

# BIOPAMA GEONODE MODULE: QUICK USER GUIDE

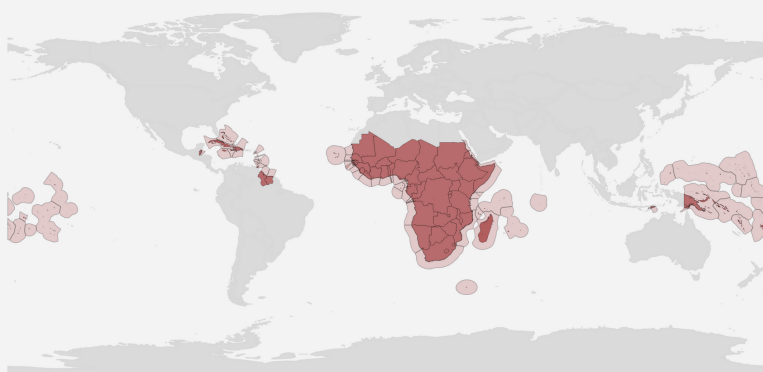
SIMPLE ONLINE TOOLS FOR SPATIAL DATA SHARING AND DECISION MAKING

## *What is the BIOPAMA GeoNode Module?*

The [GeoNode Module](#) of the [BIOPAMA Reference Information System \(RIS\)](#) provides a simple way to share geospatial data, make maps and link data to conservation goals. In BIOPAMA, GeoNode provides a data repository for collecting, interpreting, and sharing data on biodiversity and protected areas within the African, Caribbean and Pacific (ACP) Group of States. Using the functions of GeoNode, it allows users to share and download relevant data as vectors (shapefiles, json, csv, kml and kmz) and rasters (GeoTIFF) in a user-friendly way.

BIOPAMA Geonode aims at fostering knowledge exchange among decision makers in the fields of biodiversity and conservation. Users can find data, maps and other information which can be further analysed within the BIOPAMA [Reference Information System](#) for tracking progress towards conservation goals at global, regional, national and local scale.

BIOPAMA Geonode spatial data infrastructure is simple to use – non-specialist users can easily upload geospatial data without any detailed technical knowledge. This tool therefore grants the possibility to share data and spatial information in support of effective conservation strategies. It is important and useful to share such data - data and information on the state and trends of biodiversity are fundamental to monitor the conservation status of the world's ecosystems and to tackle the biodiversity crisis we are facing.



## 79 COUNTRIES

**The Biodiversity and Protected Areas Management (BIOPAMA)** programme is an initiative of the Organisation of **African, Caribbean and Pacific States** (OACPS) financed by the European Union's 11th European Development Fund (EDF), jointly implemented by the International Union for Conservation of Nature (IUCN) and the Joint Research Centre of the European Commission (JRC) aims to improve the long-term conservation and sustainable use of natural resources in African, Caribbean and Pacific (ACP) countries, in protected areas and surrounding communities.

**THIS QUICK USER GUIDE TELLS YOU HOW TO:**

**1. Access the platform: Go to Part 1 of the User Guide**

**Create** new account and user profile

**Search** layers and maps

**2. Share and contribute: Go to Part 2 of the User Guide**

**Add data:** upload a new layer

**Make a map:** combine existing layers

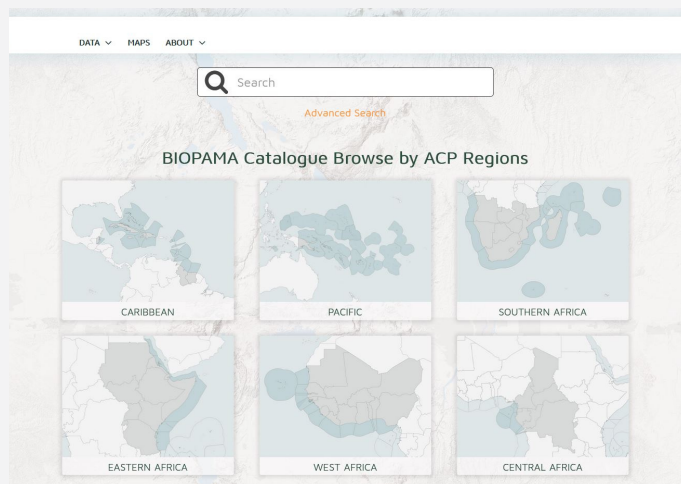
**3. Connect Geonode to the Conservation Tracking Tool: Go to Part 3 of the User Guide**

