



Nelson's Dockyard, Antigua & Barbuda



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

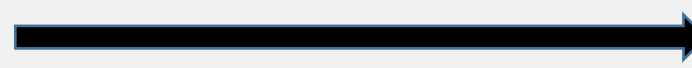
**Caribbean PA Data Management  
Regional Workshop  
20 - 23 May 2019  
Barbados**

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Technical Officer  
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# Background

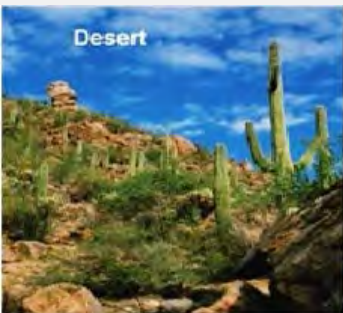


# Biological diversity (biodiversity)



# Human well-being

- the number, variety & variability of living organisms
  - genetic, species, ecosystem
- ▶ • cornerstone of earth's existence
  - 40 % of the world's economy and 80 % of the needs of the poor are derived from biological resources
  - Richer biodiversity:
    - increases resilience
    - greater opportunities for medical discoveries
    - economic development
    - adaptive responses to such new challenges as climate change



Desert



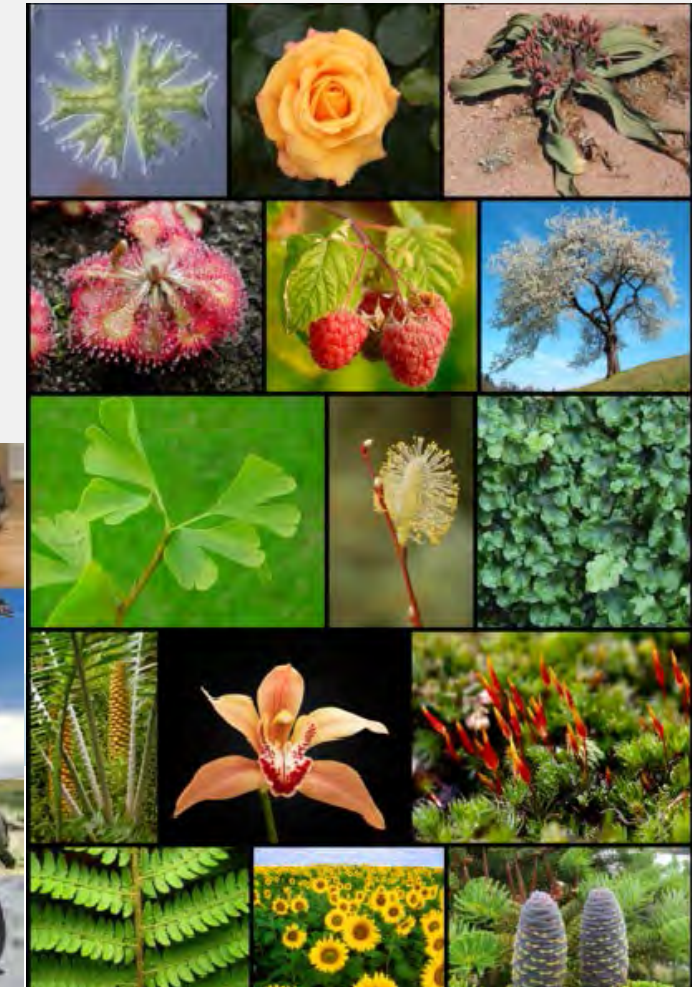
Tundra



Coral Reef



Prairie





# Protected Areas

- a clearly defined geographical space
- recognised, dedicated and managed, through legal or other effective means
- to achieve the long term conservation of nature with associated ecosystem services and cultural values

(IUCN Definition 2008)

## Other Effective Area-cased Conservation Measure

- a geographically defined area other than a Protected Area
- which is governed and managed in ways that achieve positive and sustained long-term outcomes
- for the in situ conservation of biodiversity with associated ecosystem functions and services
- and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.

(CBD 2018)

