

# Information Systems for Protected and Conserved Areas

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European Commission  
Joint Research Centre

Tools to help drive the ongoing development of PIPAP



An initiative of the ACP Group of States financed by the European Union's 11th EDF.



Regional Implementing Partner



From Knowledge to Action for a Protected Planet



# From Knowledge to Action for a Protected Planet

The Africa, Caribbean, Pacific group of States





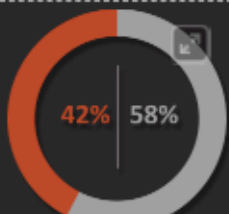
From Knowledge to Action for a Protected Planet

# Coral Reefs percentage protected and unprotected

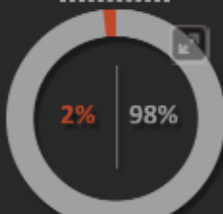


(Click on the COUNTRY name to navigate on the map)

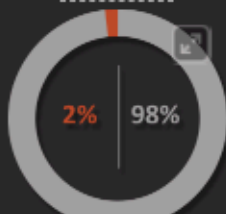
Antigua and Barbuda



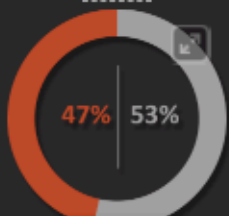
Bahamas



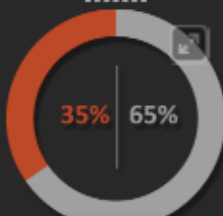
Barbados



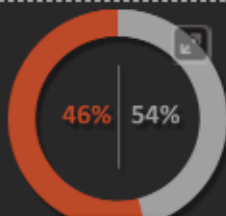
Belize



Cuba



Dominican Republic



Grenada

Jamaica

Saint Lucia



LEGEND

- Marine Protected Areas
- Protected Coral Reefs
- Coral Reefs

Pan and zoom the map to navigate

# JRC's Mission

***“ As the science and knowledge service of the Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle ”***



Science supporting policy

Knowledge driving decisions

World leader in geospatial applications for policy





# European Union support for sustainable use and conservation of nature in developing countries

The European Union has a strong and proud record of supporting conservation worldwide.



Within the EU, it has created the largest network of protected areas in the world, Natura 2000. Globally, it works to protect animal and plant species that face particular threats and to fight the illegal wildlife trade. In EU international development cooperation, meanwhile, we place a strong emphasis on protecting wildlife and ecosystems to combat poverty and improve livelihoods.



EU Development & Cooperation  
Biodiversity for Life

EU leading donor of development assistance - €75.7 billion in 2017 (57% of global ODA)

Long-standing relationships with conservation actors



# Our BIOPAMA Objectives 2017-2023

**Standardised tools, indicators and metrics** on protected areas globally – Digital Observatory of Protected Areas (DOPA)

A dedicated information system focused on the protected areas of the ACP – BIOPAMA Reference Information System

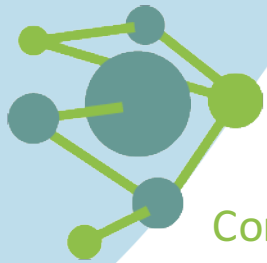
**Regional systems**, within operational observatories, driven by regional needs

A comprehensive approach to the issues of protected area management effectiveness and governance  
Supporting the Pacific Islands Protected Area Portal (PIPAP) and the regional observatory for protected and conserved areas

Bringing the results of these systems closer to the decision making process, at all levels



# RIS Functions



Connect



Contribute



Analyse



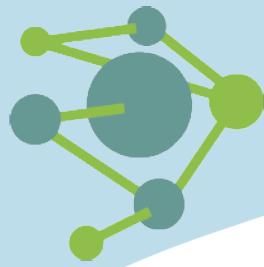
Explore



Learn

Built on open-source technology and open standards





# Connect

- With each other, through the Yammer Network
- With datasets and services, through industry-standard protocols
- With other systems and tools
- With updated news, events and opportunities related to protected areas
- With the wider public, through StoryMaps and data visualisation