**Link GeoNode to the Tracking Tool:**

Upload a new indicator on the Tracking Tool



# Part 1: How to access the platform



## CREATE A NEW ACCOUNT

BIOPAMA Geonode can be accessed from the Reference Information System main page (link) and requires a specific account. Click on the "Sign in" link and in the dialog that follows click on "Create a new account". The registration page will be opened, allowing you to easily create your account.

We use the European Commission Authentication System (ECAS) to manage logins to BIOPAMA services. ECAS is the service allowing users to access most of the digital systems developed or used by the European Institutions. An auto-generated email will confirm your registration; log in and start exploring the platform. Once you have an account, access your profile settings and upload information from the Profile page.

## Featured Datasets



228 Layers

[Explore layers »](#)

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



12 Maps

[Explore maps »](#)

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



215 Users

[See users »](#)

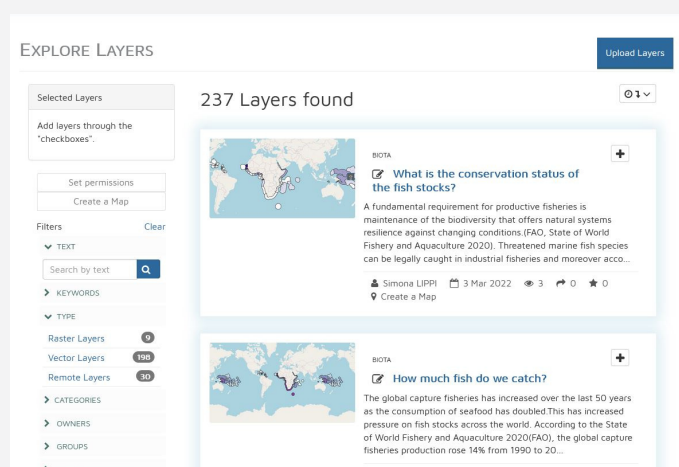
Geonode allows registered users to easily upload geospatial data and various documents in several formats.

## WHAT TYPE OF INFORMATION CAN YOU FIND IN THE BIOPAMA GEONODE PLATFORM?

BIOPAMA Geonode is a spatial data infrastructure focusing on themes related to biodiversity and protected areas. Our catalogue concentrates on the status and threats of natural resources in the ACP countries (and features many global data layers on those topics). There are two main types of resources: **layers (data) and maps**. In the GeoNode main page, the banner shows two main buttons: **Data and Maps**. Here you can find Layers and Maps:

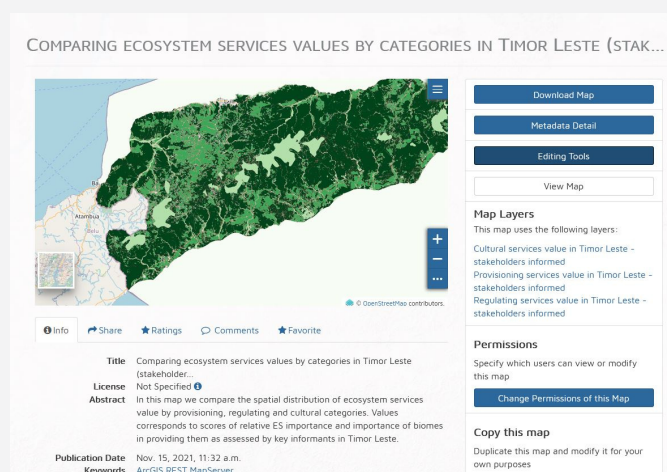
### LAYERS:

You can easily upload your own data to GeoNode and use existing data from the catalogue. Layers display spatial data and are associated with metadata and users can comment and rate each individual dataset. Raster or vector data can be uploaded to create a new layer.