Codrington Lagoon, Barbuda



Pitons Management Area, St. Lucia



King's Hill Forest Reserve, St. Vincent



South Coast Marine Conservation Area, St. Vincent



Tobago Cays Marine Park, Grenadines

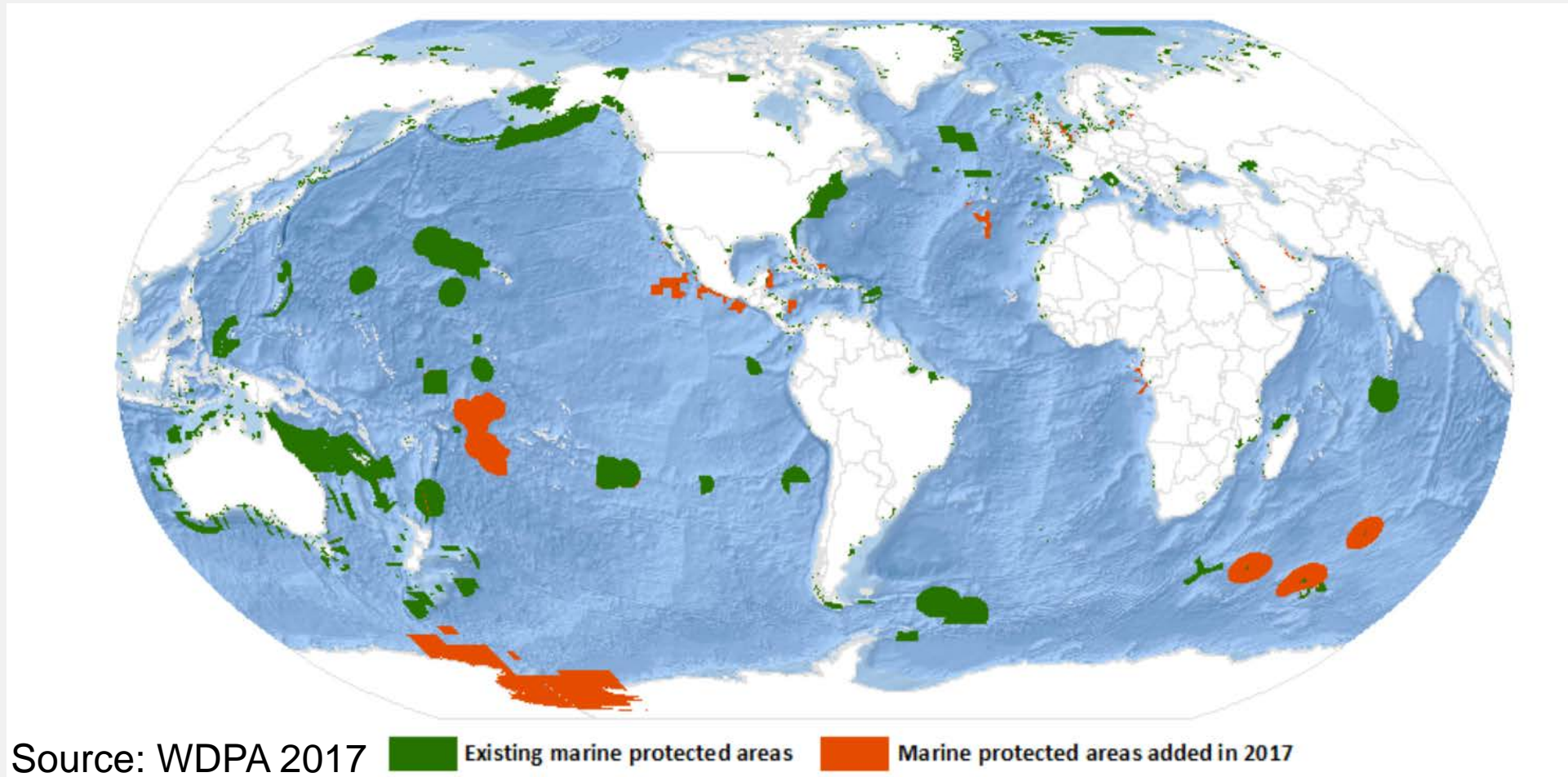


Glover's Reef Marine Reserve, Belize



# Protected Areas (global)

> 230,000 PAs globally  
> 200 countries

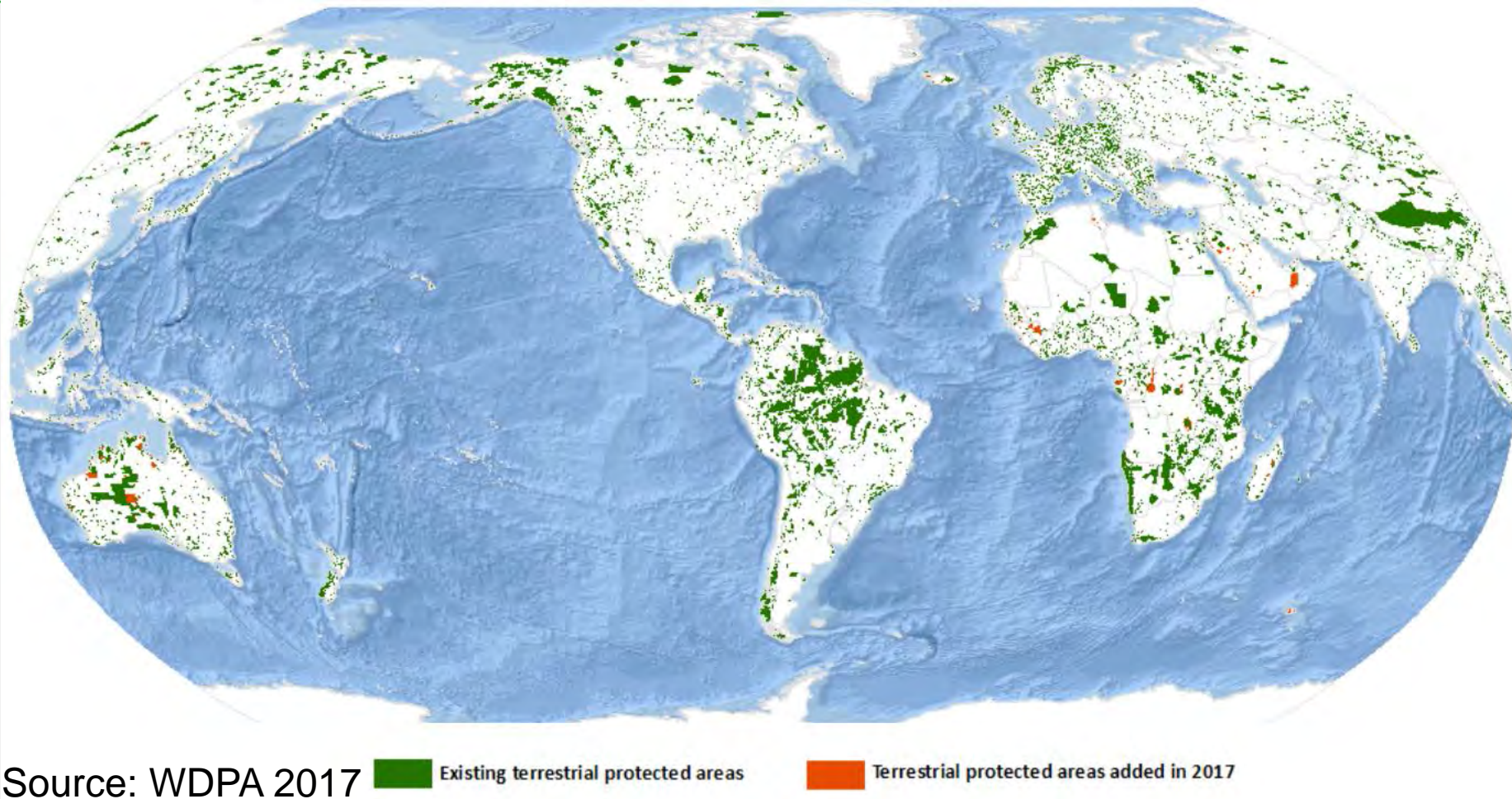


**Marine**  
(approx. 25 million km<sup>2</sup>)



# Protected Areas (global)

> 230,000 PAs globally  