**BIOPAMA Pacific**  
NEW CONVERSATIONS ALL CONVERSATIONS FILES SEARCH

Search

**BIOPAMA GROUPS**

- BIOPAMA Eastern & Southern Africa
- BIOPAMA Caribbean
- BIOPAMA Pacific**
- BIOPAMA Western & Central Africa
- BIOPAMA Technology
- Jamaica Fish Sanctuaries Network
- Reference Information System
- GeoNode for BIOPAMA
- BIOPAMA East African Community ...
- Caribbean Marine Protected Area ...
- World Conservation Congress 2016
- IGAD BMP
- SMART- MESOAMERICA
- Training of Trainers on MPA Manag...
- CaMPAM-ECMMAN project mana...
- JRC BIOPAMA
- Bahamas Data Management Work...
- BIOPAMA Project Management
- Technical Advisory Group

All Network  
+ Create a group  
🔍 Discover more groups

**PRIVATE MESSAGES**

santiagosaura-quest, Mariagrazia...

**Stephen Peedell** – 3 hours ago  
SPREP, IUCN and JRC team putting together the final touches for next week's BIOPAMA regional workshop for the Pacific. Andrew and I from JRC are very excited to be here and we are really looking forward to next week's discussions - how can BIOPAMA best support the development of the PIPAP Pacific Islands Protected Areas Portal, and support the other services that are expected of a regional observatory for protected and conserved areas? What are the key data and information needs, how can we move from knowledge to action? What are the key targets for conservation and livelihoods, and how can we measure progress towards these objectives?

ACCESS OPTIONS

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Write a reply

<https://www.yammer.com/biopama>

<http://rris.biopama.org/storymaps/Caribbean-Marine-Protected-Areas>

Angola - Antigua and Barbuda - Belize - Cape Verde - Comoros - Bahamas - Barbados - Benin - Botswana - Burkina Faso - Burundi - Cameroon - Central African Republic - Chad - Congo (Brazzaville) - Congo (Kinshasa) - Cook Islands - Cte d'Ivoire - Cuba - Djibouti - Dominica - Dominican Republic - Eritrea - Ethiopia - Fiji - Gabon - Gambia - Ghana - Grenada - Republic of Guinea - Guinea-Bissau - Equatorial Guinea - Guyana - Haiti - Jamaica - Kenya - Kiribati - Lesotho - Liberia - Madagascar - Malawi - Mali - Marshall Islands - Mauritania - Mauritius - Micronesia - Mozambique - Namibia - Nauru - Niger - Nigeria - Niue - Palau - Papua New Guinea - Rwanda - St. Kitts and Nevis - St. Lucia - St. Vincent and the Grenadines - Solomon Islands - Samoa - Sao Tome and Principe - Senegal - Seychelles - Sierra Leone - Somalia - South Africa - Sudan - Suriname - Swaziland - Tanzania - Timor Leste - Togo - Tonga - Trinidad and Tobago - Tuvalu - Uganda - Vanuatu - Zambia - Zimbabwe



[www.acp.int](http://www.acp.int) – connect to the other countries and regions of BIOPAMA





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Connect to the JRC BIOPAMA Team – at your service! [jrc-biopama@ec.europa.eu](mailto:jrc-biopama@ec.europa.eu)





# Contribute

- Share data, maps and other information resources through GeoNode <http://geonode-rris.biopama.org/>
- Help design the features of the RIS and RRIS <http://rris.biopama.org/>
- Create data, using community platforms like OpenStreetMap. <http://beta.biopama.org/>
- Improve global databases with regional contributions, e.g. WDPA, through the BIOPAMA Observatory

## A data repository for biodiversity and protected areas

The BIOPAMA project aims to build a solid information base for decision making on protected areas in the Africa, Caribbean, Pacific (ACP) region. This repository, based on GeoNode, is part of the *BIOPAMA Reference Information System*. Here you can discover and use maps, reports, data and other information sources, and upload your own to share with others. The themes of data you can find here cover a broad range of natural resource management and related topics.

The core development is done by the *Joint Research Centre* of the European Commission, based in Italy. Our project partners IUCN are working with regional institutions to set up Observatories, which will use GeoNode to help share important data.

The BIOPAMA project began in July 2011 and is now in its second phase, running until 2023. It is closely linked to the development of the Digital Observatory of Protected Areas (*DOPA*), which provides harmonised indicators and data on protected areas globally. JRC and IUCN are now working with our institutional partners to ensure the long-term sustainability of the Observatories and the Reference Information System. You can find out more about BIOPAMA at the main project page [www.biopama.org](http://www.biopama.org).



