

# **WFP GeoNode**

## *Use Cases and Roadmap*

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# World Food Programme



## WFP Global Presence

May 2013

- |                               |                                    |
|-------------------------------|------------------------------------|
| ● OMP Regional Bureau Panama  | ● OMJ Regional Bureau Johannesburg |
| ● OMD Regional Bureau Dakar   | ● OMC Regional Bureau Cairo        |
| ● OMN Regional Bureau Nairobi | ● OMB Regional Bureau Bangkok      |
| ★ Headquarters                | ■ Regional Bureau                  |
| ● Liaison Office              | ● Communications Office            |
|                               | ● Centre of Excellence             |
| ● Country Office              |                                    |
| ● Humanitarian Response Depot |                                    |

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The designations employed and the presentation of material in the maps do not imply the expression of any opinion whatsoever on the part of the World Food Programme concerning the legal or constitutional status of any country, territory or sea area, or concerning the delimitation of frontiers.

\* The Line of Control in Jammu and Kashmir agreed on by India and Pakistan is represented approximately by a dotted line. The final status of Jammu and Kashmir has not yet been agreed on by the parties.

\*\* A dispute exists between the Government of Pakistan and the United Kingdom of Great Britain and Northern Ireland concerning ownership of the Islamabad International Airport.

\*\*\* Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

# Outline

- Introduction
- WFP GeoNode in the organization
- Technical Update
- WFP GeoNode as part of the GIS Infrastructure
- WFP GeoNode projects
- Roadmap

# Introduction

 **WFPGeoNode**

Search... [Sign in](#)

LAYERS MAPS ▾ RESOURCES ▾ USERS

Welcome to the WFPGeoNode

Our corporate web application for creating and sharing geospatial data and maps designed for non-GIS experts.

[Get Started](#)

Image Credit: NASA

Layers	697	Maps	69	Static Maps	2186	Users	200
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Recent Maps



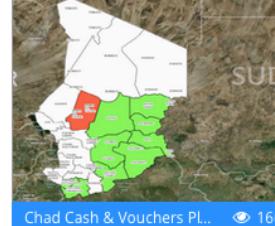
School Feeding in Egypt 97



CAR Operational Overvie... 330



WFP Presence by Region... 352



Chad Cash & Vouchers PL... 166

 **Explore Data**

Click to search for geospatial data from our corporate SDI or published by other users, organizations and public sources.

 **Explore Maps**

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

 **Upload Data**

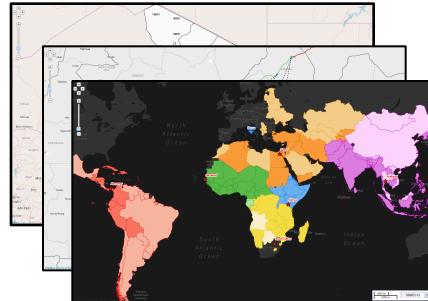
GeoNode allows registered users for easily upload geospatial data in several formats including shapefile, GeoTiff and KML.

WFPGeoNode 2.2.10 | [Contacts](#) | [Terms of Use](#) | [Get Started](#)