> 200 countries



**Terrestrial**  
(approx. 20 million km<sup>2</sup>)

# Protected Areas (ACP)



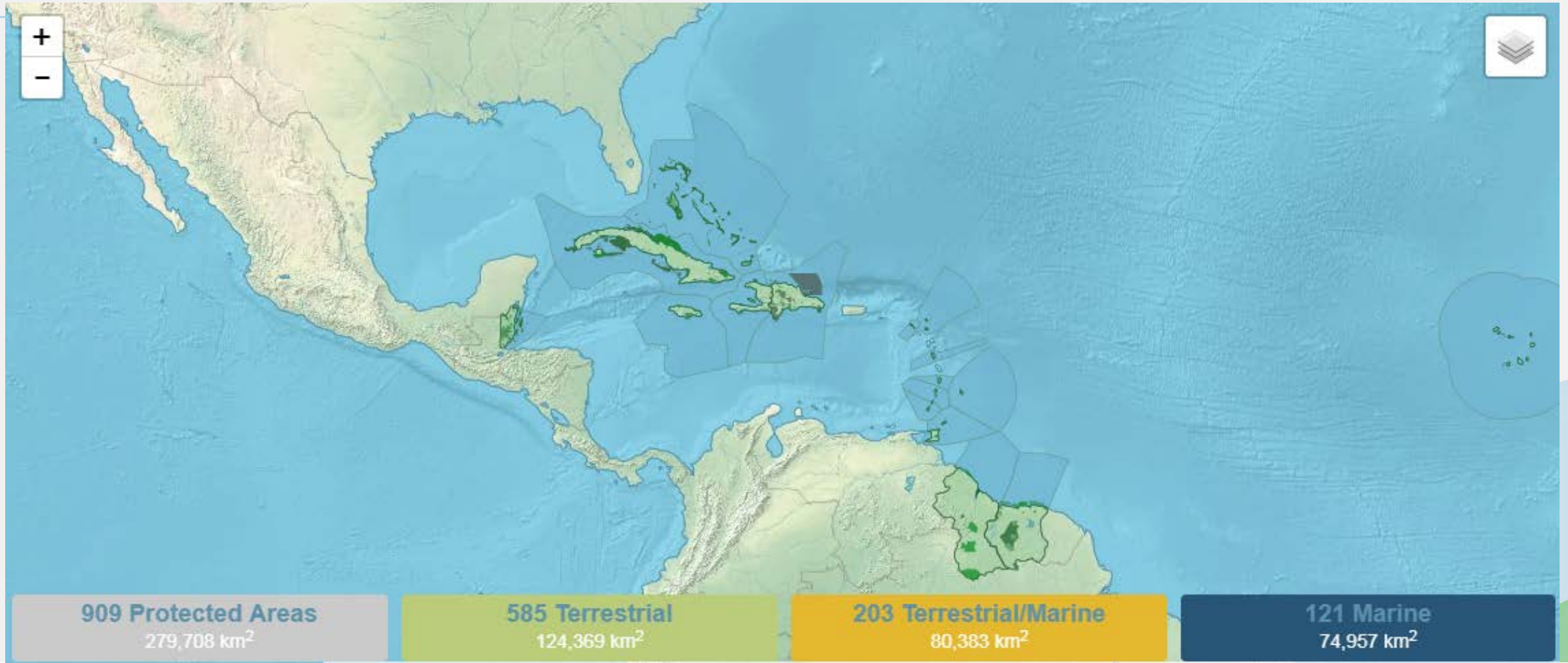
**9,000+ PROTECTED AREAS:**

**1 BILLION+ PEOPLE:**

THEIR LIVELIHOODS DEPEND ON THE SUSTAINABLE USE OF NATURAL RESOURCES IN THE AFRICAN, CARIBBEAN AND PACIFIC COUNTRIES



# Protected Areas (Caribbean ACP)






# Current trends in biodiversity

Countries are protecting more area habitats, but biodiversity is still in stark decline.