### MAPS:

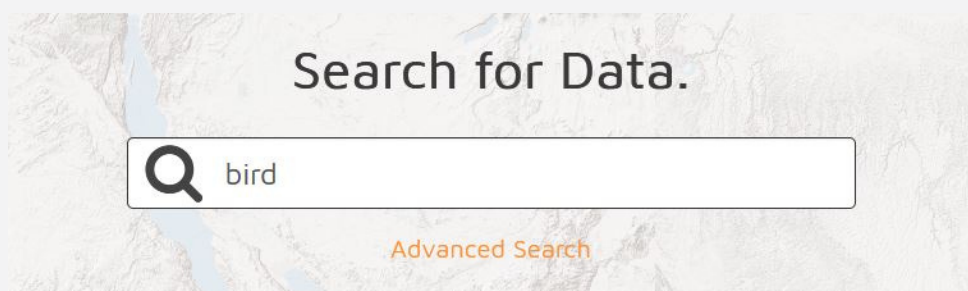
You can use data to easily make your own maps, and define your own styles and colours. Layers can also be added from a remote service or by using web service layers such as Google or MapQuest. Layers can be ordered and modified by adjusting their transparency to make the information more understandable. Maps can be downloaded or printed in various standard formats such as PDF or PNG.





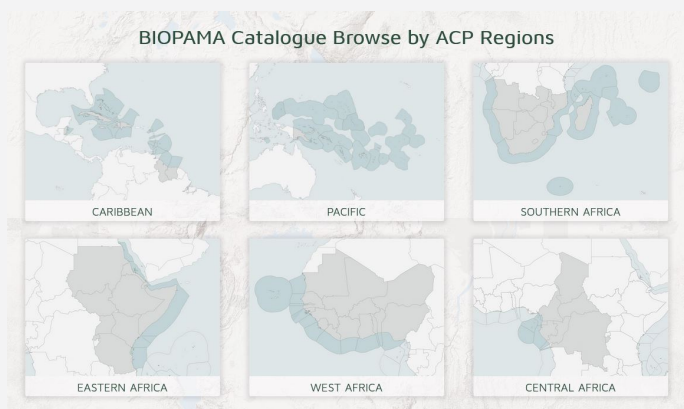
## HOW CAN YOU FIND THE INFORMATION?

Users can search layers and maps through key words, or by specifying the data type, category, geographic area, users or other parameters. Users can also make use of the free text search box and use several other filters within the “Advanced Search” options.



In the BIOPAMA GeoNode landing page you may find the list of all the categories available in the repository. You also have the possibility to filter data by each of the ACP regions. Clicking on Layers from the Data menu (navigation bar), the Layers page will appear you can scroll down to explore all available layers. Maps link in the navigation bar allow you to land in the Maps search page and use available filters to search specific maps.

### Discover the available datasets.



**Note:** BIOPAMA GeoNode aims to cover areas referred to the African, Caribbean and Pacific countries – these are the project countries, but many of the datasets are, or are derived from, data that have global coverage

# Part 2: How to contribute information

## UPLOAD NEW LAYERS OR CREATE MAPS

In BIOPAMA Geonode you can upload **new layers** or creating **new maps**.