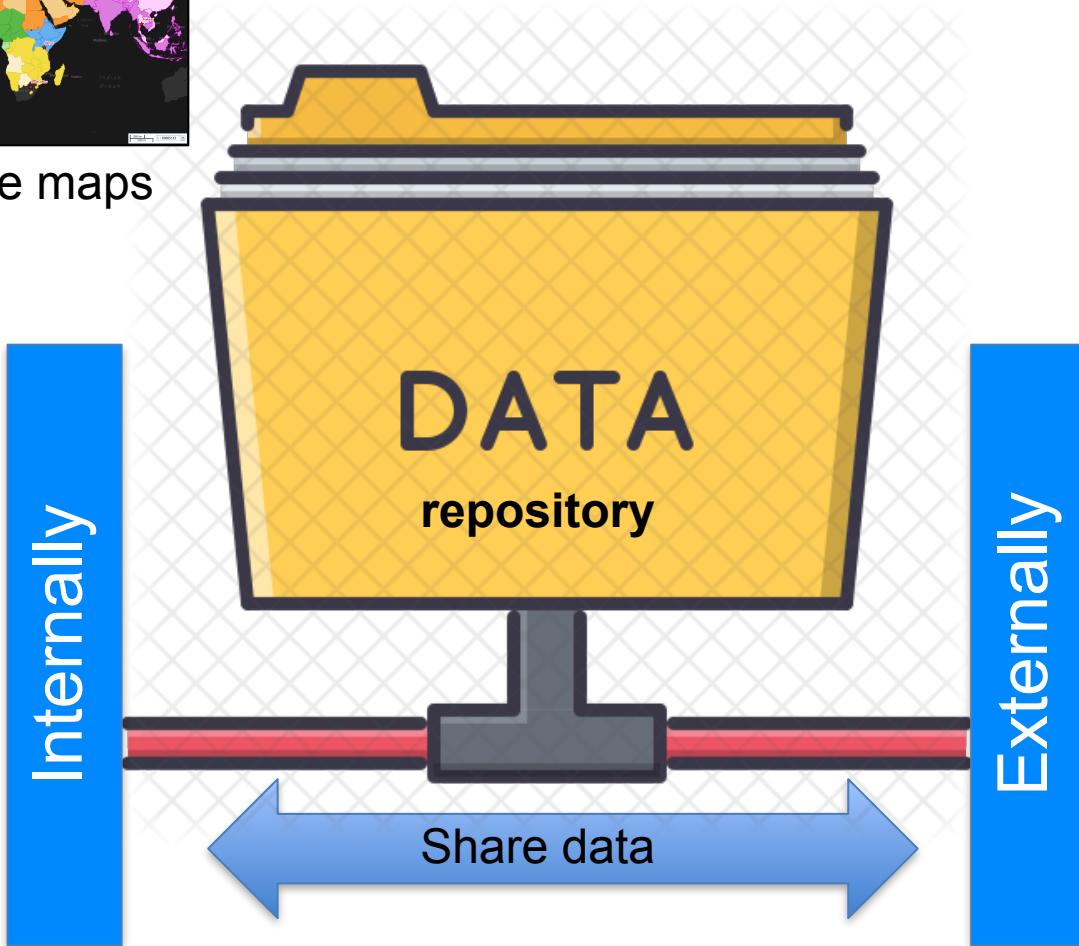
English 



# WFP GeoNode in the organization

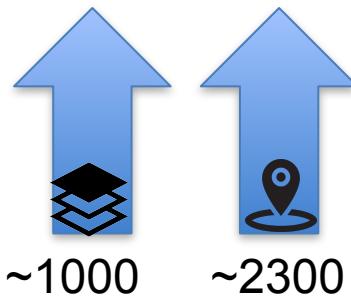


Interactive maps



# WFP GeoNode

Some numbers

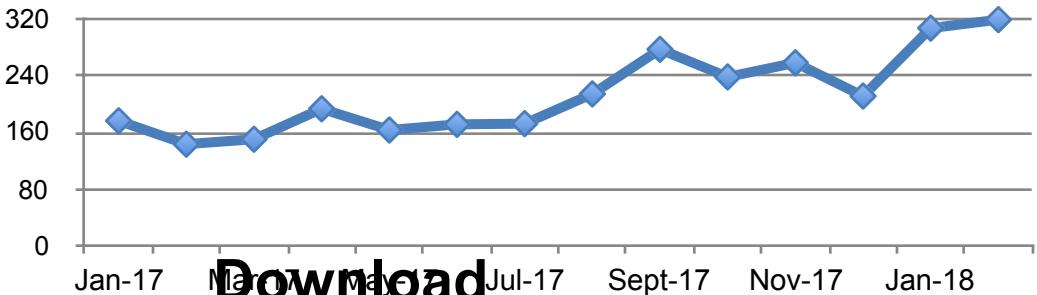


Top 10

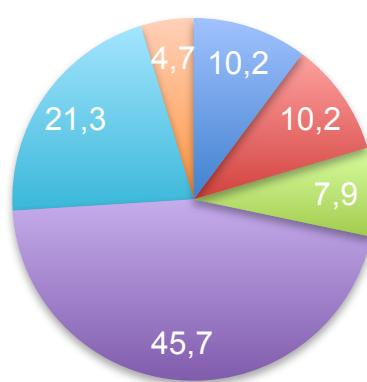
 United States
 United Kingdom
 Netherlands
 Canada
 Egypt
 Switzerland
 Nigeria
 France
 India
 Australia

>50%

Shapefile Download ~214 per month



Download  
from  
external  
users



- Private Sector
- Personal Use
- Government
- Academia
- UN Agency
- Other

# WFP GeoNode

As a hub

store data



Internal

SDI



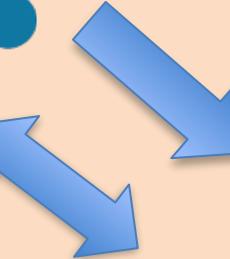
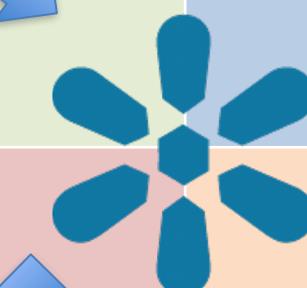
Public



