

# GeoNepal User Manual

Version 1.1

## 1. Introduction

### 1.1. What is GeoNepal?

GeoNepal (<https://geonepal.info/>) is a spatial data-sharing platform intended to service the Nepalese geospatial community. It provides a home for spatial and non-spatial data layers produced in Nepal and a place to consolidate useful datasets produced regionally or globally. To ease data discovery by Nepalese analysts we have uploaded some data layers originally shared elsewhere that may not be widely known within Nepal. We have made every effort to clear this with original data authors, but if you see your dataset wrongly shared here, please contact the platform administrator at Kathmandu University and we will remove it until permissions can be adequately clarified. GeoNepal implements the GeoNode (<https://geonode.org/>) spatial data sharing software. The home page of the GeoNepal portal is shown in Figure 1.

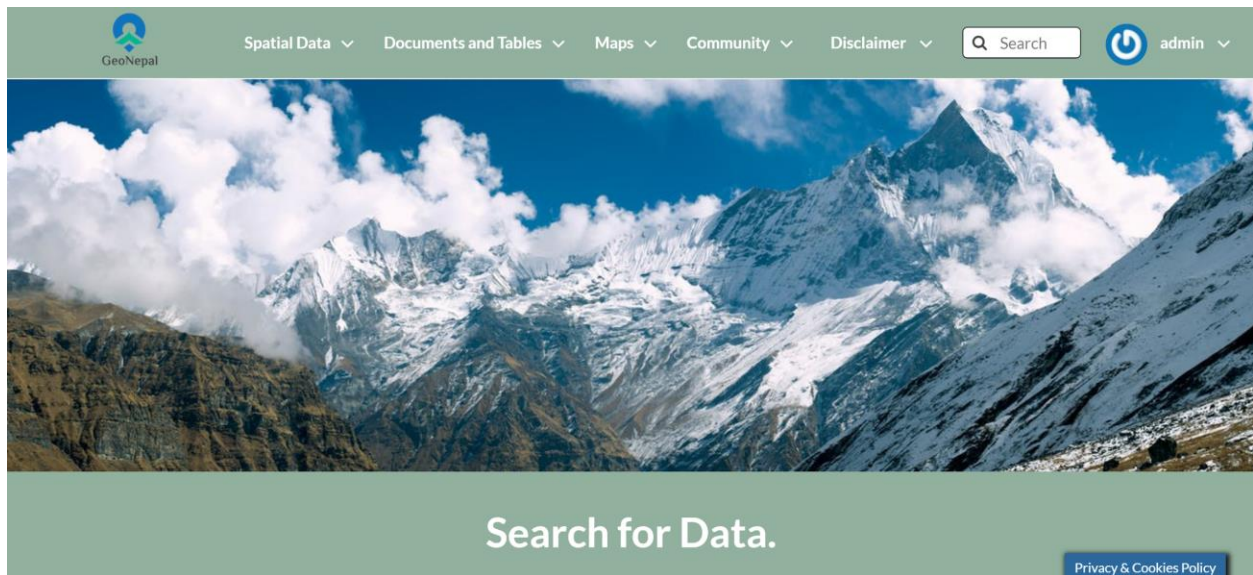


Figure 1: GeoNepal home page

GeoNode is a geospatial content management system, a platform for the management and publication of geospatial data. It brings together mature and stable open-source software projects under a consistent and easy-to-use interface allowing non-specialized users to share data and create interactive maps.

Data management tools built into GeoNode allow for integrated creation of data, metadata, and map visualizations. Each dataset in the system can be shared publicly or restricted to allow access to only specific users. Social features like user profiles and commenting and rating systems allow for the development of communities around each platform to facilitate the use, management, and quality control of the data the GeoNode instance contains.

It is also designed to be a flexible platform that software developers can extend, modify or integrate against to meet requirements in their own applications.

## **1.2. Why is GeoNepal required?**

There is a growing demand for the use and application of geospatial data in Nepal. Several governmental and non-governmental organizations as well as researchers collect, use, and store huge amounts of geospatial data annually for different purposes. However, there is no or very limited publicly available open data for re-use. The data seekers need to individually contact the potential data holders through personal and professional contacts. This is not only inefficient but also has a limited chance of getting a dataset with proper metadata.

GeoNode is an open-source based web platform that hosts geospatial metadata and data. The Department of Geomatics Engineering of Kathmandu University has set up its own GeoNode (<https://geonepal.info/>) to provide access to a range of spatial and non-spatial of the Nepalese territories. We encourage the data creators like enterprises, development agencies, non-governmental organizations, academicians, and scholars to share free and open data through this platform. We aim that the user can look for and use data from this large data warehouse in a couple of years.

## **1.3. What data are available on GeoNepal?**

At present, about 260 spatial layers and 60+ documents are available on the platform. The portal hosts administrative boundaries of Nepal, OpenStreetMap (OSM) daily extracts, Demographic, Hazard, and climatic data collected and curated by non-governmental organizations. Furthermore, the subsets of global and regional products that are not widely known in Nepal are also made available. Currently, the platform has the data of the following user-defined categories (number of data in each category is shown in Figure 2) which will have data of more categories as we receive the data from other categories:

- i. Biodiversity
- ii. Boundaries
- iii. Climatology, meteorology, and atmosphere
- iv. Economy
- v. Environment
- vi. Environment
- vii. Health
- viii. Inland waters
- ix. Location
- x. Planning Cadastre
- xi. Population
- xii. Society
- xiii. Structure
- xiv. Transportation
- xv. Utilities and communications