**218 Layers**

Click to search for geospatial data published by other users, organizations and public sources. Download data in standard formats.

[Explore Layers »](#)



**52 Maps**

Data is available for browsing, aggregating and styling to generate maps which can be shared publicly or restricted to specific users only.

[Create maps »](#)



**100 Users**

GeoNode allows registered users to easily upload geospatial data in several formats including Shapefile, GeoTiff and various kind of Documents.

[Share data »](#)

<http://geonode-rris.biopama.org/>



# Explore

- Find useful data, maps and reports through GeoNode <http://geonode-rris.biopama.org/>
- Browse PA data and statistics at region, country and site level <http://rris.biopama.org/country/TL>
- Compare global indicators from the Digital Observatory of Protected Areas (DOPA) <http://dopa-explorer.jrc.ec.europa.eu/>
- Discover related projects, funding and solutions in your region <http://econservation.jrc.ec.europa.eu/country/MZ>





# Explore

## Samoa

[Home](#) • [Pacific](#) • Samoa



[General](#)
[Protected Areas](#)
[PADDD](#)
[Key Biodiversity Areas](#)
[Ecoregions](#)
[Habitats](#)
[Climate](#)
[Species](#)
[References](#)
[Legislation](#)

### Key protected area stats

Total number of protected areas: 84  
 Terrestrial protected area coverage: 6.77%  
 Shortfall to the CBD's 17% terrestrial target: **10.23%**  
 Landlocked country: no  
 Total number of marine protected areas: 73  
 Marine protected area coverage (0-200 nm): 0.09%  
 Shortfall to the CBD's 10% marine target: **8.92%**

### Key biodiversity links

- [Convention on Biological Diversity \(CBD\) Country Profile](#)  
(includes latest NBSAP and CBD National Report)
- [CBD Programme of Work on Protected Areas \(PoWPA\) Action Plan](#)
- [Digital Observatory for Protected Areas \(DOPA\) Country Data](#)
- [World Database on Protected Areas \(WDPA\) Country Data](#)
- [Global Biodiversity Information Facility \(GBIF\) Country Summary](#)
- [BirdLife International Country Profile](#)
- [NatureServe Country Dashboard](#)

### Key country indicators

Terrestrial area (km<sup>2</sup>): 2,830 (2015)  
 Total population (people): 193,759 (2015)  
 Population density (people per km<sup>2</sup> land area): 68.47 (2015)  
 Population growth (annual): 0.8% (2015)  
 GDP growth (annual): 1.6% (2015)  
 GDP per capita, PPP (current international \$): \$5,819.36 (2015)

### Other country links

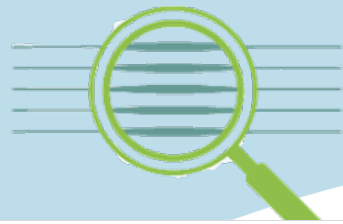
- [EC EuropeAid Country Info](#)
- [EU External Action Country Info](#)
- [World Bank Country Page](#)
- [UN Data Country Profile](#)
- [UNDP Country Profile](#)
- [UNEP Country Profile](#)
- [FAO Country Profile](#)
- [CIA World Factbook Country Info](#)
- [Wikipedia Country Info](#)