request data



OPWeb



ICA

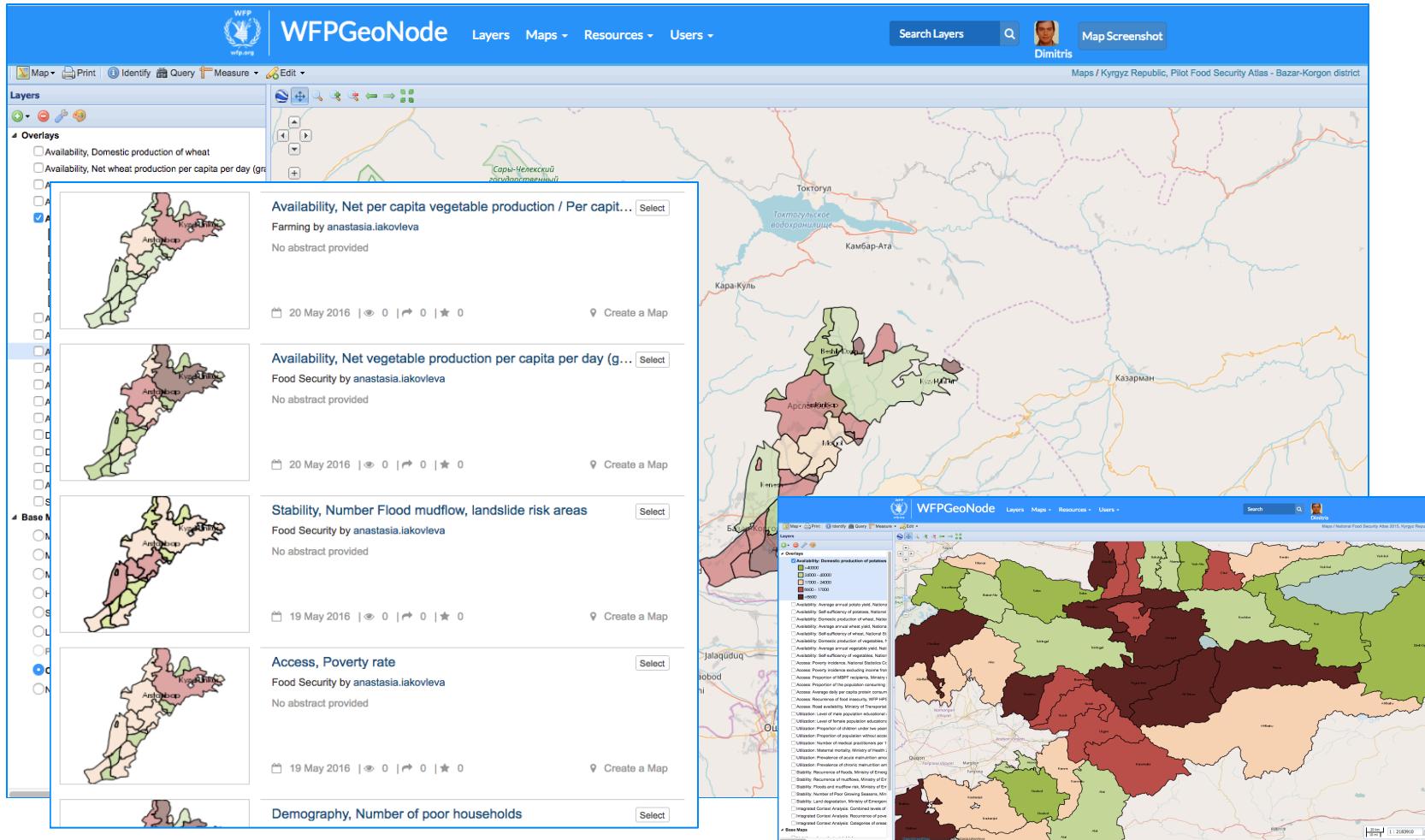


# WFP GeoNode in the organization

In the organization

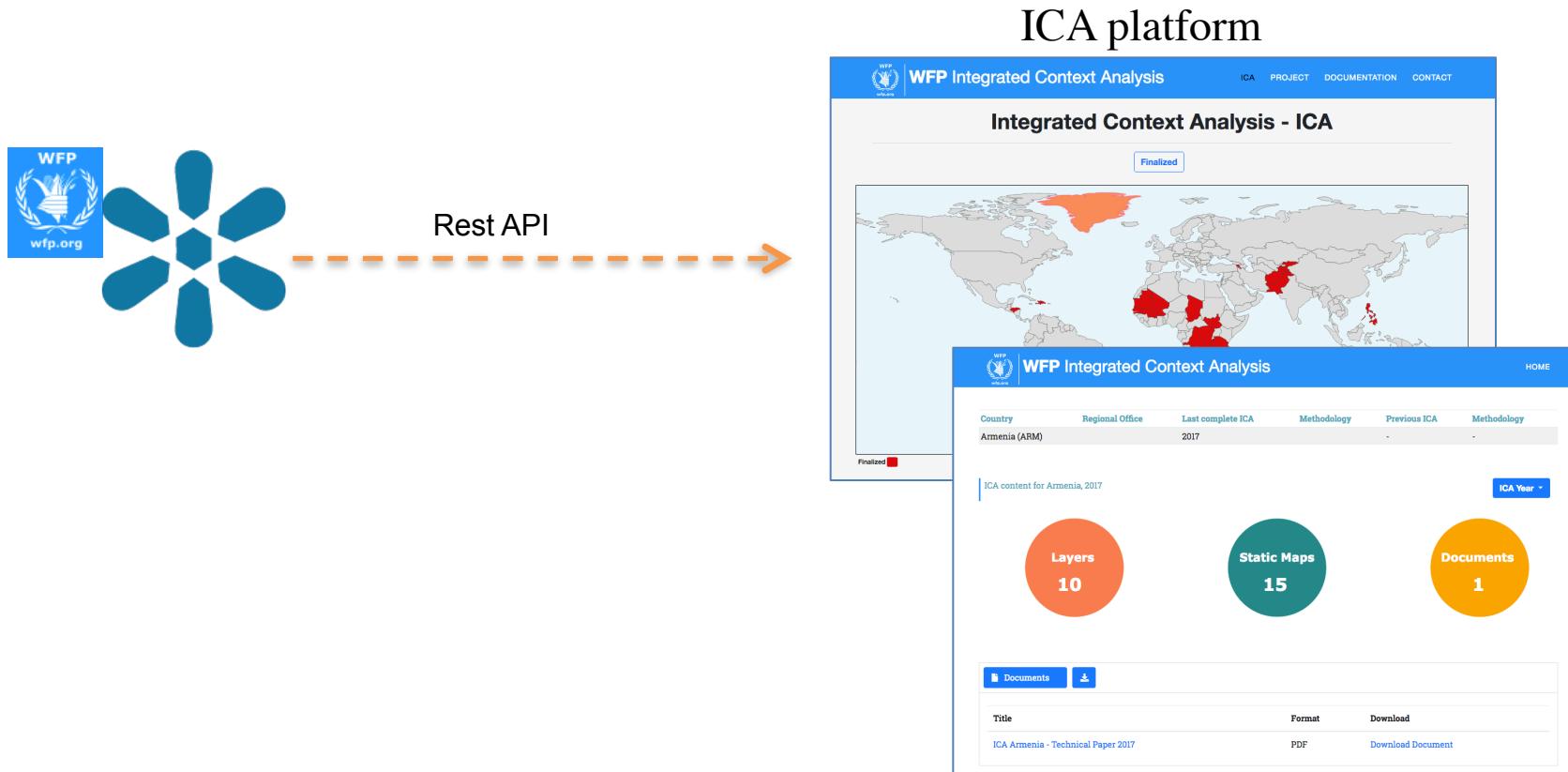
National Food Security Atlas, Kyrgyz Republic:

- > 60 layers



# WFP GeoNode Use Cases - ICA

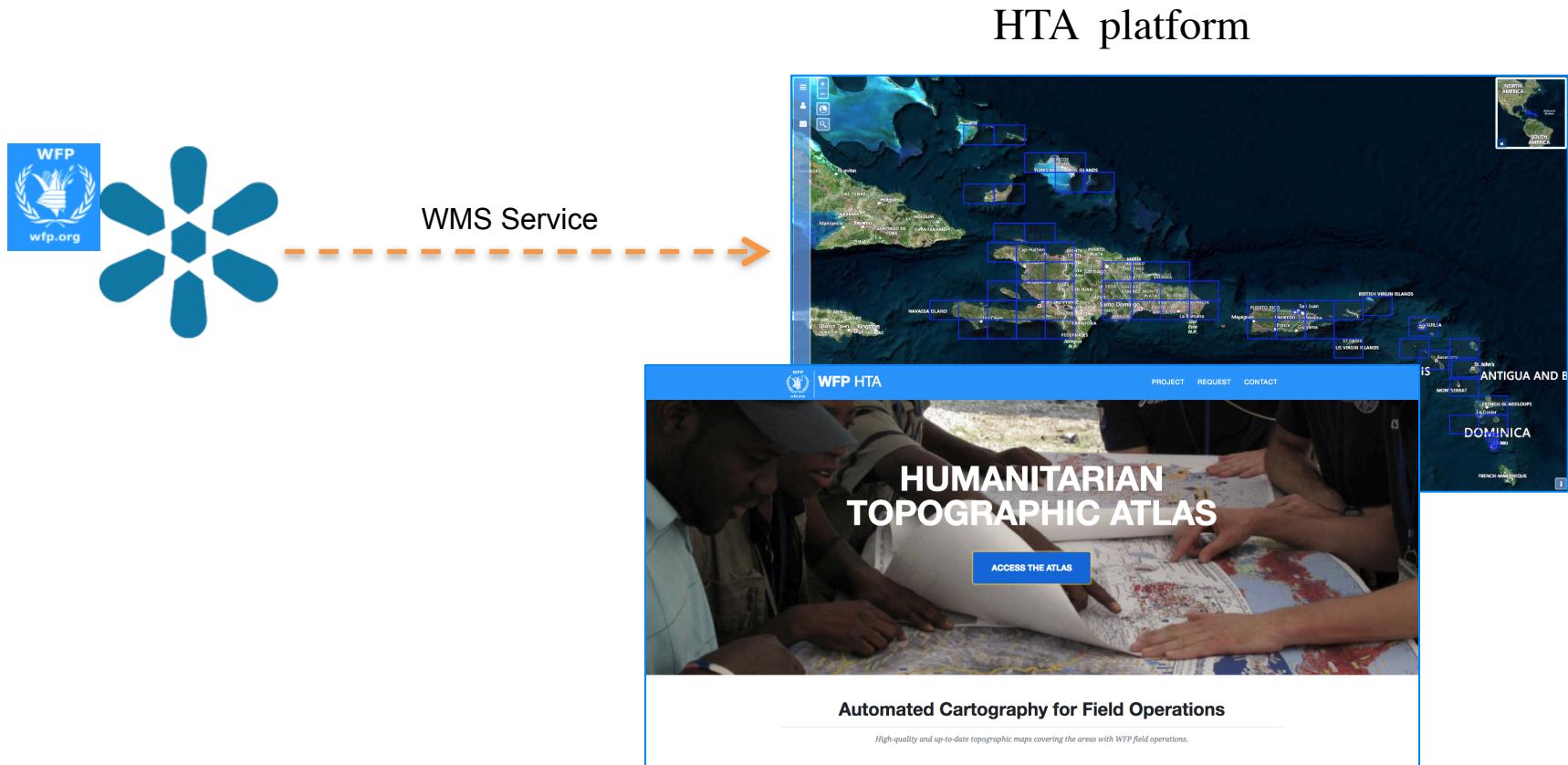
**Requirement:** to have a dedicated page for the ICA project where it is possible to display data grouped by country and year of analysis along with other metadata information ([geonode.wfp.org/imaps/ica/](http://geonode.wfp.org/imaps/ica/)).



# WFP GeoNode Use Cases - HTA

## Humanitarian Topographic Atlas

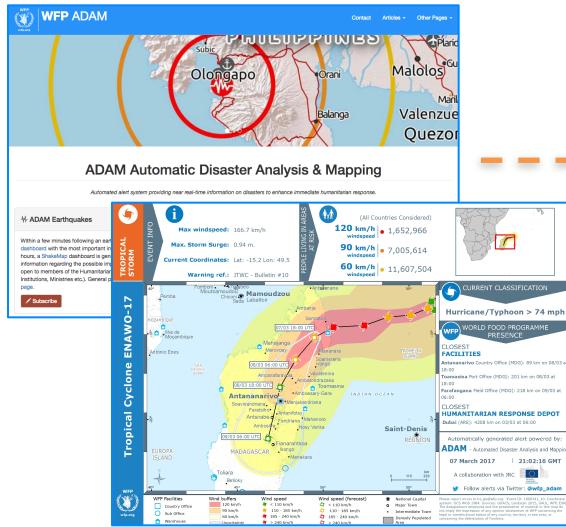
**Requirement:** to have a dedicated page for the HTA project with a global map divided into grids. The user will search for area of interest and download corresponding map by clicking on the grid ([geonode.wfp.org/imaps/hta/](http://geonode.wfp.org/imaps/hta/))



# WFP GeoNode Use Cases - ADAM

**Description:** ADAM is an automated alert system developed to provide near-real time information for earthquakes and tropical cyclones. The generated dashboards and pivot tables are **automatically** uploaded to GeoNode and later disseminated publicly via twitter (@WFP\_ADAM).

ADAM



# Technical Update

## Layer Filtering

Download part of the layer using:

- query builder
- map selector

**Download Layer**

**Do you want to filter it?**

[Query Builder](#) [Map Filter](#)

Match **all** of the following:

**iso3** =  [+](#)

**Pick your download format:**

[KML](#) [GeoJSON](#) [Excel](#) [CSV](#) [Zipped Shapefile](#)

**IDN** **IMY** **IND** **IRL** **IRN** **IRQ** **ISR**

[Close](#)

**Download Layer**

**Do you want to filter it?**

[Query Builder](#) [Map Filter](#)



Leaflet | Map tiles by Stamen Design, CC BY 3.0 — Map data © OpenStreetMap contributors, CC-BY-SA

**Pick your download format:**

[KML](#) [GeoJSON](#) [Excel](#) [CSV](#) [Zipped Shapefile](#)

[Close](#)

# Technical Update

Create a Layer with Administrative Boundaries (source Gaul2015):

## Create Layer

1 Create a layer by administrative levels

Choose an existing layer:

[Global Layer](#) [Country layer by region](#) [Country layer by province](#)

Download a CSV file of a selected country

---

### Upload Layer

Title

Layer type

Csv  No file chosen

Selected country

Explore Layers

### Permissions

Who can view it?