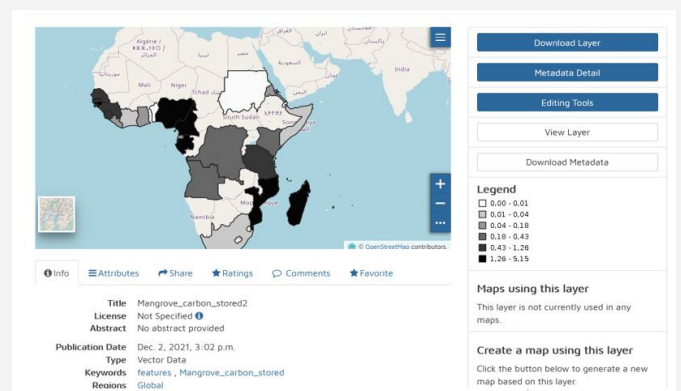
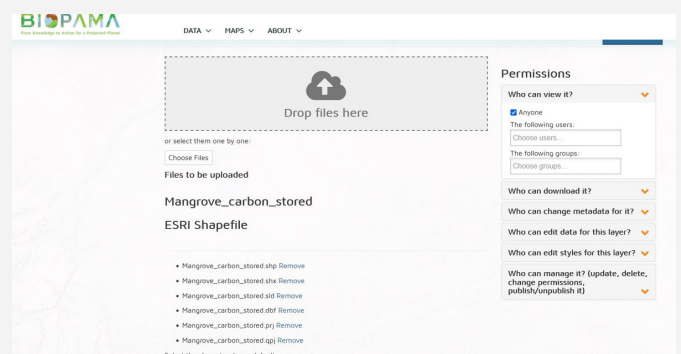
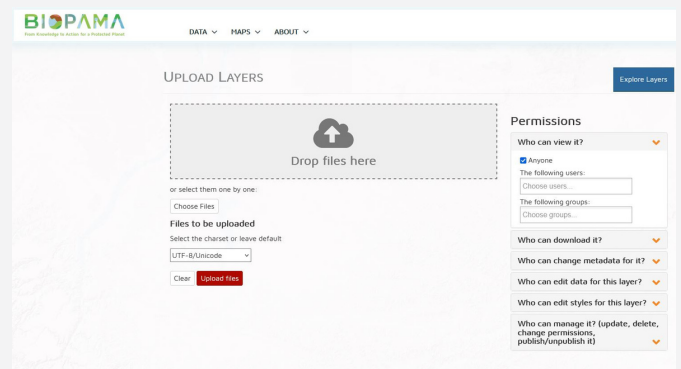
### UPLOADING LAYERS:

Layers are the main type of resource to upload your data and it can be used to create new information and make new maps.

Users can upload new layers from the **Data link** in the banner or from the Layers Page (**Upload Layers button**). The **Layers Uploading page** will be displayed.

Users can upload files from their device using "Choose Files" or by dropping files directly from the stored folder. You can also change the default Permissions settings and choose several layer possibilities.

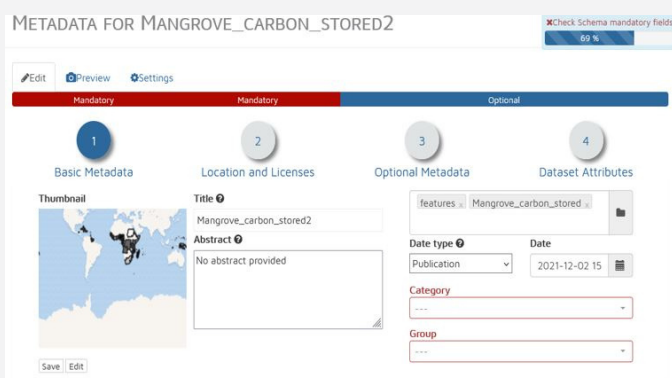
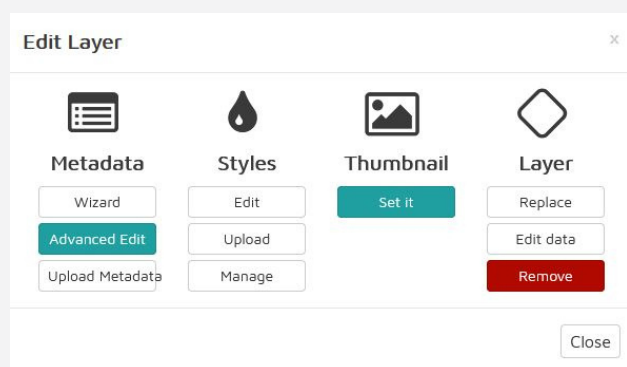
Here an example of uploading an ESRI Shapefile (note that shapefiles are actually a collection of files, with the mandatory files (.shp, .shx, .dbf and .prj). In addition, a styling file (.sld) has been uploaded – this defines the colours and symbols that can be used for the layer. Once you have clicked on the Upload Files button, a new layer page will be displayed with a Map preview box, a tab and a tool section. (Raster data can be uploaded as GeoTIFFs)