[Sustainability Science](#)  
— April 2015, Volume 10, Issue 2, pp 357–369 | [Cite as](#)

Why biodiversity declines as protected areas increase: the effect of the power of governance regimes on sustainable landscapes

Authors [Authors and affiliations](#)

Rosemary Hill , Craig Miller, Barry Newell, Michael Dunlop, Iain J. Gordon

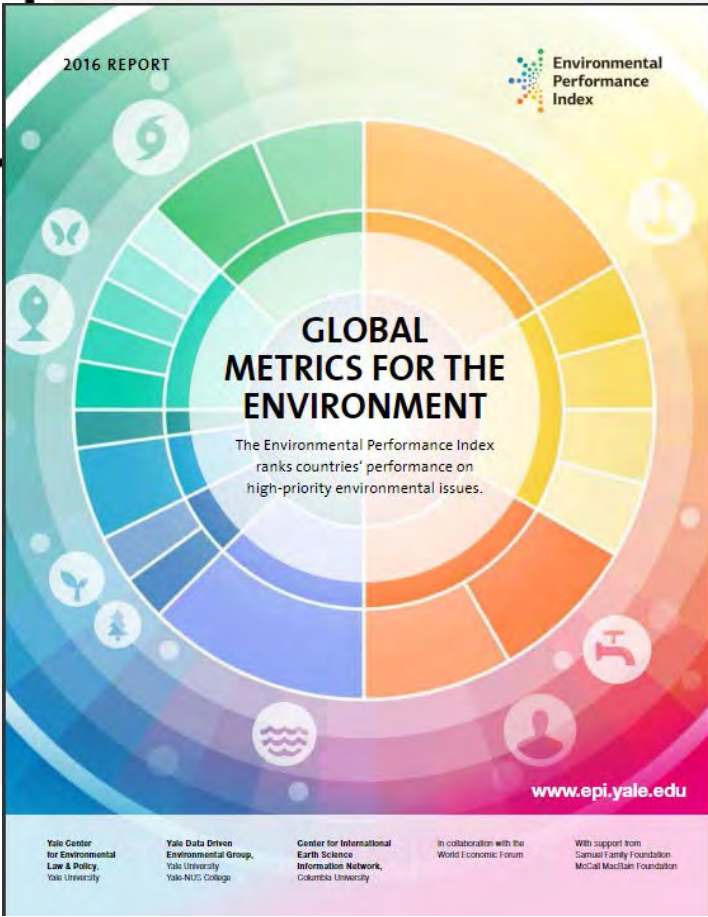
Special Feature: Technical Report Pathways towards sustainable landscapes  
First Online: 14 February 2015

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Shares Downloads Citations

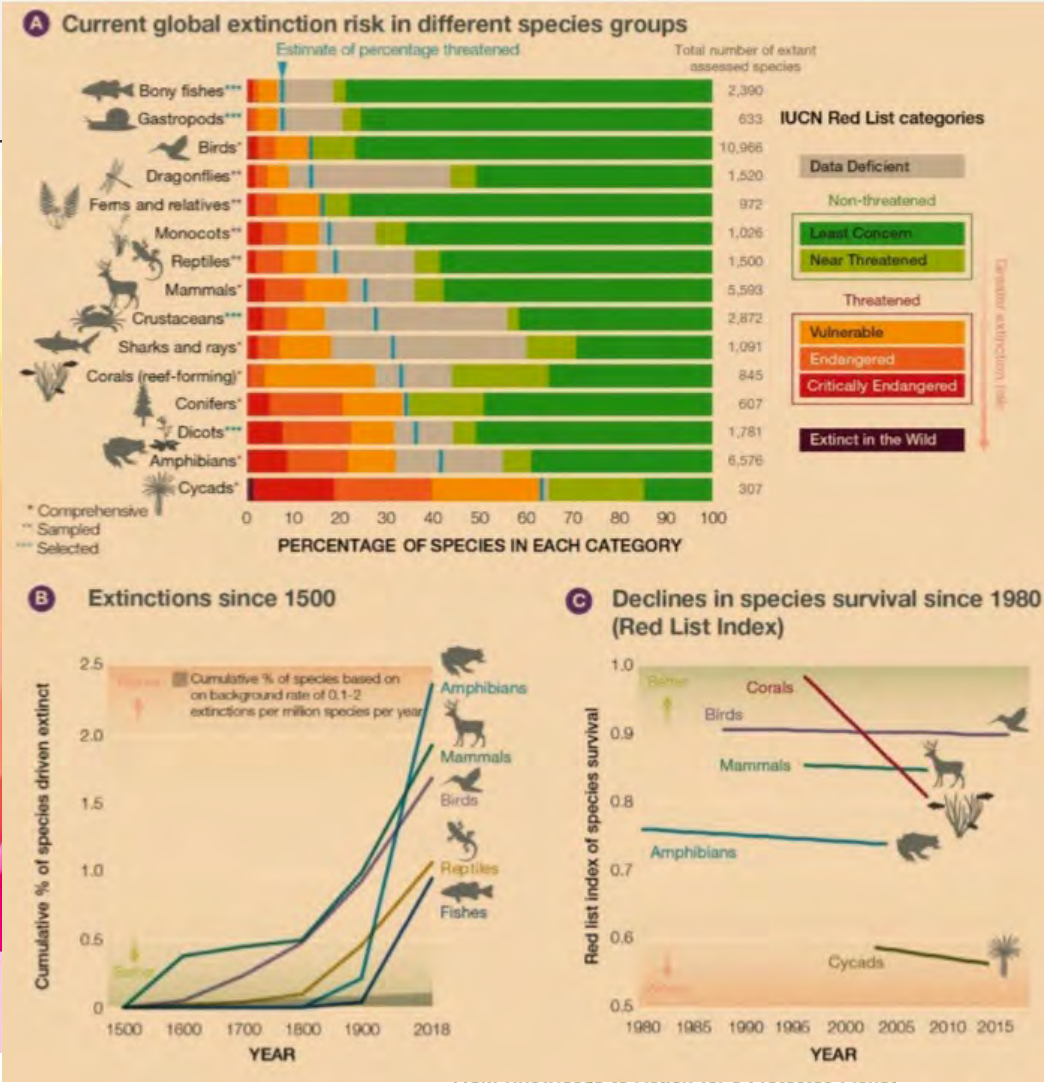
## Abstract

Achieving sustainable landscapes that integrate food production with biodiversity conservation remains challenging, particularly in the tropics where most forest clearance results from conversion to industrial agriculture. Land-sparing (delineating protected areas and intensifying agricultural production from developed land) has often been identified as more effective than land-sharing (mixing protection and production in an agro-ecological matrix) for biodiversity.