Anyone

The following users:

The following groups:

Who can download it?

Who can change metadata for it?

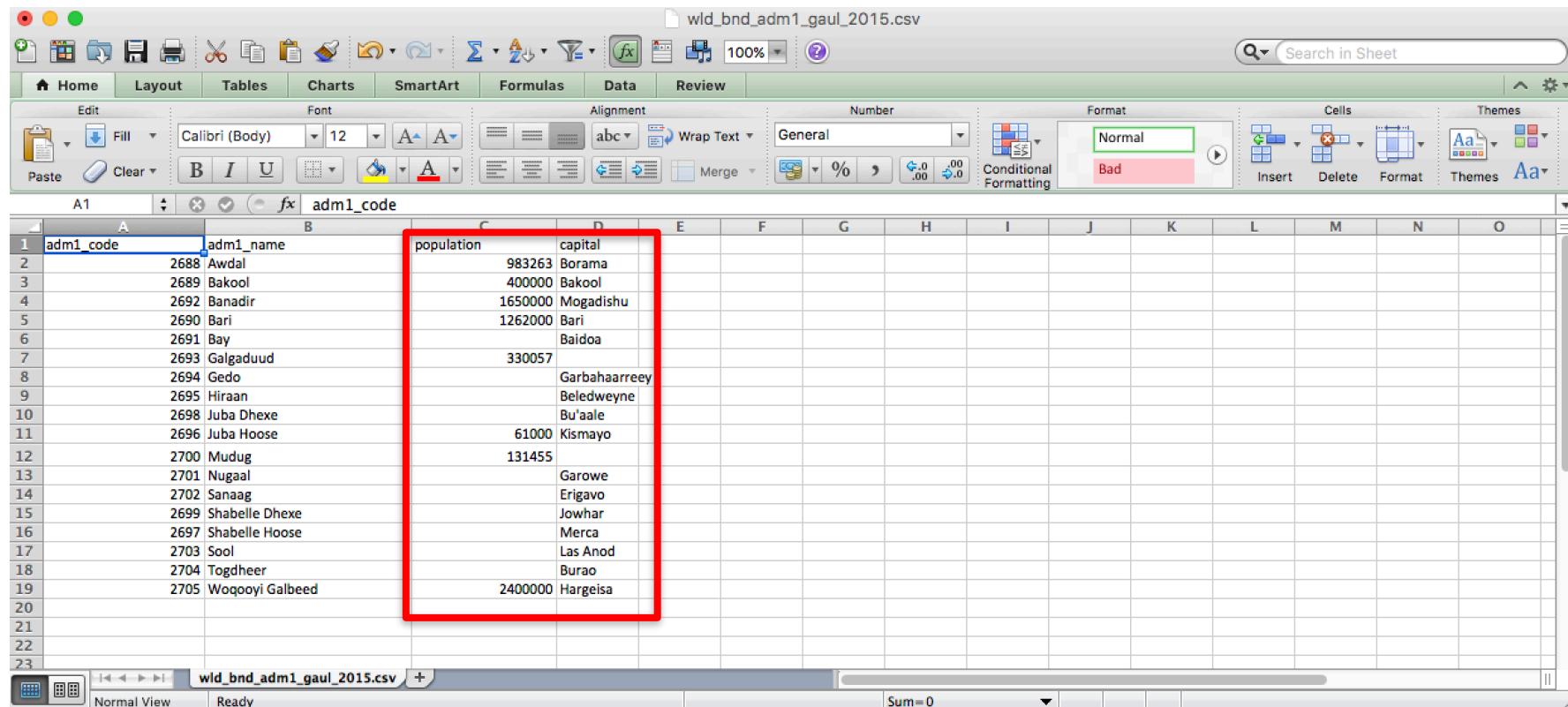
Who can edit data for this layer?

Who can edit styles for this layer?

Who can manage it? (update, delete, change permissions, publish/unpublish it)

# Technical Update

Open the CSV with Excel (e.g. Regions of Somalia). Add additional columns:



	adm1_code	adm1_name	population	capital
1	2688	Awdal	983263	Borama
2	2689	Bakool	400000	Bakool
3	2692	Banadir	1650000	Mogadishu
4	2690	Bari	1262000	Bari
5	2691	Bay		Baidoa
6	2693	Galgaduud	330057	
7	2694	Gedo		Garbaaarreey
8	2695	Hiraan		Beledweyne
9	2698	Juba Dhexe		Bu'aale
10	2696	Juba Hoose	61000	Kismayo
11	2700	Mudug	131455	
12	2701	Nugaal		Garowe
13	2702	Sanaag		Erigavo
14	2699	Shabelle Dhexe		Jowhar
15	2697	Shabelle Hoose		Merca
16	2703	Sool		Las Anod
17	2704	Togdheer		Burao
18	2705	Woqooyi Galbeed	2400000	Hargeisa
19				
20				
21				
22				
23				

Two added two columns:  
 1. Population of each region  
 2. Capital of each region

# Technical Update

## Create Layer – Method I

Upload the file:

### Create Layer

Create a layer by administrative levels

Choose an existing layer:

Global Layer    Country layer by region    Country layer by province

**Upload Layer**  
Fill in the necessary fields

Title:

Layer type: Global Layer

Csv: Choose File No file chosen

Selected country: World, Abyei, Afghanistan, Aksai Chin

Click Upload –The layer will be created

Upload

Explore Layers

### Permissions

Who can view it?

Anyone  
The following users:  
 Choose users...

The following groups:  
 Choose groups...

Who can download it?

Who can change metadata for it?

Who can edit data for this layer?

Who can edit styles for this layer?