Metadata: it is **fundamental** to provide information on the data you have uploaded; essential information such as title, abstract, **data source are mandatory**. Clicking on the Editing Tools link it will be possible to select the **Wizard button that helps you to fill all boxes**.

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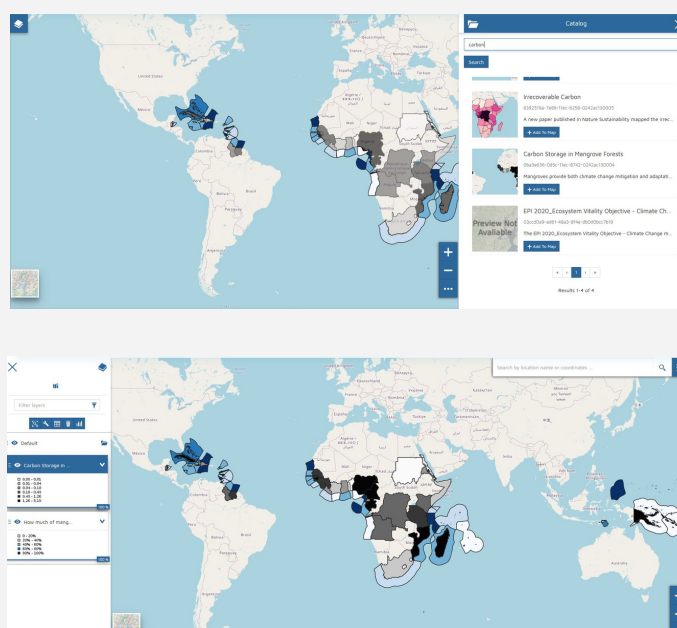
it is recommended to choose an explanatory and attractive title. You should provide an exhaustive explanation of the data that makes it understandable and easily reusable by other users; citing data sources properly. Remember, the purpose of the metadata is to help a user that is not familiar with the layer understand how the data can be used, where they have come from and what they contain. Use metadata to guide such users, so be as clear and concise as possible.



All layers can be downloaded in their original data format, exported copying the html code or used as **WMS services** (WMS services are online maps and a great way to share visualisations of your data without having to download the underlying data)