Hill et al. 2015



Hsu et al. 2016



Diaz et al. 2019

# Current trends in biodiversity

## ACP countries' challenges

▶ The main challenges to ensure biodiversity conservation, sustainable livelihoods and effective protected area management and governance are linked to:

- Policy and legal frameworks
- Institutional capacities
- Ineffective law enforcement
- Inadequate assessments of impacts from infrastructure developments
- Lack of sustainable funding mechanisms

## Consequences

- Biodiversity continue declining
- Ecosystems increasingly degraded
- Climate change impacts to nature and society
- Livelihoods, particularly of local communities, at risk




# **BIOPAMA programme**

- Addresses priorities for improved management & governance of biodiversity and natural resources

- tools
- services
- funding



	Caribbean Protected Areas Gateway
	Pacific Islands Protected Area Portal (PIPAP)
	Western Africa
	Western Africa, Marine
	Central Africa
	Eastern Africa
	Southern Africa
	Horn of Africa



# The Regional Observatories (Regional Reference Information Systems)

- open-source, free and secure tools
- bring together the best available science and knowledge
- collect and analyse protected areas data, information and trends
  - protected areas and biodiversity ecosystems
  - species, habitats, pressures, threats
  - socioeconomic
  - management & governance

# Caribbean Protected Areas Gateway

*Linking data to better decision*



# Caribbean Protected Areas Gateway *(Linking data to better decisions)*

- hosted by the University of the West Indies (UWI)
- housed at the Centre for Resource Management and Environmental Studies (CERMES)
- launched in 2015
- funded through the 11<sup>th</sup> EDF



## The Caribbean countries (15)

- Antigua & Barbuda
- The Bahamas
- Barbados
- Belize
- Dominica
- Dominican Republic
- Grenada
- Guyana
- Haiti
- Jamaica
- St. Kitts & Nevis
- Saint Lucia
- St. Vincent & the Grenadines
- Suriname
- Trinidad and Tobago





# Caribbean Protected Areas Gateway *(Linking data to better decisions)*

## Aim

- ▶ • to improve the long-term conservation and sustainable use of natural resources in Caribbean ACP countries, via improved decision making
  - in protected areas and surrounding communities

## Objectives

- capacity building
- provide critical services and tools
- to complement and align with existing platforms and initiatives

# Caribbean Protected Areas Gateway

An initiative of the ACP Group of States financed by the European Union (EU)'s 11<sup>th</sup> European Development Fund

Implementing partner



the scientific know how of the (European Commission)

Host



UWI



engages primarily with:

- national and regional level agencies and institutions
- protected area practitioners

Implementing partner



ORMACC

biodiversity conservation expertise of IUCN



# Caribbean Protected Areas Gateway (Team)

## IUCN



**Hyacinth Armstrong-Vaughn**  
Regional Coordinitor



**Jose Courrau**  
Senior Officer & Advisor



**Justin Springer**  
Technical Assistant

## UWI – CERMES



**Julian Walcott**  
Technical Officer



**Carmel Haynes**  
Communications



**Anton Shepherd**  
Web Developer



**Dionne Carbon**  
Research Assistant

## JRC



**Mariagrazia Graziano**  
MPA Specialist



# Technical Officer



# Caribbean Protected Areas Gateway (Technical Officer)

## Role

► Intermediary between the end users and the Implementing agencies



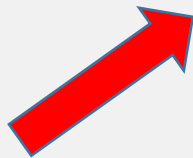
UWI

ORMACC

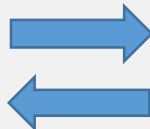
JRC



Technical  
Officer



Caribbean Protected  
Areas Gateway



End Users  
& target audience

## Functions

- liaise with the other Regional TOs
- develop relationships & networks
- manage the collection of data & information
  - management of a GeoNode
  - promote data sharing
- respond to request from stakeholders
- facilitate technical support and trainings
- report on advances and updates Caribbean Gateway
- develop communications products
  - newsletters and presentations
- facilitate the dissemination of information
  - lessons learned, best practices, case studies

# Caribbean Protected Areas Gateway

## Key Components



# Caribbean Protected Areas Gateway *(Linking data to better decisions)*

## 1. Regional Reference Information System

- user interface <http://caribbean-rris.biopama.org/>
- data/content management system (GeoNode) <http://geonode-rris.biopama.org/>

