -0.44275319999295, 167.0890045166 -0.44275319999295, 167.0890045166 -0.65285700418652))
Spatial / Geographical Coverage Location	Nauru
Temporal Coverage	Friday, January 1, 1993 - 00:00 to Monday, December 31, 2018 - 00:00

GROUP

Group
(dataset provider)



Department of Commerce, Industry and Environment

The Nauru Department of Commerce, Industry and Environment has oversight and responsibility over issues concerning the environment, climate change, and commerce.

Data Extent



Leaflet | Map data © OpenStreetMap

SET LICENSE LEVEL

License
(usage restrictions)

License

Other (Public Domain)

4. Adding a Dataset

STEP 1: Add a dataset

Create the folder/container to hold your data

VIDEO
TUTORIAL

The screenshot shows the 'Add a Dataset' page on the Inform website. The page has a dark blue header with navigation links: 'Add content', 'Content', and 'Visualizations'. On the right of the header, it says 'Hello whitney' and 'Log out'. Below the header is a blue navigation bar with links: 'Datasets', 'About', 'Groups', and 'Topics'. On the right of this bar is a user profile icon, the name 'whitney', and a 'Log out' link. The main content area has a breadcrumb trail: 'Home / Add content / Add dataset'. On the left, there is a blue box titled 'What are datasets?' containing text: 'Datasets are simply used to group related pieces of data. These can then be found under a single url with a description and licensing information.' Below this is the Inform logo, which consists of a palm tree and the text 'Inform ENVIRONMENTAL INFORMATION FOR DECISION MAKING'. The main heading is 'Add a Dataset'. Below the heading is a progress bar with three steps: '1 Create dataset' (highlighted in green), '2 Add data', and '3 Additional data'. The 'Create dataset' step is active, showing a form with three fields: 'Title *' with a placeholder 'eg. A descriptive title', 'URL' with a placeholder 'cookislands-data.sprep.org/dataset/[dataset]' and an 'Edit' button, and 'Description' with a rich text editor toolbar and a placeholder 'eg. Some useful notes about the data'.

VIDEO
TUTORIAL

What are datasets?

Datasets are simply used to group related pieces of data. These can then be found under a single url with a description and licensing information.

Inform
ENVIRONMENTAL INFORMATION
FOR DECISION MAKING

Add a Dataset

1 Create dataset 2 Add data 3 Additional data

Title *

eg. A descriptive title

URL

cookislands-data.sprep.org/dataset/[dataset] Edit

Description

eg. Some useful notes about the data

4. Adding a Dataset

Setting the license level

Decide with who you want to share

Now: 4 license levels

License Options and Access Control *

- Select a value -

- **Public domain** - Dataset resources will be freely available for download and use without restriction.
- **Creative Commons Attribution Share-alike** - Dataset resources will be freely available. Usage must give attribution and share the dataset under the same license.
- **Inter-agency** - Metadata will be publicly available but actual dataset resources will only be available for download to authenticated users.
- **Private** - Metadata will be publicly available but actual dataset resources will only be available for download to users within the same group.

Simplify to 3 license levels:

Level	Terminology	
1	Public	Open
2	Inter-agency	Shared
3	Private	Closed

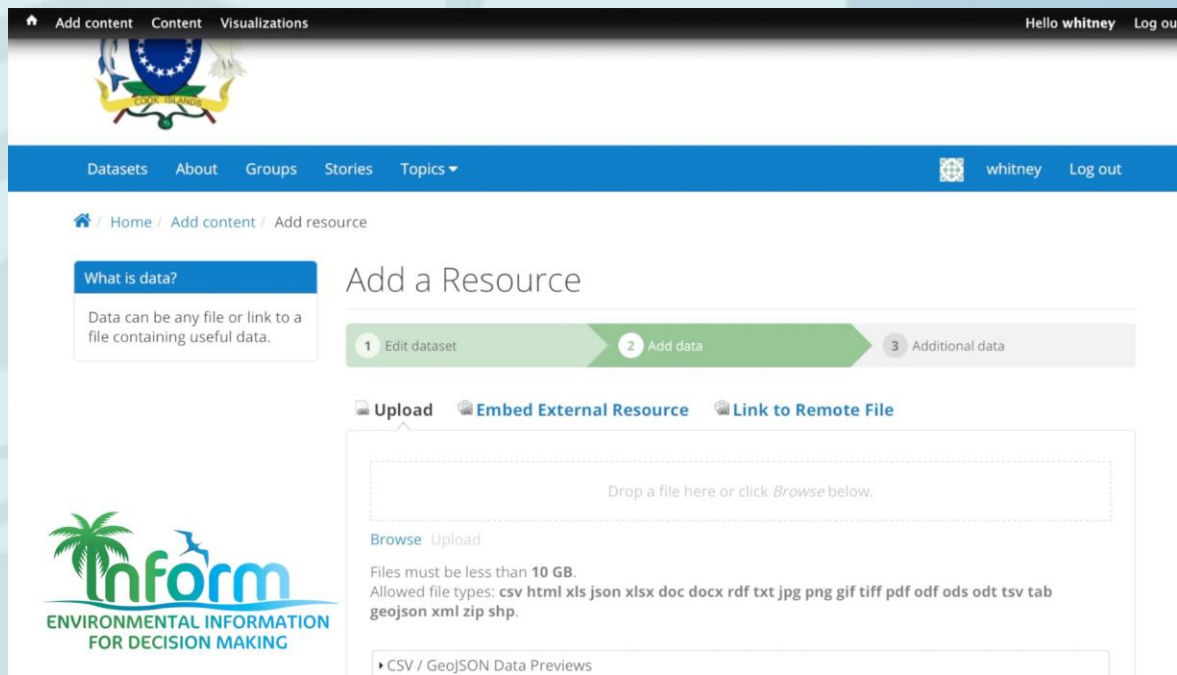
4. Adding a Dataset

STEP 2: Adding Resources

Adding the actual data itself

The data portal supports many file types, including: csv, html, xls, json, xlsx, doc, docx, rdf, txt, jpg, png, gif, tiff, pdf, odf, ods, odt, tsv, geojson and xml.

VIDEO TUTORIAL



- **Embed External Resource**
- **Link to Remote File**

4. Adding a Dataset

STEP 3 : Adding Metadata


Adding additional information: data about the data

Not mandatory but highly recommended!

Field	Value
Author	Author of the dataset
Spatial Coverage Area	Area that the dataset relates to
Spatial Coverage Location	Name of the area that the dataset relates to
Frequency	How often a dataset is published
Temporal Coverage	Date, or start and end date range encompassing the dataset
Contact Name	Name of the person who can be contacted regarding the dataset
Contact Email	Email address of the person who can be contacted regarding the dataset
Homepage URL	URL of homepage where more info on the dataset can be found
Data standard	Name of the data standard that the dataset conforms to
Language	Language used in the dataset
Resources	List of resources that you added to the dataset
Related content	Internal link or link to an outside resource that provides additional context
Revision information	Explanation of the changes you are making in the Revision log message box. This helps other authors understand your motivations.

Adding Metadata (additional information on the data)

VIDEO TUTORIAL



[Add content](#) [Content](#) [Visualizations](#)

Hello **whitney** [Log out](#)

under a single url with a description and licensing information.

Dataset Information

These fields are compatible with [DCAT](#), an RDF vocabulary designed to facilitate interoperability between data catalogs published on the Web. These fields are also compatible with the Common Core metadata schema from [Project Open Data](#).

Author

This is the author of the dataset.


Spatial / Geographical Coverage Area

Spatial coverage of the dataset. Will be rendered as GeoJSON. See [DCAT spatial/geographical coverage](#) for more info.