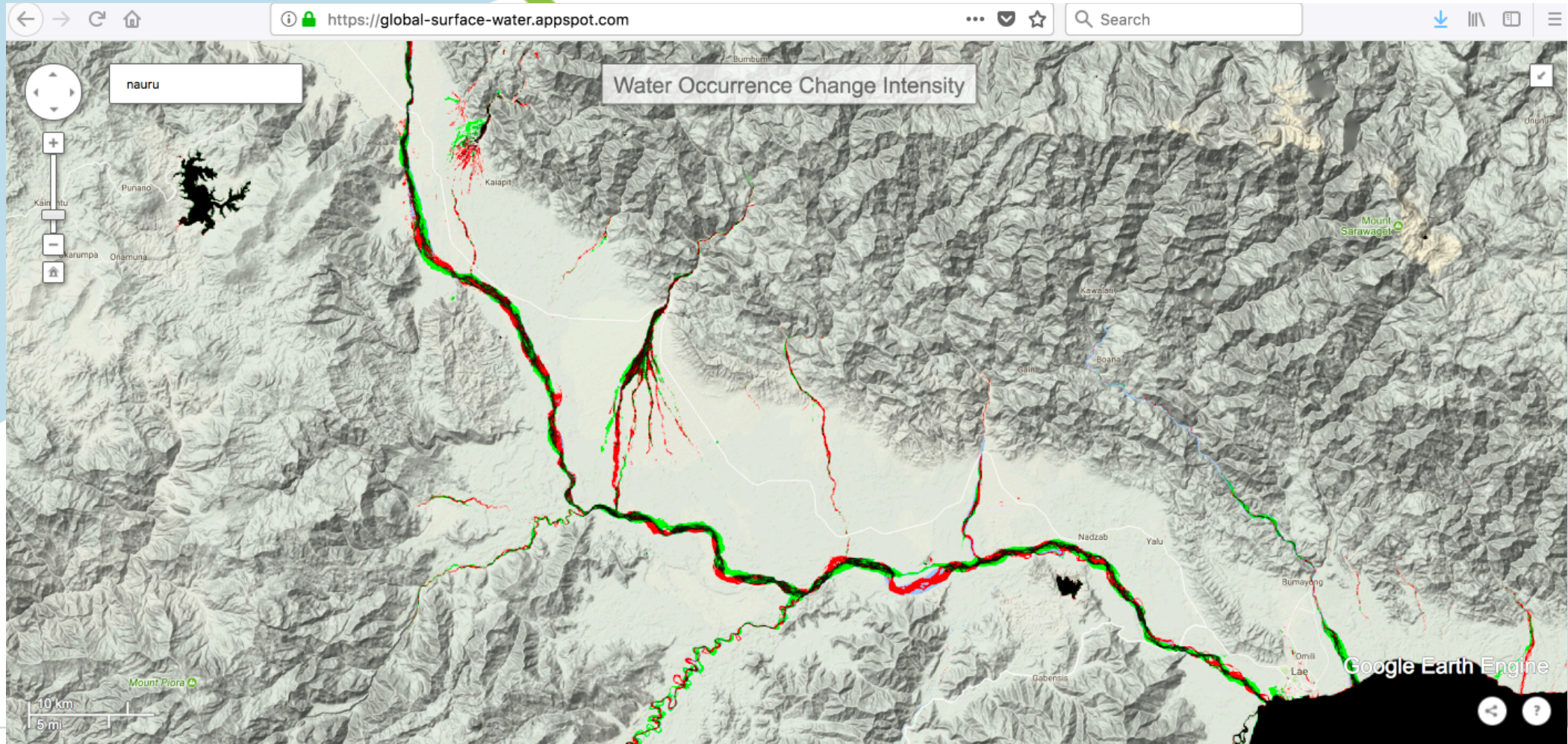
# Analyse

- Show trends and change in protected areas over time
- Compare and rank protected areas
- Dynamics outside of protected areas
- Understand ecological connectivity of protected areas
- Assess pressures and threats
- Explore management effectiveness and governance
- Support applications for funding (i.e BIOPAMA Action Component)
- Generate input to reporting
- Feed data into more sophisticated models and tools (e.g. Marxan, SMART)