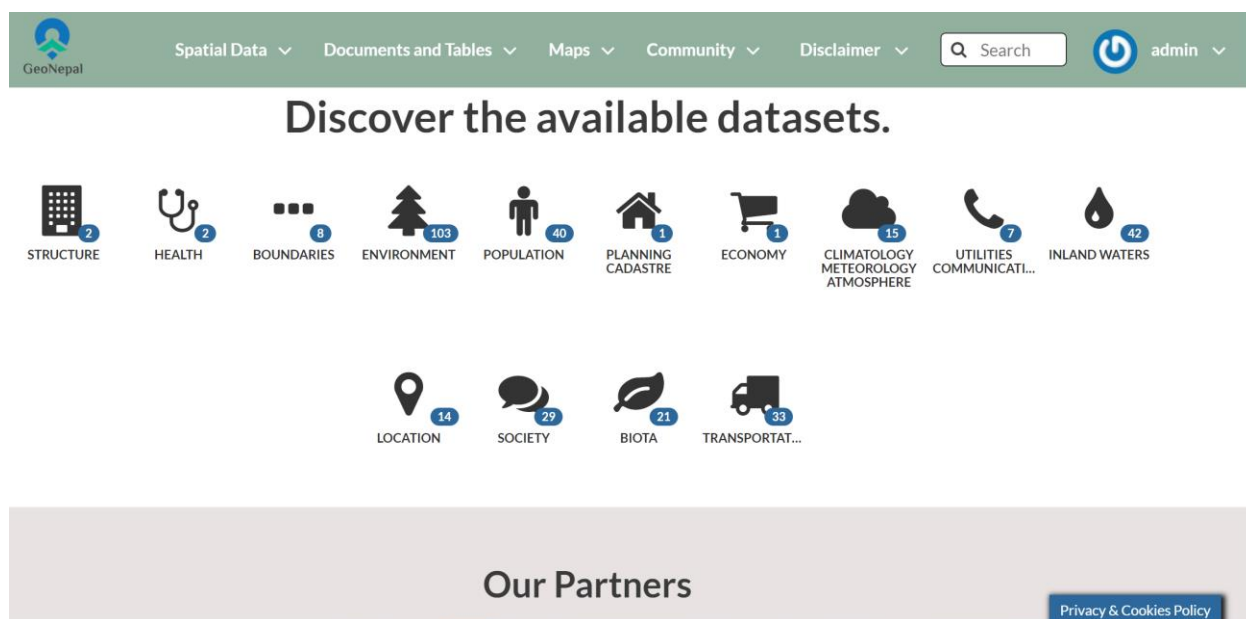


Figure 2: Categories of data available on GeoNepal portal

We are continuously contacting potential data providers and encouraging them to share free and open data. Many organizations we have consulted are preparing datasets to be uploaded and shared through this platform.

#### 1.4. Fitness for use and legality of data

We have aimed to develop a strong and responsible scientific community that can recognize the value of free and open data for planning and development. The users should themselves check and decide the fitness of the data for their intended application by the reading method used, the process followed, the data extent, and the accuracy of the data reported by the provider. We strongly encourage the original authors/publishers to clearly report the method used, the process followed, the data extent, and the accuracy of the data in the metadata so that the potential users can decide whether the data is useful for their task in hand. It is also informed to the data providers to kindly publish the data on which they have the legal rights to publish. The information is available in both English and Nepali languages on the GeoNepal portal as well through disclaimer which is depicted in Figure 3.

## **INFORMATION AND CONSENT REGARDING THE FITNESS FOR USE AND LEGALITY OF DATA**

GeoNepal Geoportal hosts data provided by or uploaded by Educational, Governmental, Non-Governmental, Private, developmental organizations and individual scholars themselves. The Department of Geomatics Engineering, Kathmandu University hosts and maintains this geoportal with financial support from the World Bank Group. The portal is aimed to make the free and open data of the Nepalese territories available to a wide variety of users, scholars and organizations. Neither the Kathmandu University nor the World Bank Group has any take in validation of data correctness and legality. The method used, the process followed, the data extent, and the accuracy of the data should be made available in the metadata by the original authors/publishers themselves. The users are recommended to check the fitness of the data for their intended application. It is also informed to the data providers to kindly publish the data on which they have the legal rights to do so. A metadata and a sample data can, however, be published for the datasets that need to be purchased.

### **तथ्याङ्क (डाटा) को उपयोगिता तथा वैधानिकताको बारेमा जानकारी र याँहाको सहमति**

GeoNepal जियोपोर्टलमा उपलब्ध तथ्याङ्क (डाटा) विभिन्न शैक्षिक, सरकारी, गैर-सरकारी, निजी, विकास साझेदार संस्थाहरु र विद्वान अनुसन्धानकर्ताहरुद्वारा प्रदान गरिएका वा स्वयम् प्रकाशित गरेका छन्। विश्व बैंक समूहको आर्थिक सहयोगमा काठमाण्डौ विश्वविद्यालयको जियोमेटिक्स इंजिनियरिङ्ग विभागले यो जियोपोर्टललाई संचालित तथा हेरचाह गर्ने गर्दछ। नेपाली सिमाभित्रको पैसा तिर्न नपर्ने खुला डाटा आम प्रयोगकर्ता, विद्वान अनुसन्धानकर्ता एवम् संस्थाहरुको पहुचमा ल्याउनु यस जियोपोर्टलको उद्देश्य रहेको छ। काठमाडौं विश्वविद्यालय वा विश्व बैंक समूहद्वारा यहाँ प्रस्तुत डाटाको शुद्धता परीक्षण गर्न तथा सोको वैधानिकता मापन गर्न सम्भव नहुने हुँदा प्रयोगकर्ताहरुलाई आफ्नो आवश्यकता अनुसार जाँच गरी प्रयोग गर्न हुन एवम् डाटा-प्रदायकहरुले आफूसँग कानूनी अधिकार भएको डाटामात्र प्रकाशित गरिदिन हुन अनुरोध छ। डाटा तयार गर्दाको विधि, प्रक्रिया, डाटाको क्षेत्र, र डाटाको शुद्धता मूल लेखक/प्रकाशकहरु स्वयम्ले मेटाडाटामा उपलब्ध गराउने छन्। साथै, खरिद गर्नुपर्ने डाटाको हकमा मेटाडेटा तथा एक नमूना डाटा यस जियोपोर्टलमा प्रकाशित गर्न सकिनेछ।

*Figure 3: Information regarding Fitness for use and legal authority for public sharing*

### **1.5. Our Partners**

The Department of Geomatics Engineering under the School of Engineering, Kathmandu University hosts and maintains the GeoNepal platform under financial support from the World Bank and the UKaid.

GeoNepal is a public data-sharing portal where any organization or individual may share spatial and non-spatial data of the Nepalese territories. Thus, the Nepalese Geospatial Community as well as regional and global data providers are the unofficial partners. Though the platform accepts and hosts non-spatial data as well which the geospatial community requires, the main focus of the portal is on spatial and related data.