Map

GeoJSON

Points



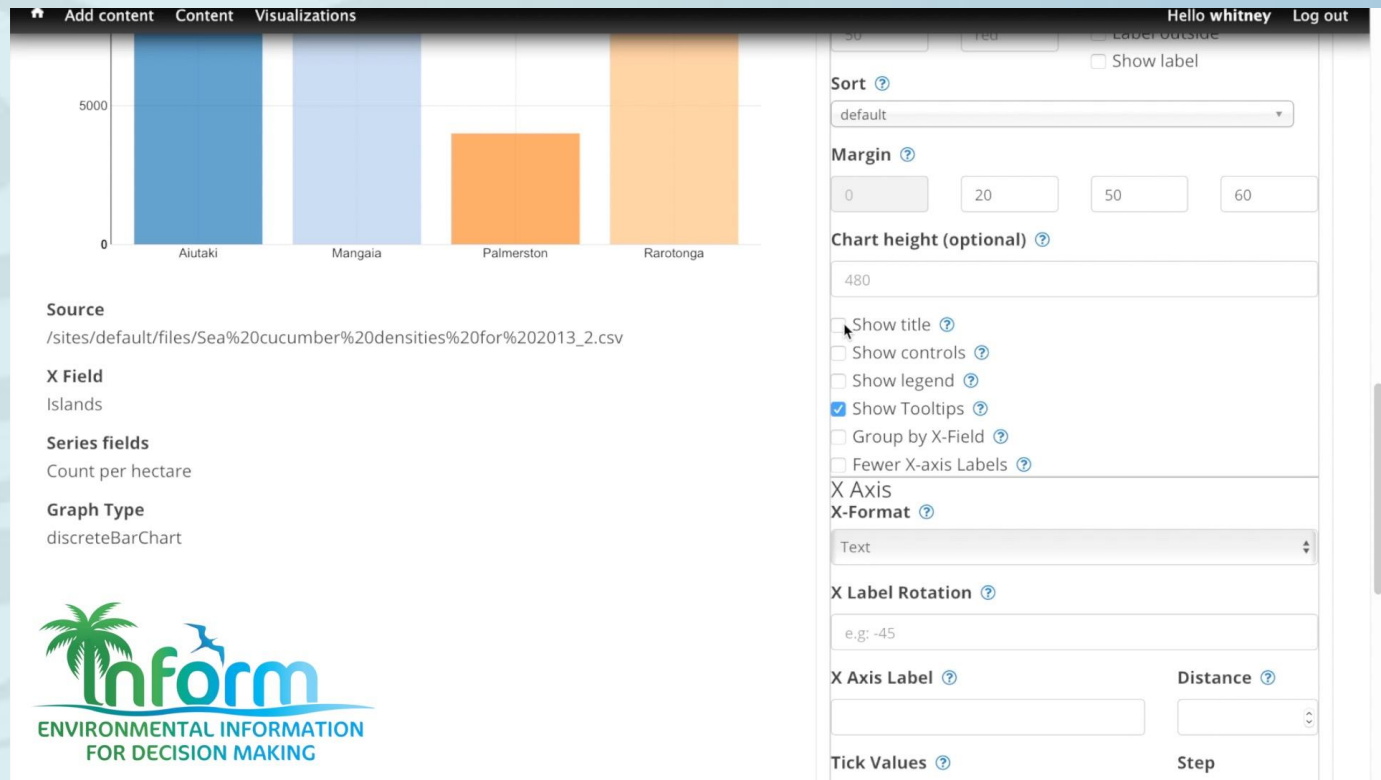
5. Editing or deleting a dataset

Remember the 2 data portal levels:

- do you want to delete the entire **dataset**
- do you want to delete 1 or more **resources** belonging to that dataset?