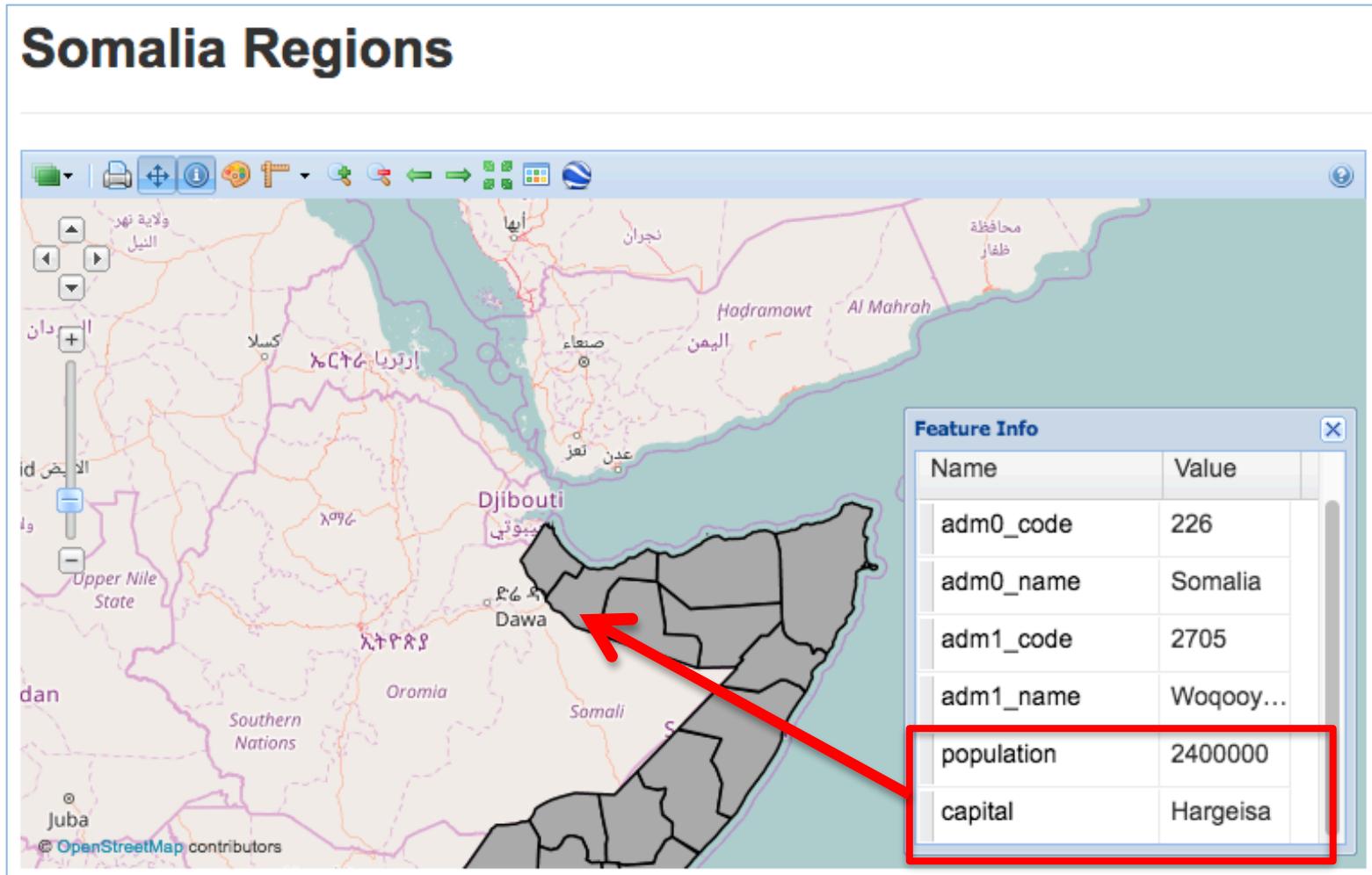
Who can manage it? (update, delete, change permissions, publish/unpublish it)

Set permissions

## Create Layer – Method I

# Technical Update

The Layer is Uploaded and can be retrieved in Layer List page



# Technical Update

## Create Layer – Method II

Create an empty layer with specified geometry and attributes

**Create Layer**

Select the empty layer method

**Create Empty Layer**

Name of new Layer  
Iraq IDP Locations

Type of Data  
Points

name  
Character

Type  
Character

Population  
Integer

Add Another Attribute

Upload

Fill in the necessary fields

Add attributes

Click Upload –The layer will be created

Permissions

Who can view it?  
 Anyone  
The following users:  
Choose users...

The following groups:  
Choose groups...