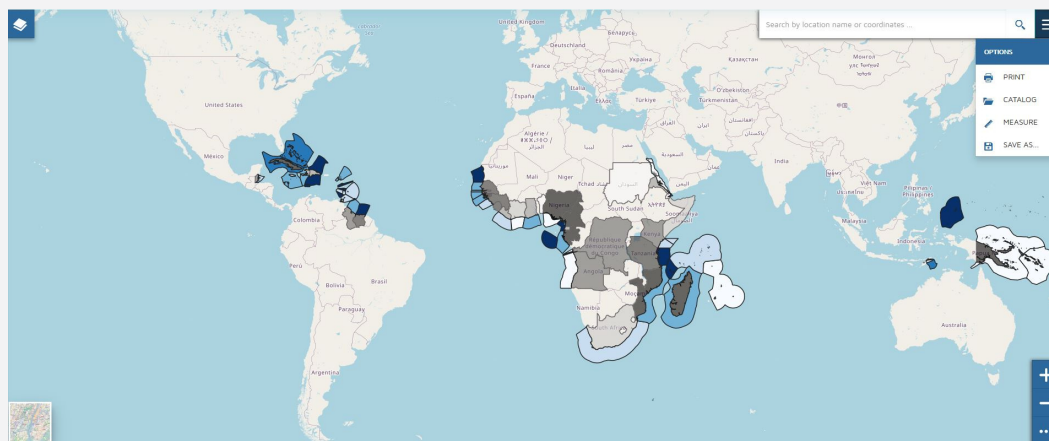
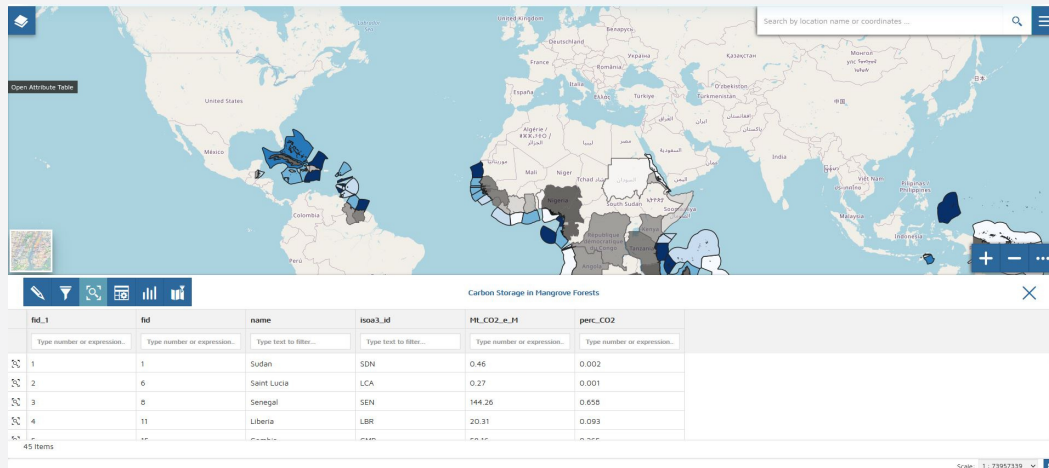
## CREATING NEW MAPS:

Combining existing layers or using remote services, GeoNode gives the possibility to create **new maps**. Create new maps by clicking on the Maps link in the navigation bar. On the Map viewer page, manage the chosen layers or add new ones from the repository by clicking on the icon on the upper-left corner. Here in the example, we aim to understand the conservation potential of mangroves to achieve climate goals in relation with the carbon stored by this habitat. We combine the **Carbon Storage** and **Mangrove protection by country** layers.



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You can manage layers overlap, opacity, filter attributes and, clicking on the layer name, a toolbar will allow you to explore the feature, delete, zoom or create Widgets as charts. Maps can be printed and saved in the repository.



To learn more about the GeoNode Platform, visit: [GeoNode Users Guide — GeoNode 3.2.1 documentation](#)

Note: As for the layers, providing metadata is mandatory. Essential information and permission properties must be added



# Part 3: Connect GeoNode Layer to the Conservation Tracking Tool

## USING GEONODE LAYER IN THE CONSERVATION TRACKING TOOL

In BIOPAMA, we can take the use of GeoNode to a new and more powerful level, by directly linking the data we have uploaded to specific conservation goals. In the core module of the Reference Information System, the Tracking tool, data and indicators, linked to biodiversity targets, are made available at different scale levels, from global to site-specific level to support decision making on conservation strategies and tracking PAs progress towards conservation targets. Metrics stored in the GeoNode repository can be uploaded in the tracking tool to create indicators related to policy targets and goals