### **1.6. Contacting the GeoNepal**

We kindly encourage the users and potential data providers to contact us at [kugeonode@gmail.com](mailto:kugeonode@gmail.com) or [geonode@ku.edu.np](mailto:geonode@ku.edu.np) for complaints on the data and their interest in sharing data through this platform.

## 2. Data Exploration

### 2.1. Searching Data on the internet

Please search the following data on the internet.

- i) Population distribution of Nepalese children under five years old
- ii) Population distribution of Nepalese youth (15-24 years old)
- iii) Population distribution of Nepalese Elderly people (above 60 years old)
- iv) Friction Surface Coefficient
- v) Population density
- vi) Spatial Distribution of population over years
- vii) Births in the “XYZ” year
- viii) Infant mortality rate over the years
- ix) Solar potential
- x) Photovoltaic Power Potential
- xi) Electricity Substations
- xii) Power station locations
- xiii) Transmission line network

Please note down if the data are easily available for download.

### 2.2. Searching Data on the GeoNepal Portal

Each of these data sets is available at the **GeoNepal** portal. Now, search the data on the GeoNepal portal. To search the “Population distribution of Nepalese children under five years old”, type “children” in the search box, select “HRSL- Populations of Children Under five [2019]”.

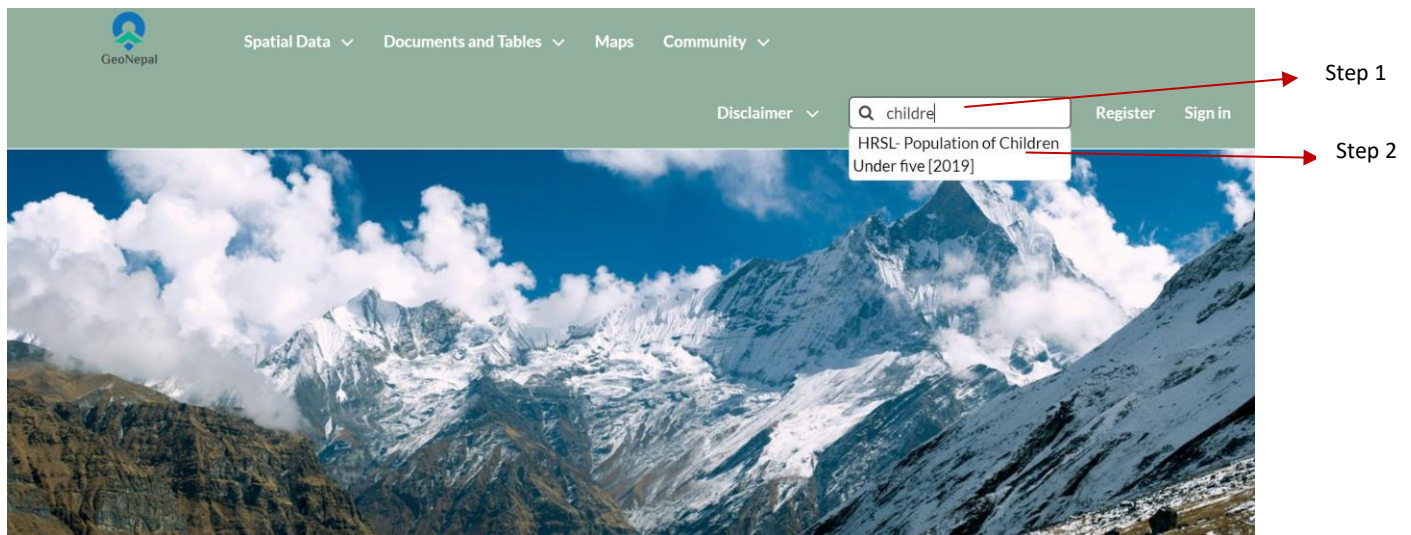


Figure 4: Searching specific data on the GeoNepal portal

Select the data and review the data and metadata.



The screenshot shows the GeoNepal portal interface. At the top, there is a navigation bar with links for Spatial Data, Documents and Tables, Maps, Community, Disclaimer, a search bar, and Register/Sign in options. Below the navigation bar, the search results are displayed. On the left, there is a 'Filters' section with a 'Clear' button and a '2 found' indicator. The filters include a 'TEXT' dropdown, a search bar containing 'HRSL- Population of Children Under five', and several other filter categories like KEYWORDS, TYPE, Raster Layer (1), Document (1), CATEGORIES, RESPONSIBLE, GROUPS, and GROUP CATEGORIES. In the center, there is a thumbnail image of a map. To the right of the thumbnail, the title 'HRSL- Population of Children Under five [2019]' is displayed, followed by a detailed description of the dataset, its source (Facebook with support from Columbia University), and a link to the methodology page.

Figure 5: Searching Children Population data on the GeoNepal portal

The screenshot shows the metadata page for the dataset 'HRSL- Population of Children Under five [2019]'. The page has a green header with the same navigation bar as Figure 5. Below the header, the title 'Metadata : HRSL- Population of Children Under five [2019]' is displayed, followed by a 'Return to Layer' button. The main content area is titled 'Identification' and contains the following information:
 

- Title:** HRSL- Population of Children Under five [2019]
- Abstract:** Demographic data regarding children under the age of five prepared by Facebook with support from Columbia University Updated: November 6, 2019 Format: GeoTIFF The high-resolution maps have been developed using machine learning techniques to identify buildings from commercially available satellite images. Then, these data are overlaid general population estimates based on publicly available census data and other population statistics. The resulting maps are the most detailed and actionable tools available for aid and research organizations. For more information about the methodology used to create our high resolution population density maps and the demographic distributions, please visit: <https://dataforgood.fb.com/docs/methodology-high-resolution-population-density-maps-demographic-estimates/> For information about how to use HDX to access these datasets, please visit: <https://dataforgood.fb.com/docs/high-resolution-population-density-maps-demographic-estimates-documentation/> License: Creative Commons Attribution International To reference this data, please use the following citation: Facebook Connectivity Lab and Center for International Earth Science Information Network - CIESIN - Columbia University. 2016. High Resolution Settlement Layer (HRSL). Source imagery for HRSL © 2016 DigitalGlobe. Accessed DAY MONTH YEAR."