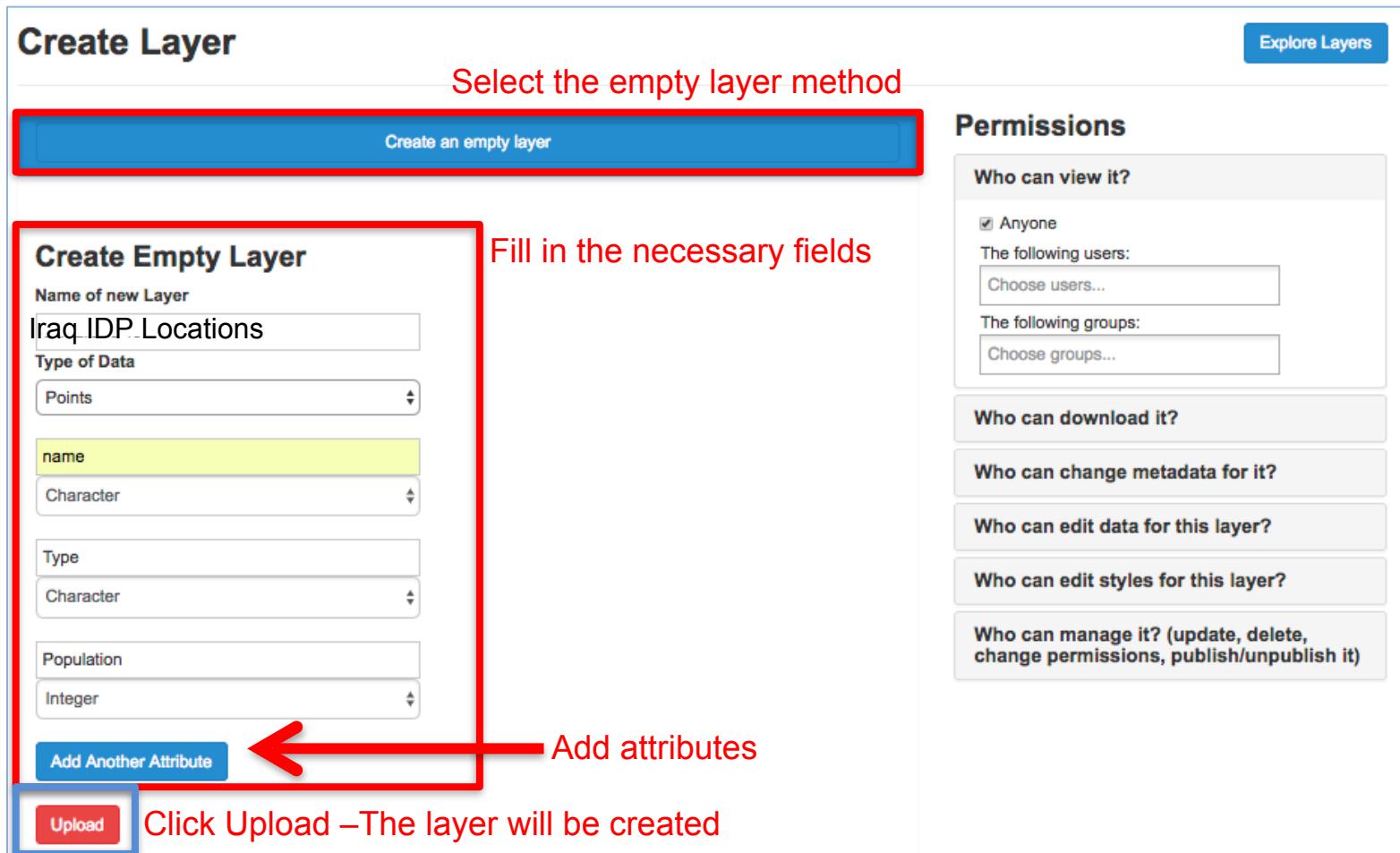
Who can download it?

Who can change metadata for it?

Who can edit data for this layer?

Who can edit styles for this layer?

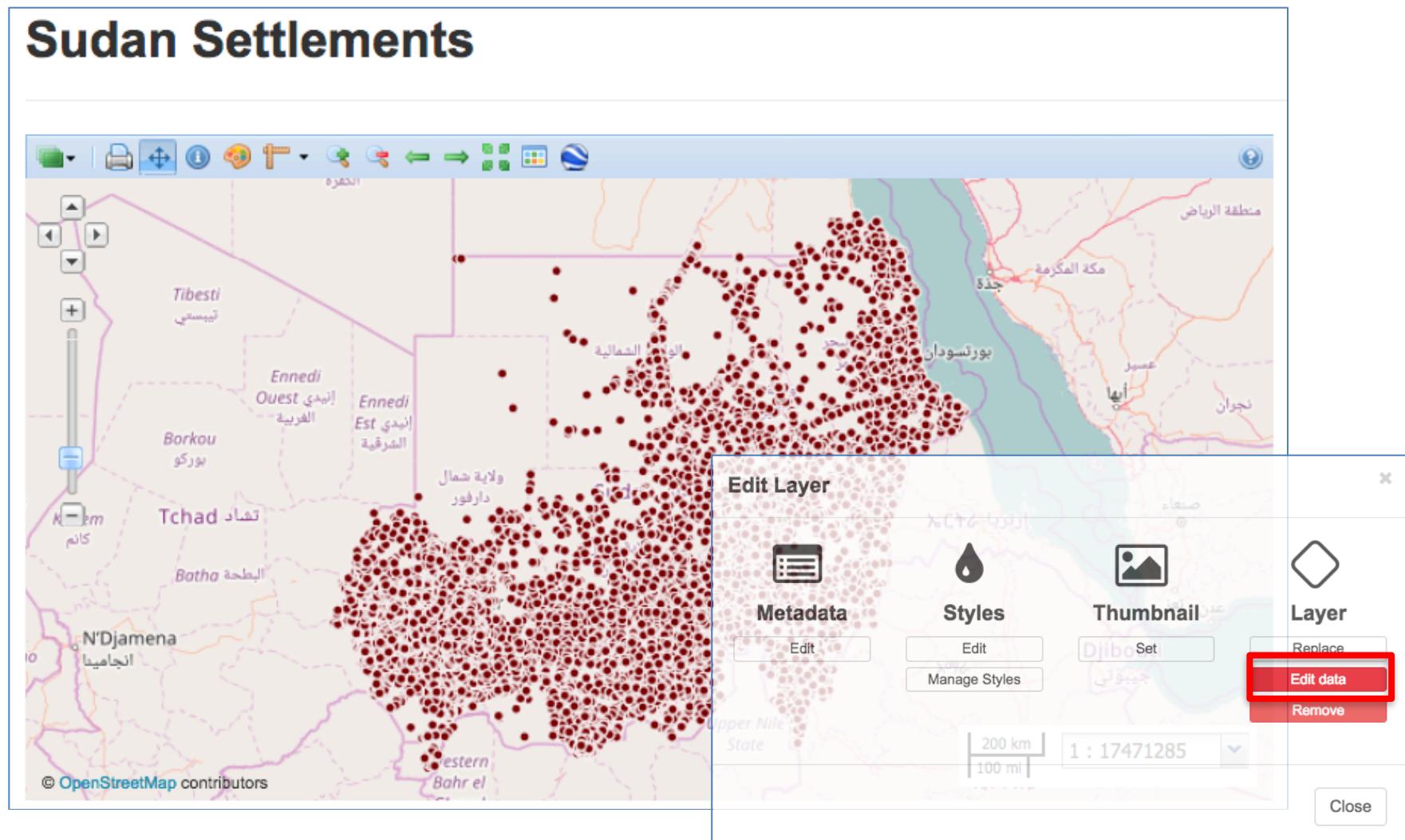
Who can manage it? (update, delete, change permissions, publish/unpublish it)