## 2. Communications platform (Yammer) <https://www.yammer.com/biopama/>

## 3. Funding mechanism – Action Component <https://action.biopama.org/>

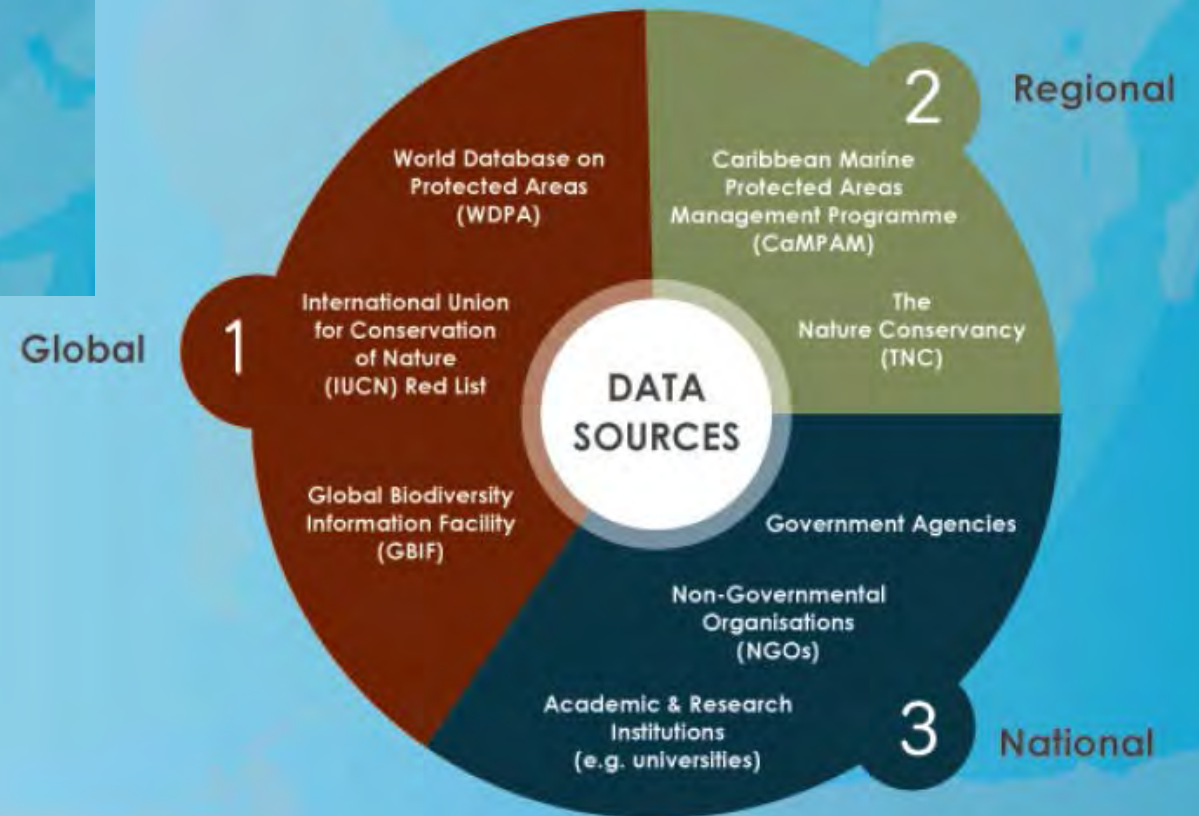
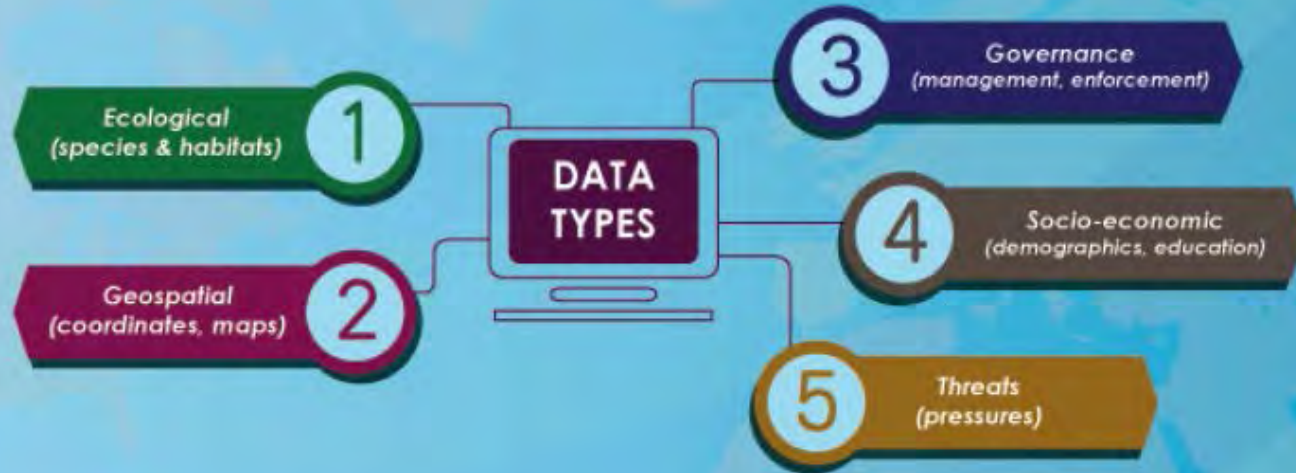
## 4. Server

# Caribbean Protected Areas Gateway (*Linking data to better decisions*)

## Regional Reference Information System

- ▶ bring together the best available science and knowledge and make it easily accessible, at regional, country and site level:
  - the many knowledge products
  - projects
  - databases on protected areas
  - species
  - data uploaded, created and generated by the users themselves
- a tool which can be used to support decision making for planning, designating and managing protected areas