6. Creating Visualizations

VIDEO TUTORIAL

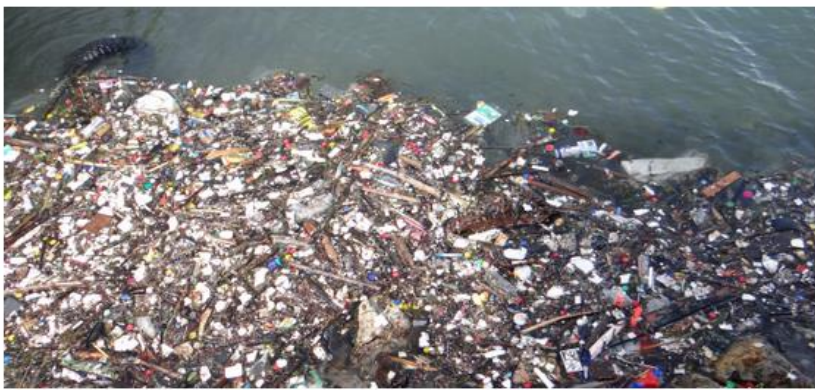


7. Stories and Dashboards

Example of PNG

Datasets About Groups **Stories** Dashboards Topics ▼

Log in Register



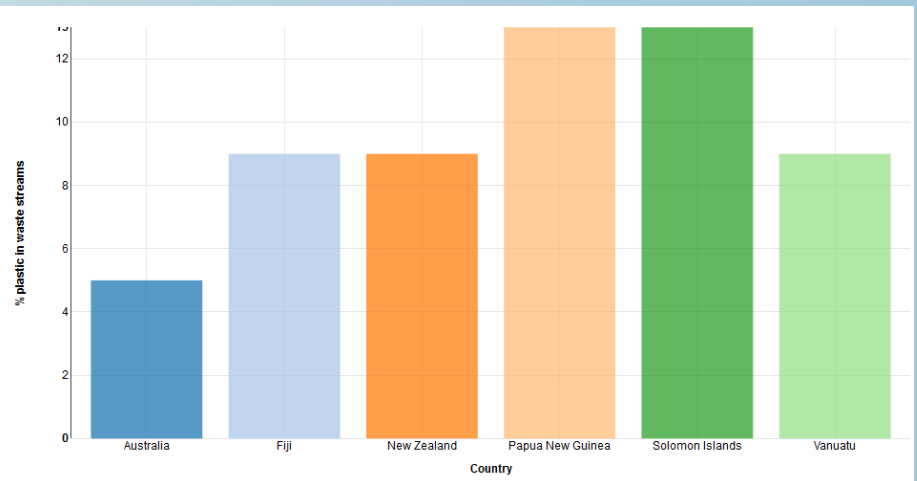
Country plastics ban enables healthier oceans and environment

Waste on the beach in Papua New Guinea. Photo Credit: Anthony Talouli/SPREP

Plastics, policy

TAGS

Waste on the beach in Papua New Guinea. Photo Credit: Anthony Talouli/SPREP
The Papua New Guinea Government plans to stop the single use of biodegradable plastic shopping bags by 2019, following the ban's announcement this April. Hon. John Pundari, Minister of Environment, Conservation and Climate Change, announced the ban, which follows unsatisfactory adherence to a similar one on non-biodegradable plastic bags in 2014. Studies have found plastic traces in fish, turtles and other marine animals. If the ban is successful, it can reduce both the plastic toxins ingested by these animals and those that seep into the ocean and other water sources in Papua New Guinea.



under development

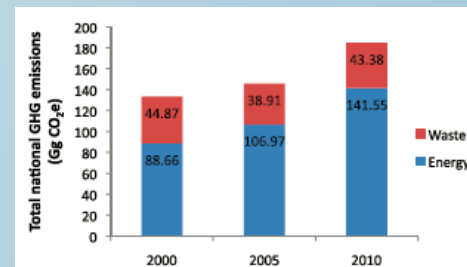
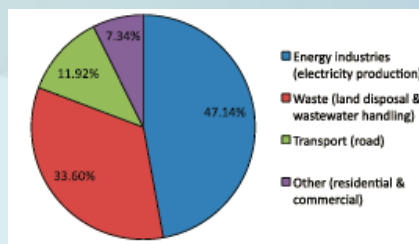
Datasets About Groups Stories **Dashboards** Topics ▾

Log in Register

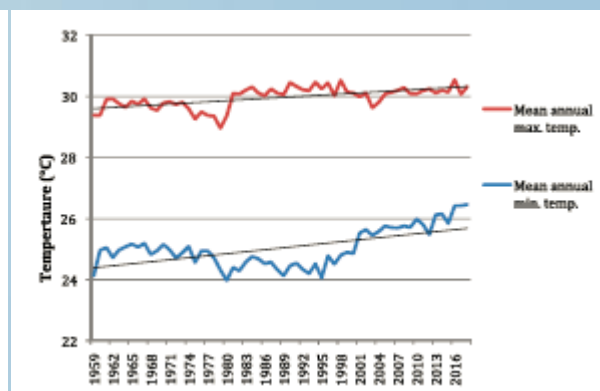
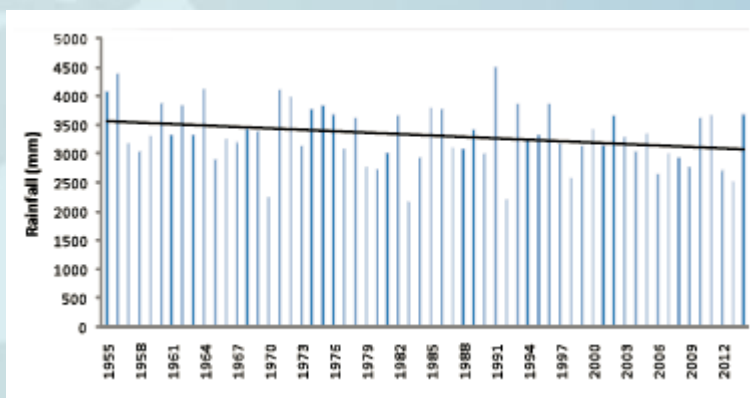
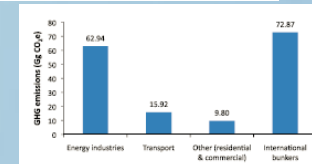
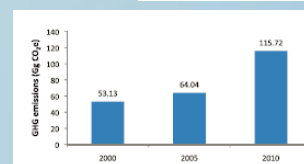
List of different Dashboards, per topic