Figure 6: Metadata of HRSL- Population of Children Under five [2019]

Similarly, check the data and its metadata of other datasets from the links provided as:

- Population distribution of Nepalese children under five years old

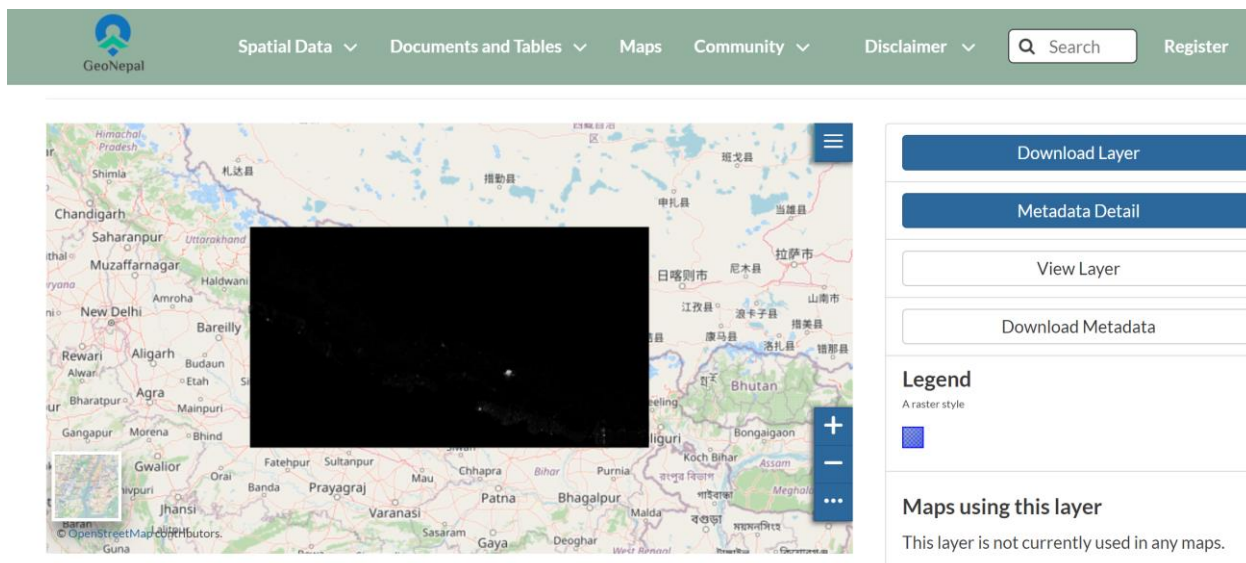


Figure 7: [https://geonepal.info/layers/NPL\\_children\\_under\\_five\\_2019\\_06\\_01:geonode:NPL\\_children\\_under\\_five\\_2019\\_06\\_01](https://geonepal.info/layers/NPL_children_under_five_2019_06_01:geonode:NPL_children_under_five_2019_06_01)

ii) Population distribution of Nepalese youth (15-24 years old)

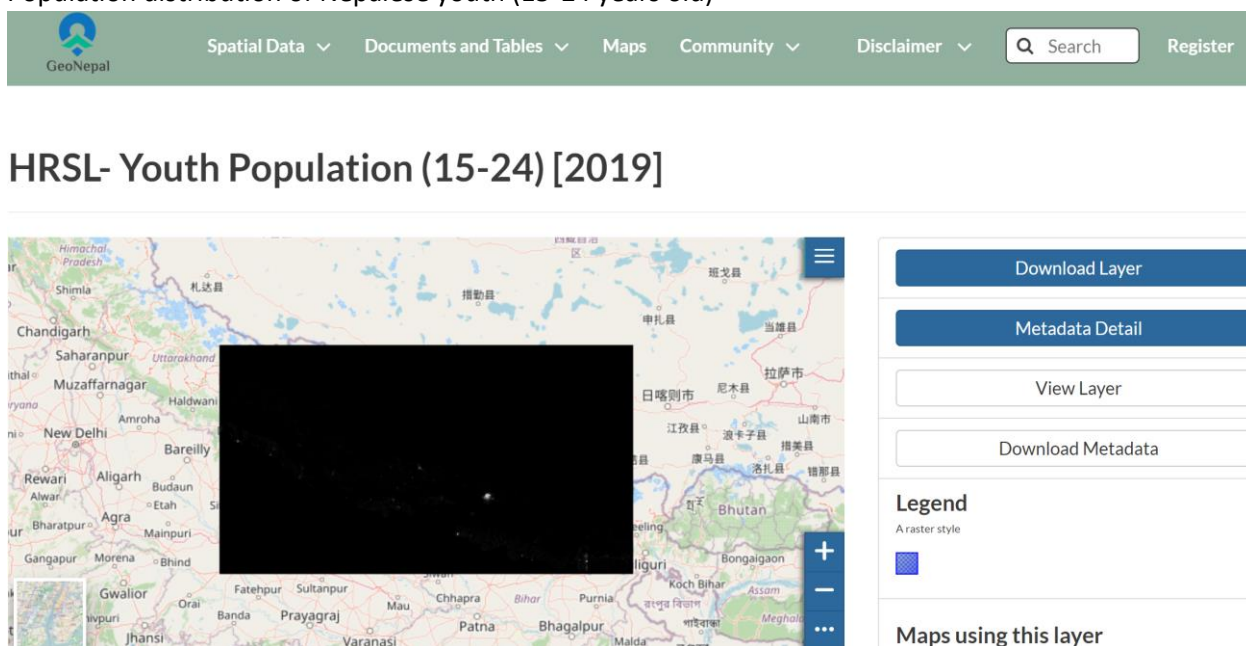


Figure 8: [https://geonepal.info/layers/NPL\\_youth\\_15\\_24\\_2019\\_06\\_01:geonode:NPL\\_youth\\_15\\_24\\_2019\\_06\\_01](https://geonepal.info/layers/NPL_youth_15_24_2019_06_01:geonode:NPL_youth_15_24_2019_06_01)

iii) Population distribution of Nepalese Elderly people (above 60 years old)