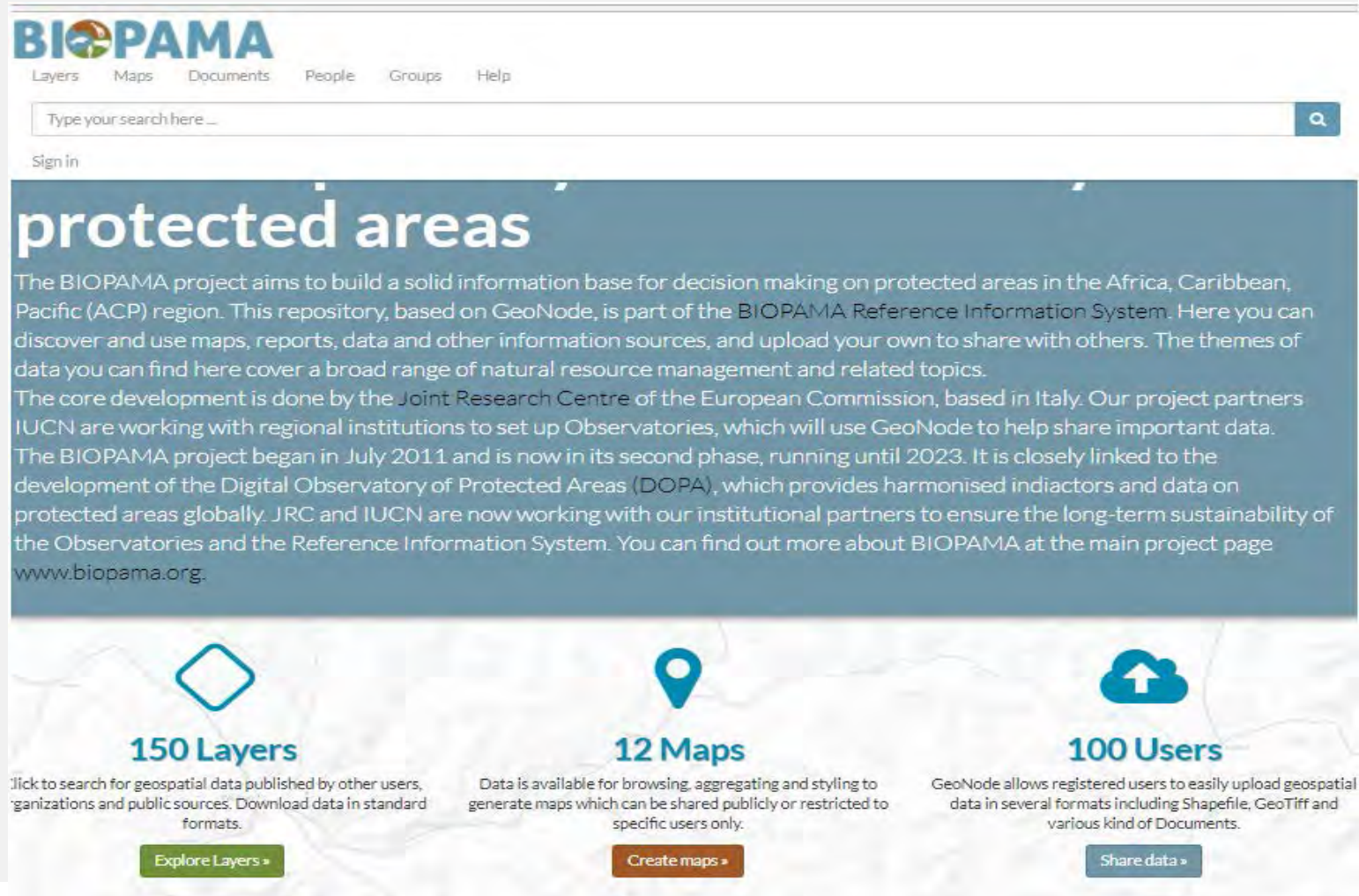






# Data repository for biodiversity and protected areas (GeoNode)

- content management system
- platform for the management and publication of data
  - documents
  - geospatial data
- upload your own to share with others
- create useful maps



The screenshot shows the BIOPAMA website interface. At the top is the BIOPAMA logo and a navigation menu with links for Layers, Maps, Documents, People, Groups, and Help. Below the menu is a search bar with the placeholder text 'Type your search here...' and a 'Sign in' link. The main heading is 'protected areas'. The text below the heading describes the BIOPAMA project's goal to build a solid information base for decision making on protected areas in the Africa, Caribbean, Pacific (ACP) region. It mentions that the repository is based on GeoNode and is part of the BIOPAMA Reference Information System. The text also states that the core development is done by the Joint Research Centre of the European Commission, based in Italy, and that the project partners IUCN are working with regional institutions to set up Observatories. The 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). The text concludes by stating that the project aims to ensure the long-term sustainability of the Observatories and the Reference Information System, and provides the website URL www.biopama.org.

Below the text, there are three main features highlighted with icons and buttons:

- 150 Layers**: Click to search for geospatial data published by other users, organizations and public sources. Download data in standard formats. [Explore Layers »](#)
- 12 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 »](#)