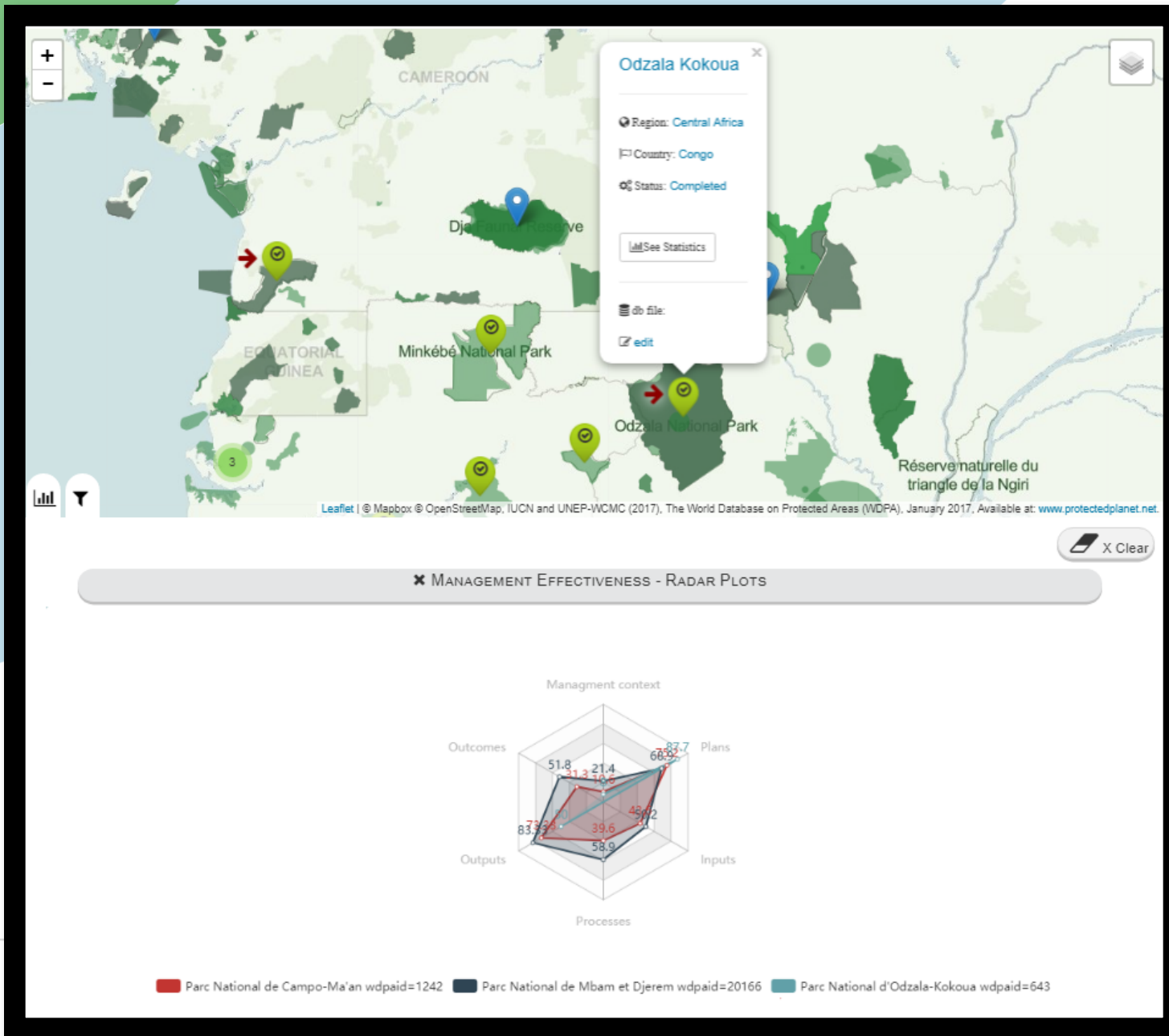
# Analyse

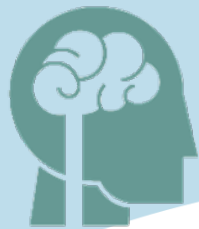




# Management Effectiveness

- <http://rris.biopama.org/imetassessment#>

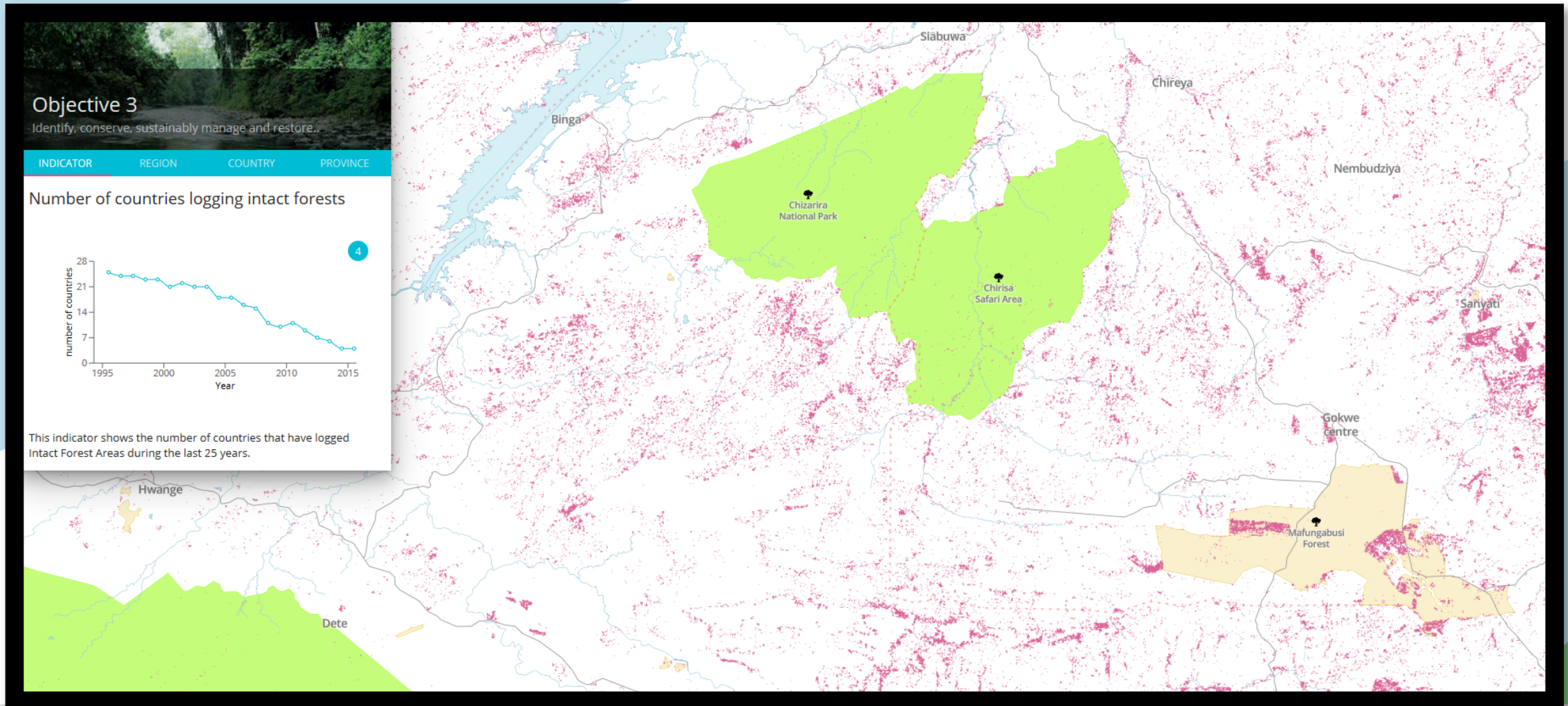




# Learn

- Discover training opportunities
- Share your experience
- Learn by doing
- Follow simple on-line training
- Dedicated data management workshops

# A Target-Based Approach



Under development - <http://beta.biopama.org/wireframes/regional/build/indicator/2>





Copernicus Hot Spot Monitoring – Land Use Change in Key Landscapes



# Conclusions

- An open platform
- Designed to link to other datasets and platforms, focus on integration
- Driven by regional needs
- Improving databases at global, regional, national and site level
- Terrestrial and marine
- Combining geospatial and non-geospatial (management, governance....)
- Same architecture across regions, but customised content and interfaces
- A hub for PA data and WDPA reporting
- Supported by JRC
- From data to analysis
- From knowledge to action
- What are the incentives to use and contribute to this platform?
- What are the other systems and datasets that should be linked?
- What are the priority analytical needs?



# #FOSS4G2018

27, 28 AUGUST 2018 : WORKSHOPS

29, 30, 31 AUGUST 2018 : THREE DAY MAIN CONFERENCE

1, 2 SEPTEMBER 2018 : CODE SPRINTS AND COMMUNITY EVENTS

94

Days

21

Hours

27

Minutes

45

Seconds



Melbourne 2018

# FOSS4G SotM Oceania

Melbourne, Australia | November 20-23, 2018

For the first time, the FOSS4G and OpenStreetMap communities of Australia, New Zealand, and Oceania are gathering for 4 incredible days of exploring open source geospatial tech & open data.



# BIOPAMA

From Knowledge to Action for a Protected Planet

[rris.biopama.org](http://rris.biopama.org)



[www.biopama.org](http://www.biopama.org)

The Biodiversity and Protected Areas Management Programme (BIOPAMA) is an initiative of the ACP Group of States funded by the European Union's 11<sup>th</sup> European Development Fund.