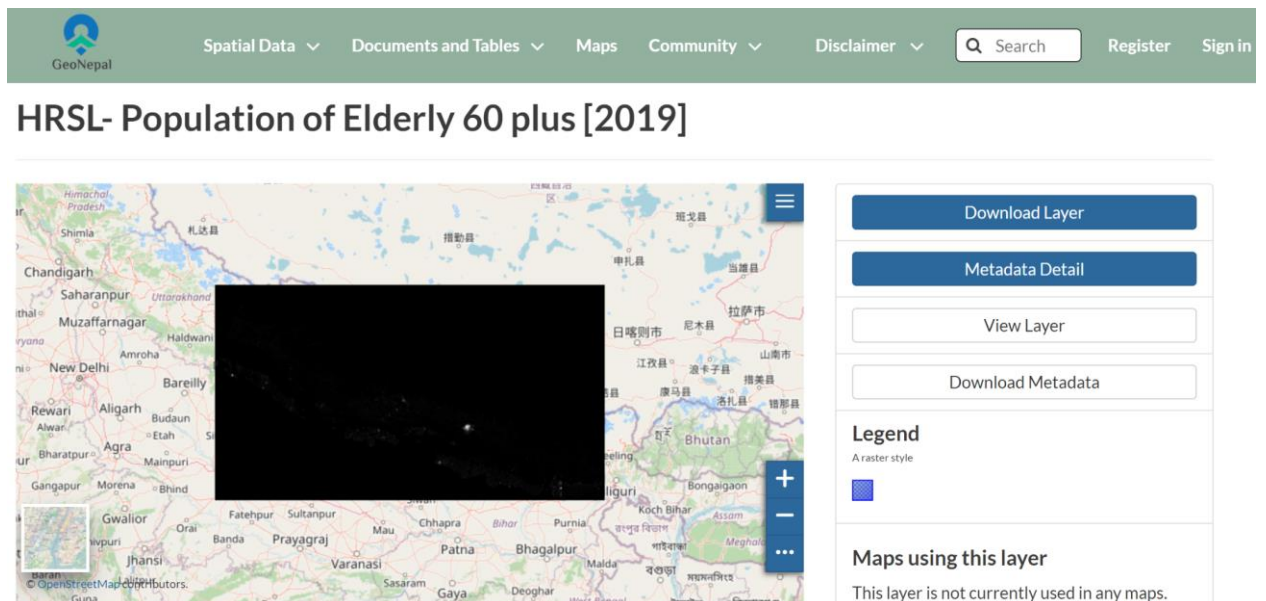
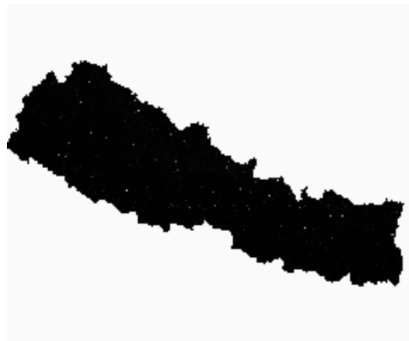


Figure 9: [https://geonepal.info/layers/NPL\\_youth\\_15\\_24\\_2019\\_06\\_01:geonode:NPL\\_youth\\_15\\_24\\_2019\\_06\\_01](https://geonepal.info/layers/NPL_youth_15_24_2019_06_01:geonode:NPL_youth_15_24_2019_06_01)

#### iv) Friction Surface Coefficient



#### Existing Friction Surface [Monsoon Season]

This is a raster friction surface representing the difficulty of crossing a given 30 m x 30 m cell in the raster in units of hours for the monsoon season in the year 2021. It can be used to calculate travel times in units of hours to the nearest feature in a set of features (e.g. schools, businesses, rivers, roads) in a Cost Distance modeling analysis. These tools are standard within desktop and code-based GIS analysis toolkits.

The precise methodology for creating these friction surfaces is documented in a journal article published here: <https://www.sciencedirect.com/science/article/abs/pii/S0966692321001101>. This methodology was adapted to roads data and landcover for year 2021.

This friction surface was used to prepare access raster surfaces for urban centers, roads, and major highways in the monsoon season in the year 2021. These can be found on GeoNepal as well. Population-weighted statistics for these access rasters are also published under Documents as a table.

Figure 10: [https://geonepal.info/layers/friction\\_msn\\_existing\\_20210104:geonode:friction\\_msn\\_existing\\_20210104](https://geonepal.info/layers/friction_msn_existing_20210104:geonode:friction_msn_existing_20210104)