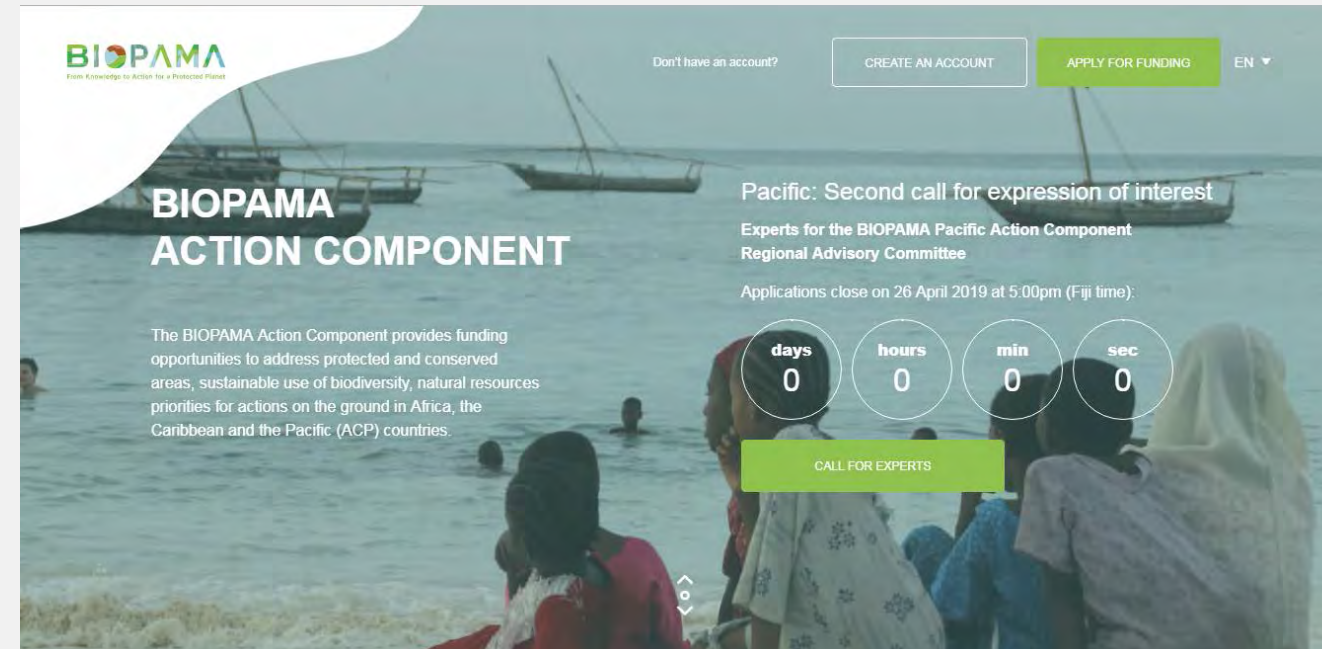
# Social Networking Platform (Yammer)

- enhance communications
- improve engagement
- build transparency (better informed)
- facilitates better networking
- create stronger communities
- share events, documents, ideas etc.



# Funding Mechanism (Action Component)

- will support specific actions on the ground aimed at strengthening protected areas and natural resources management effectiveness and governance
- by enabling protected area agencies, NGOs, local communities and other key actors to effectively implement their field projects





# **Caribbean Protected Areas Gateway**

## **Services & Benefits**

## Key Services

- Data hub/repository for biodiversity & PA data
- Provision of tools and analyses
  - apps
- Capacity building
  - trainings
  - teaching
- Reporting
  - templates
  - NBSAPs
  - MEA reports
- Funding (Action Component)
- Data storage/backup

# Caribbean Protected Areas Gateway *(Linking data to better decisions)*



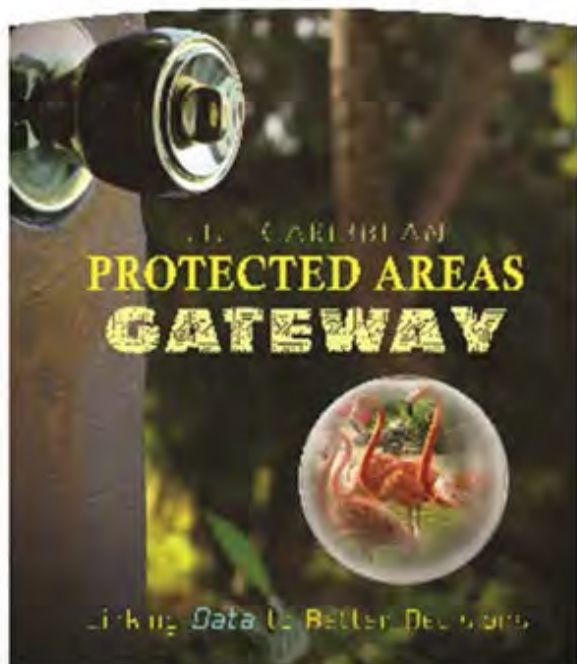


## Key Benefits

- Increased data mobilisation
  - ▶ • improved data availability and quality
  - more informed decisions
- Better networking and communications
  - increased transparency
  - increased collaboration
  - maximising of resources & reduction in duplication of efforts
  - lessons learned (case studies, information products etc.)
- Development of capacities
- Better reporting
- Funding opportunities

## Useful Links

- African, Caribbean, and Pacific (ACP) Group of States - <http://www.acp.int/>
- ▶ • BIOPAMA programme - <https://biopama.org/>
- BIOPAMA GeoNode - <http://geonode-rris.biopama.org/>
- Caribbean Protected Areas Gateway - <http://caribbean-rris.biopama.org/>
- Central Reference Information System - <https://rris.biopama.org/>
- CERMES-UWI - <https://www.cavehill.uwi.edu//cermes/home.aspx>
- IUCN-ORMACC - <https://www.iucn.org/regions/mexico-central-america-and-caribbean>
- European Commission-Joint Research Centre -  
[https://ec.europa.eu/info/departments/joint-research-centre\\_en](https://ec.europa.eu/info/departments/joint-research-centre_en)
- University of the West Indies (UWI) - <http://www.uwi.edu/index.asp>
- Yammer - <https://www.yammer.com/biopama/>



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

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

# Thank you!



# Questions?