# Technical Update

Edit data - Add new data

Add\Edit Data



# Technical Update

Current limitation: **Editing** works for points

Add\Edit Data

### Edit Layer Data: sdn\_poi\_settlem\_gov\_1

[View Layer](#)
[Explore Layers](#)

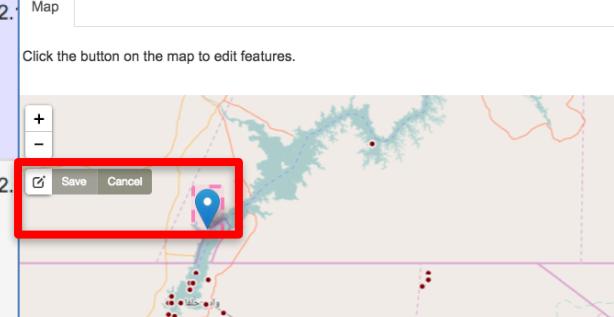
[Add a new entry](#)

Show 10 entries  Search:

	▲	type	source	name1	pcode	lccode	loc_count	state	x	y	type_text	locality	status	other_nam
<a href="#">Edit Attributes</a>	5	GPS	Faras	NF36050001	SU1103	Halfa		Northern	31.466667	22.2	Village	Halfa	Not Verified	Halfa
<a href="#">Edit Geometry</a>														
<a href="#">Delete Row</a>														
<a href="#">Edit Attributes</a>	5	GPS	Bi'r Jugub	NF36070001	SU1503	Halayeb		Red Sea	34.45	22.	Map	Click the button on the map to edit features.		
<a href="#">Edit Geometry</a>														
<a href="#">Delete Row</a>														
<a href="#">Edit Attributes</a>	5	GPS	Legag	NF36070004	SU1503	Halayeb		Red Sea	34.266667	22.	<input checked="" type="checkbox"/> Save	<input type="button" value="Cancel"/>		
<a href="#">Edit Geometry</a>														
<a href="#">Delete Row</a>														

Map

Click the button on the map to edit features.



Save Cancel

50 km Leaflet | Map tiles by Stamen Design, CC BY 3.0 — Map data © OpenStreetMap contributors, CC-BY-SA

Save Close

# Technical Update

Modified the existing remote service application to be able to select the layers to be added:

- not cascaded
- non-authenticated layers (public)

## Register New Service

Service URL

Service Type

**Available Layers** Filter

geonode:arm_trs_roads_osm
geonode:arm_trs_streets_osm
geonode:asp_poi_amenities_osm
geonode:bfa_trs_roads_osm
geonode:bfa_trs_streets_osm

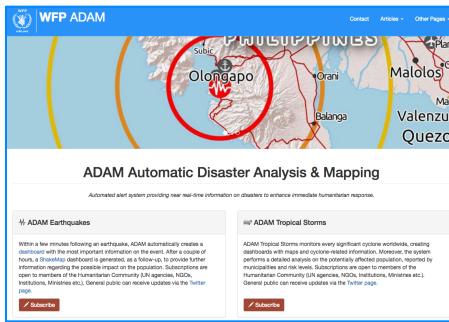
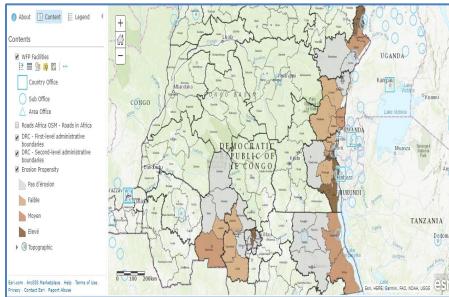
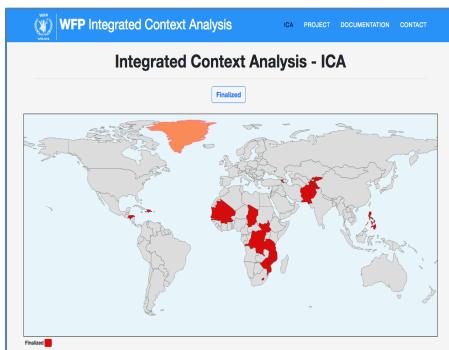
# WFP GeoNode Use Cases - OSM

**Description:** An automated process to download OSM data in regular basis (road networks, buildings etc.) and store them in local DB. The data are displayed in GeoNode via remote services (from external geoserver) and shared with the Humanitarian Data Exchange platform.

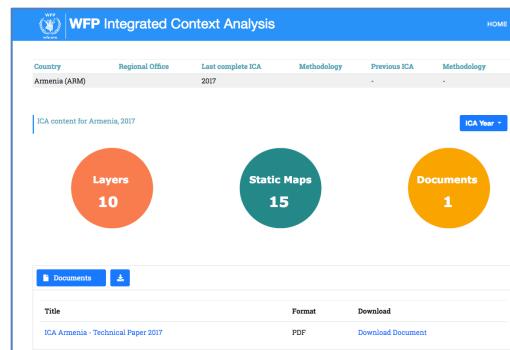


# WFP GeoNode

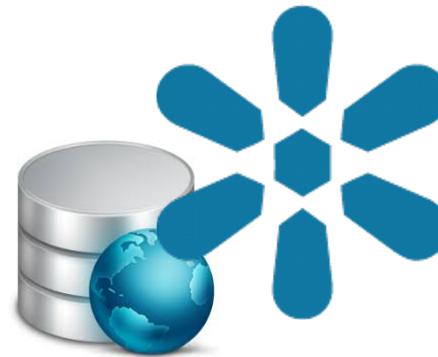
As a project catalog

- Centralized repository for the projects
- Search functionality
- Project metadata (project description, type of project etc.)



Title	Format	Download
ICA Armenia - Technical Paper 2017	PDF	<a href="#">Download Document</a>




# WFP GeoNode – Next Steps

- Implement a project catalog app.
- Redesign the WFP GeoNode homepage.
- Implement a QGIS – GeoNode plugin & an ArcMap – GeoNode plugin for publishing layers to GeoNode
- Keep up with the latest updates of GeoNode.
- Promote and conduct further trainings of the platform within the organization.