#### v) Population density

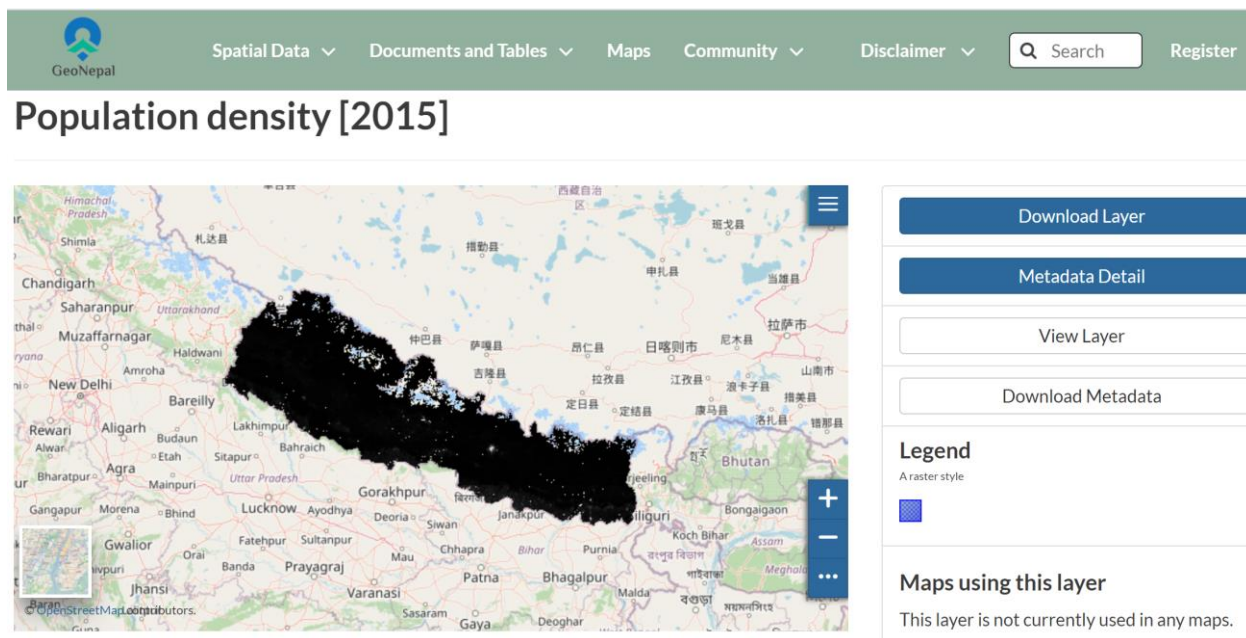


Figure 11: [https://geonepal.info/layers/NPL\\_ppp\\_v2c\\_2015\\_UNadj0:geonode:NPL\\_ppp\\_v2c\\_2015\\_UNadj0](https://geonepal.info/layers/NPL_ppp_v2c_2015_UNadj0:geonode:NPL_ppp_v2c_2015_UNadj0)

vi) Spatial Distribution of population over years

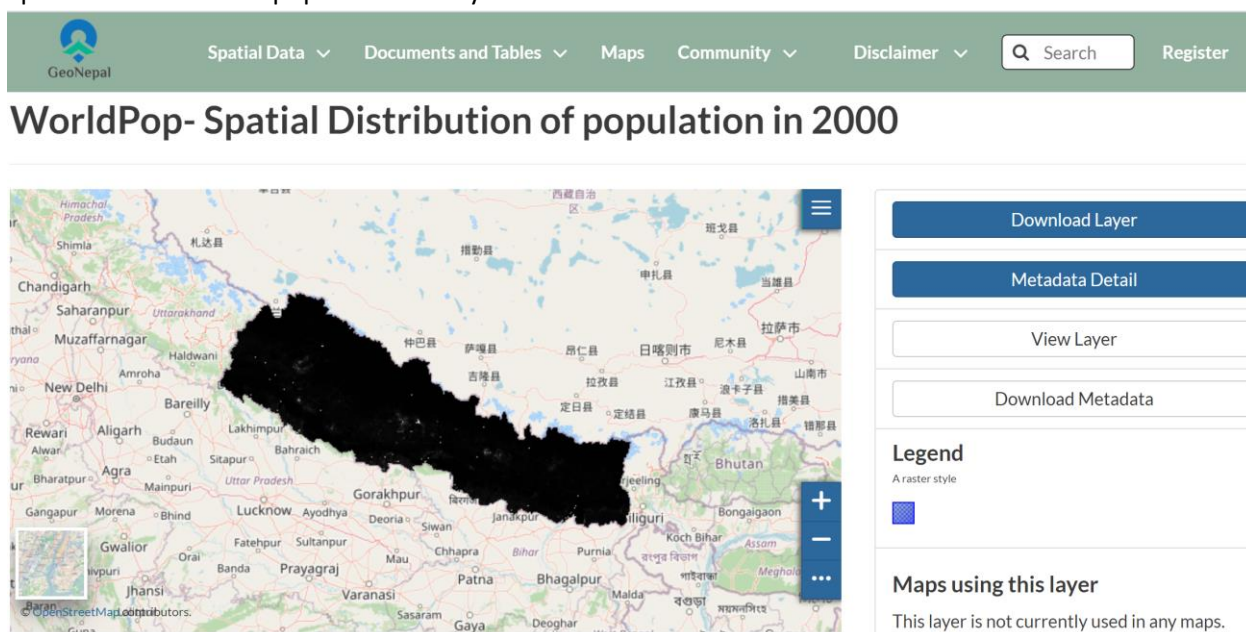


Figure 12: [https://geonepal.info/layers/npl\\_ppp\\_2000:geonode:npl\\_ppp\\_2000](https://geonepal.info/layers/npl_ppp_2000:geonode:npl_ppp_2000)

vii) Births in XYZ year

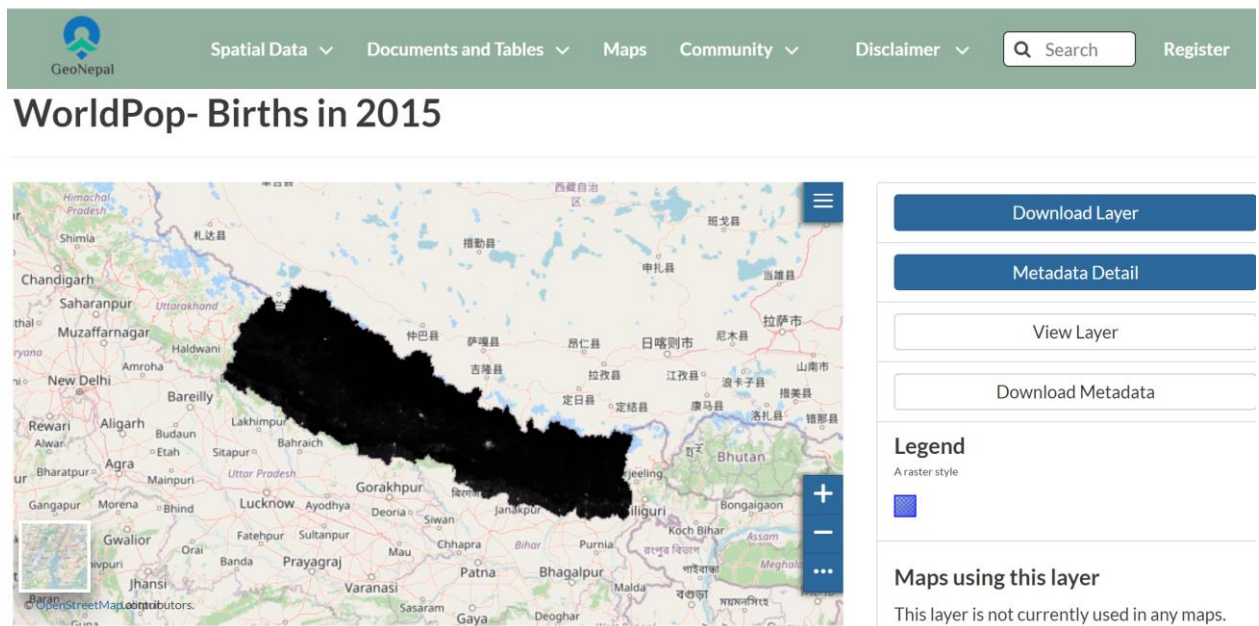


Figure 13: [https://geonepal.info/layers/NPL\\_births\\_pp\\_v2\\_2015:geonode:NPL\\_births\\_pp\\_v2\\_2015](https://geonepal.info/layers/NPL_births_pp_v2_2015:geonode:NPL_births_pp_v2_2015)