Greenhouse gas (GHG) emissions stats

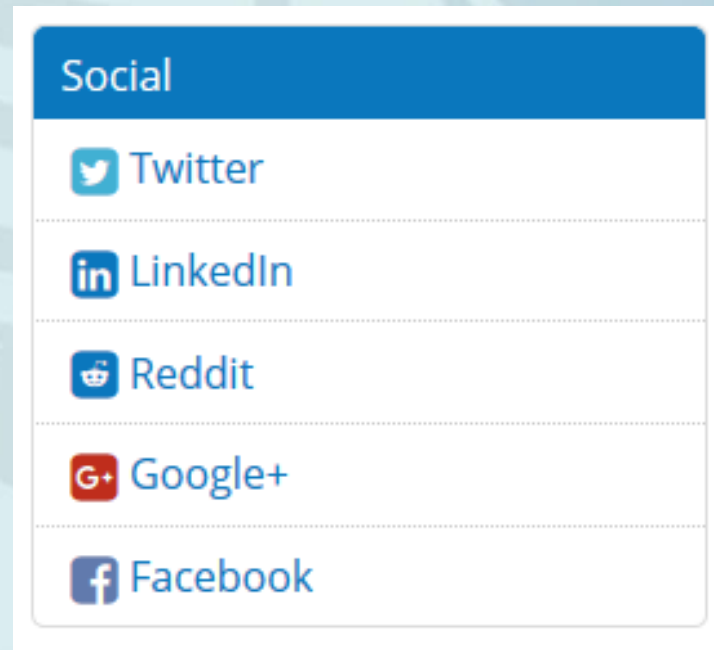


Physical Climate



8. Social media


- Public sharing options on the level of a dataset
- Be aware of which login you are using



The Inform Project


Data portal demo video


[Home](#) [Add content](#) [Content](#) [Visualizations](#) [People](#) [DKAN](#) [Site Configuration](#) Hello **sprep** Log out




Tonga Environment Data Portal

Environmental Information for Decision Making


[Datasets](#) [About](#) [Groups](#) [Stories](#) [Dashboards](#) [Topics ▾](#)  [sprep](#) [Log out](#)




Atmosphere and Climate




Land




Biodiversity



Built Environment



Coastal and Marine



Culture and Heritage

<https://pacific-data.sprep.org/>

Live Demo Regional Portal

Upload Group Photo ACPMEA and Inform Joint Meeting 2018



9. Tips and tricks

Good practices

Data portal managers:

Do regular **data portal cleaning** (1x week, 1x month)

- Check new datasets
- Check for errors, spelling mistakes,...
- Check for double data

Data portal content creators:

Use good practices when uploading data(sets).

9. Tips and tricks

Good practices

Avoid double data

- Check the portal to see if the same dataset has already been uploaded
 - Do a quick search by using keywords
- Maybe your new data **resource** is best placed under an existing **dataset**?

Examples:

- You are uploading a new version of the same data
- You found a report that provides background information on raw data in Excel already uploaded to the portal.

Good practices

Consider grouping your data resources

- Group different resources under one dataset, when relevant
- Be aware of not grouping too much
- Only group resources when they are **strongly related**
- Avoid that other users are not able to find your data

A good example of grouping different resources:

The screenshot shows a dataset page for 'Palau SOE reports' on the OERC platform. On the left, there is a profile card for 'OERC - Environmental Response and Coordination' with a green circular icon containing two white silhouettes. Below the profile card are sections for 'License' (Other (Public Domain)) and 'Other Access' (The information on this page (the dataset metadata) is also available in these formats.). The main content area is titled 'Palau SOE reports' and includes a horizontal menu with categories: Atmosphere and Climate, Land, Biodiversity, Built Environment, Coastal and Marine, Culture and Heritage, and Inland Waters. Below the menu, it states 'State of the Environment Reports Republic of Palau.' The 'Data and Resources' section lists three PDF documents: '1994 SOE Palau', '2004 SOE Palau', and '2017 SOE Palau'. Each document has a 'Download' button. At the bottom, there is a 'Download All' button and a breadcrumb trail: SOE > 1994 > 2004 > 2017 > state > environment.

Good practices

Use a good title

What is a good title for a dataset or resource?