This section is targeted to all users who already know how to create new targets and indicators in the Tracking Tool. Detailed instructions on how to use the Conservation Tracking Tool will be the subject of a separate user guide. Here we simply explain how to link a data resource in GeoNode to a conservation goal. We recommend that, if you have a clear specific need to track a particular target, you reach out to us for advice – we can help guide you through the process. However, once you have set up such a goal, linking to data is straightforward:

As in the example below, once you have set the target, added the title and the abstract, choose the scale level of your indicator and click on the Select Data link. A new window will appear asking the data source.

The screenshot shows a web form titled "Edit entity test". It has three tabs: "General", "Mandatory", and "Optional". The "General" tab is active. Under "Get Data from", a dropdown menu is set to "External Map Data". Below this is a section titled "External Map Settings" with a sub-section "WMS base URL". A text input field contains the URL "https://geonode-riis.biopama.org/geoserver/geonode/wms?". Below the input field is a green message box that says "The URL looks good." There is a blue button labeled "Search WMS Server". Below the button, there are labels for "WMS Layers:" and "Layer Attributes:". At the bottom, there are three expandable sections: "CHART CONFIGURATION", "MAP CONFIGURATION", and "SYMBOLOLOGY", each with a right-pointing arrow.

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Choosing External Map Data and copying the WMS GeoNode url, you can select the specific layer through the Search WMS Server box. Once you have selected your layer and the related attributes, you can configure the chart and the map for your indicator (Please refer to the Tracking Tool Users Guide)

**Edit entity Carbone Storage in Mangrove habitat**

**External Map Settings**

**WMS base URL**

The WMS needs to have HTTPS, it needs a workspace, and it needs a '?' at the end. Eg: https://geospatial.jrc.ec.europa.eu/geoserver/biopama/wms? Empty values in the layer, '-' or null or undefined or NaN can be used to describe that a data item is not exists (ps: not exist does not means its value is 0).

Get Capabilities works, please pick a layer.

**Search WMS Server**

WMS Layers:

Carbon Storage in Mangrove Forests

State of NBSAPs publication\_2021

Global\_PADDD tracker (polygons)\_2019

Global\_PADDD tracker (points)\_2019

PHR\_20220117\_AnalysisExtent\_Nomukalsland\_Tong

PHR\_20220117\_AnalysisExtent\_Nomukalsland\_Tone0

**Save**

**Edit entity Carbone Storage in Mangrove habitat**

not exists (ps: not exist does not means its value is 0).

The layer WFS works, select some attributes from the layer.

**Search WMS Server**

WMS Layers:

Layer Attributes:

fid\_1 | xsd:int

the\_geom | gml:MultiPolygon

fid | xsd:int

name | xsd:string

isoa3\_id | xsd:string

Mt\_CO2\_e\_M | xsd:number

Show an Area not found message

Hide the indicator

If the area the user is viewing is not found in the indicator. Should a message be displayed, or should the indicator be hidden? IE. If you have a local indicator for protected areas, it will appear on all protected area pages for the tagged countries by default. However the indicator data might not be available for all protected areas. So using this field you can choose to hide the indicator.

**Save**

### Acknowledgements

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### Disclaimer

The contents of the BIOPAMA GeoNode Module and this quick user guide do not necessarily reflect the views or policies of the European Union, European Commission, BIOPAMA partners and donors, nor any third-party providers of content. The designations employed and the presentations of material on this website and on the maps that are made available through it do not imply the expression of any opinion whatsoever on the part of the European Union, European Commission, or contributory organisations, editors or publishers concerning the legal status of any country, territory, city area or of its authorities, or concerning the delimitation of its frontiers or boundaries or the designation of its name, frontiers or boundaries. The mention of a commercial entity or product in this publication does not imply endorsement by the European Union, European Commission, or contributory organisations.

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