- description that is not too short, not too long
- description that contains the most relevant information on the dataset or resource
- The title alone should be able to guide users if they need the dataset or not
- Put more details into the **Description** field

Good practices

Tags are crucial

- **Keywords** that help portal users locate a particular dataset
- **Filtering** down your **search** when looking for datasets
- **Short and simple.** Try to imagine what other users would type in the search box when trying to find the dataset

For example: 'rainfall' is a better tag than 'rainfall patterns' or 'rainfall analysis'.

- **Categorizing datasets**
- **Fixed or predefined tags** like '**SOE**', '**Indicator**', or the name of the indicator, to easily find the datasets related to SOE reports, or a specific indicator.

For example: tag datasets related to the following SOE-indicators: "reef fish", "forest cover", "rainfall".

TIP

Take the time to think of good tags or keywords, so other users can find your datasets easily

Good practices

Metadata are crucial

It is not mandatory, but really good practice to take the time to add additional data about the dataset.

→ Other users will know who can be contacted, when the dataset was collected, what to be aware of when using the dataset etc.

Good practices

Same file, different format

- both files need to have the exact SAME NAME
- both files need to be in the SAME DATASET

Example: when you upload a GIS file as a shapefile and a geojson file, put them both in the same dataset and use the same filename.

Good practices

Same file, different version

Examples of good versioning practices:

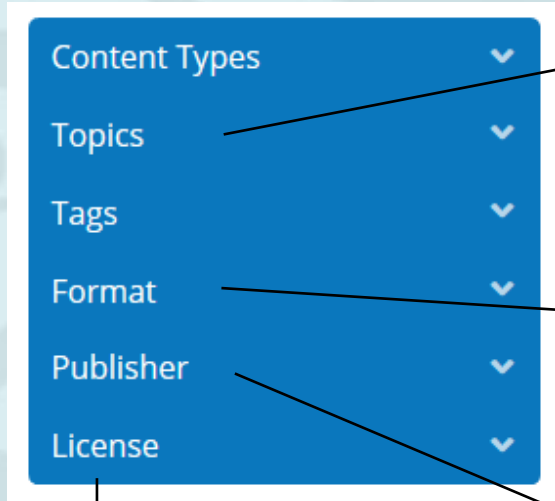
- **Forest_cover_v1.xls**: first version of forest cover dataset
- **Forest_cover_v2.xls**: second version of forest cover dataset
- **Forest_cover_2015.xls**: forest cover dataset of the year 2015
- **Forest_cover_2018.xls**: forest cover dataset of the year 2018
- **Forest_cover_20150120.xls**: forest cover dataset of 20th January 2015
- **Forest_cover_20180515.xls**: forest cover dataset of 15th May 2018

TIP

If you put the date “backwards” (year-month-day), the latest version will always appear at the bottom of your filing system

9. Tips and tricks

Finding data



- shows list of all uploaded formats
- allows you to search for images, gis files

- shows all Groups that have published data
- number of available datasets per group
- allows you to see all datasets per group

- shows the 3 license levels
- number of available datasets per level
- allows you to search for public data

9. Tips and tricks

Working with CSV files

- **CSV** = Comma Separated Values
- “Flat”, simple, easy to read format
- **You can make your data *machine-readable*** by uploading it in the CSV format.
- Most data-crunching software allows you to simply go `File >> Save As` and choose the CSV format
- Each CSV file is a **single sheet in a Excel spreadsheet** document, so you may need more than one CSV file to hold all your data
- **Handy checklist** in the user guide

9. Tips and tricks

Working with GIS files

- Geographical Information System (GIS) files come in a lot of different formats: Shapefile (.shp), Geojson file (.geojson), Google Earth file (.kml, .kmz), Raster files (.geotiff),...
- **Preferred format for portal (DKAN software) is GeoJSON**
 - DKAN is capable of reading GeoJSON files
 - present spatial datasets directly onto a map
- **Convert** gis files to geojson files (→ single files)
 - step by step manual in user guide
- Shapefiles can be **zipped** and uploaded

10. Video tutorials



SPREP YouTube channel

<https://www.youtube.com/user/SprepChannel/playlists>

Inform Project Playlist: <https://bit.ly/2wCaID2>



Data Portal Tutorial 1 - How to add a dataset



Data Portal Tutorial 2 - How to add a resource



Data Portal Tutorial 3 - How to add additional information



Data Portal Tutorial 4 - How to create a visualization

Live Helpdesk



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