#### viii) Infant mortality rate over the years

**Subnational infant mortality rate -CSV**

The second version of SEDAC's Global Subnational Infant Mortality Rates data set compiles IMR data for 234 countries and territories, 143 of which include subnational units. The data are benchmarked to the year 2015 (Version 1 was benchmarked to the year 2000), and are drawn from national offices, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), and other sources from 2006 to 2014. Boundary inputs are derived primarily from the Gridded Population of the World, Version 4 (GPWv4). National and subnational data are mapped to grid cells at a spatial resolution of 30 arc-seconds (~1 km) allowing for easy integration with demographic, environmental, and other spatial data.

admin 17 May 2021 3 0 0

Figure 14: <https://geonepal.info/documents/79>

#### ix) Solar potential



# Solar\_potential



Figure 15: [https://geonepal.info/layers/Solar\\_potential:geonode:Solar\\_potential](https://geonepal.info/layers/Solar_potential:geonode:Solar_potential)

## x) Photovoltaic Power Potential

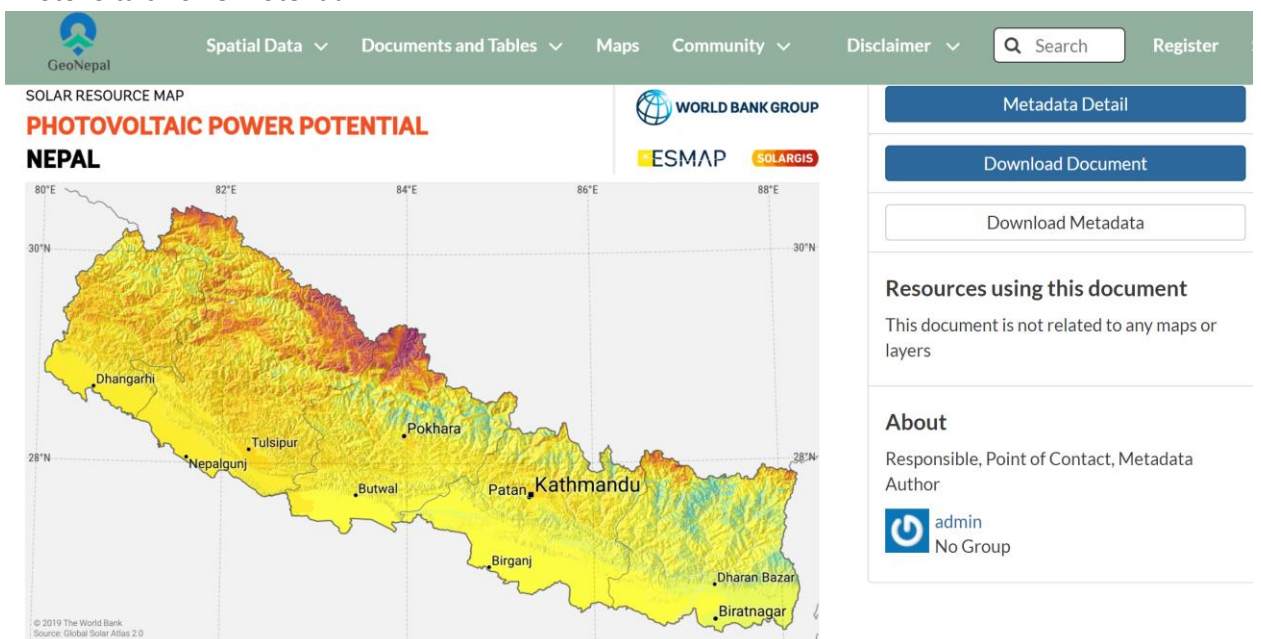


Figure 16: <https://geonepal.info/documents/33>

xi) Electricity Substations

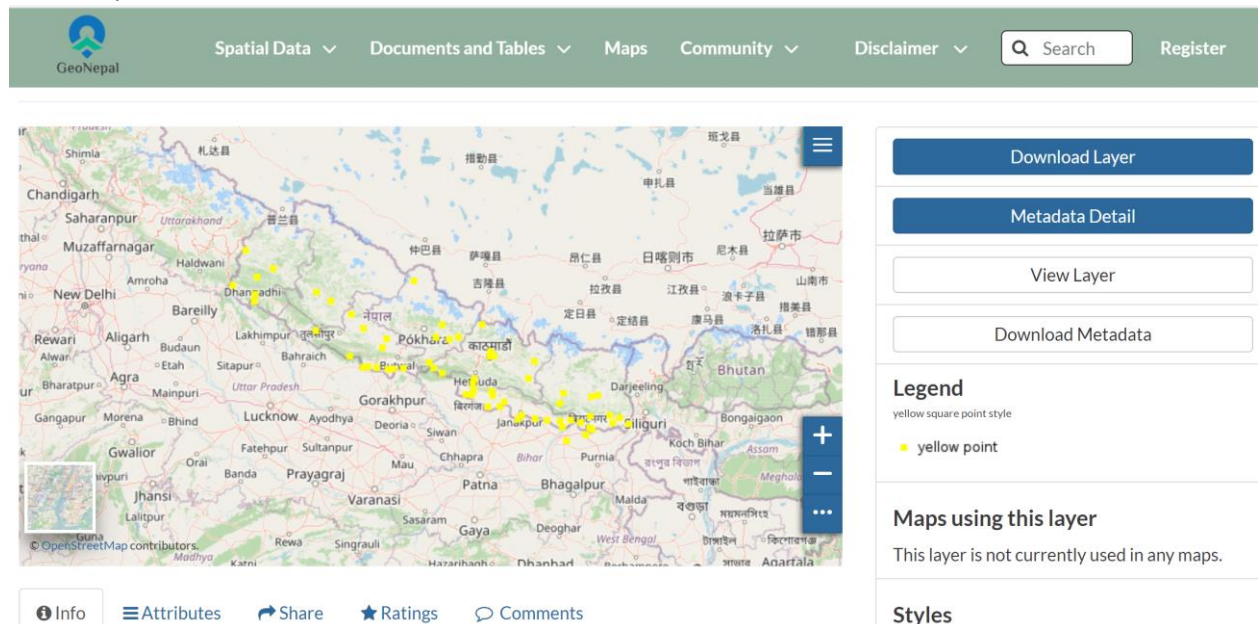


Figure 17: [https://geonepal.info/layers/geonode\\_data:geonode:nep40402\\_substations](https://geonepal.info/layers/geonode_data:geonode:nep40402_substations)

xii) Power station locations

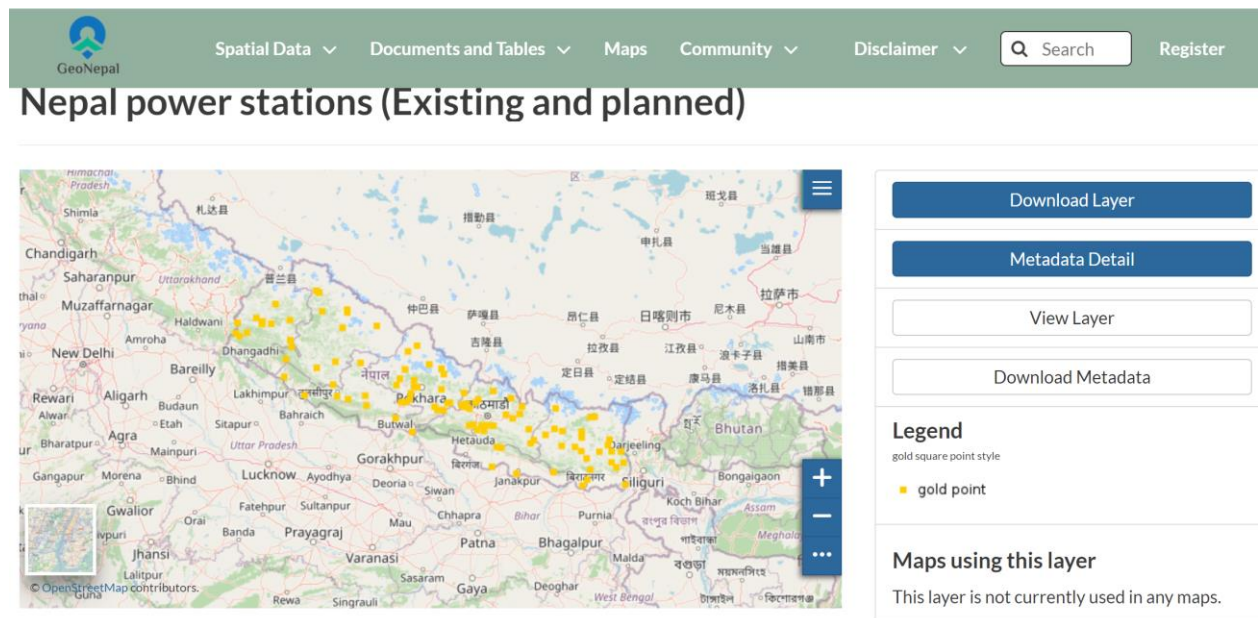


Figure 18: [https://geonepal.info/layers/geonode\\_data:geonode:nep40402\\_powerstations](https://geonepal.info/layers/geonode_data:geonode:nep40402_powerstations)

xiii) Transmission line network



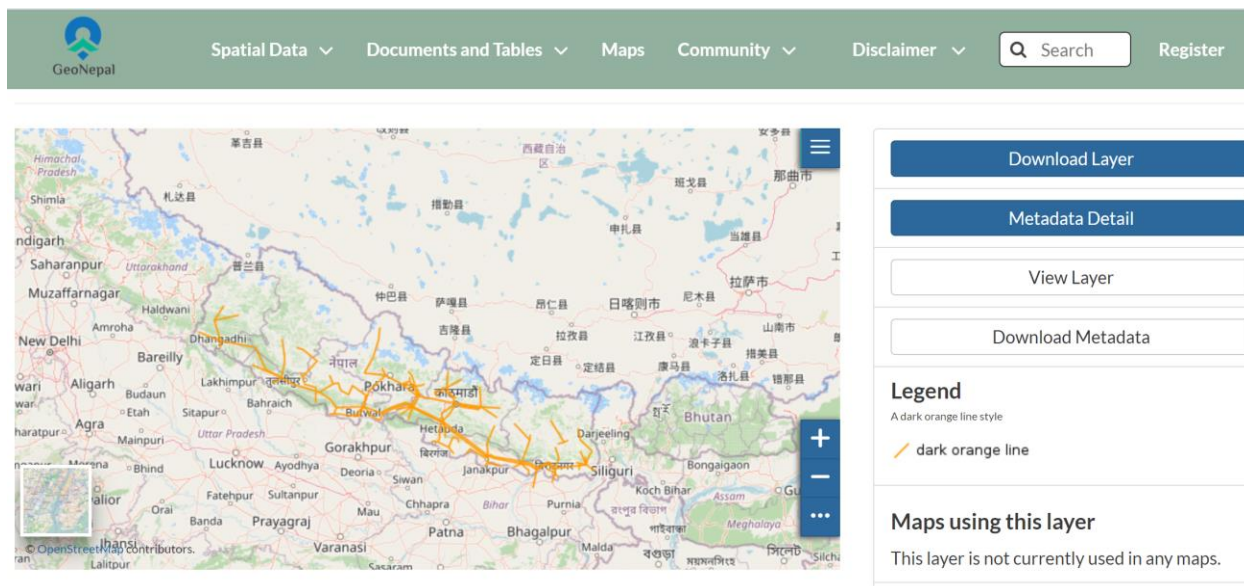


Figure 19: [https://geonepal.info/layers/geonode\\_data:geonode:nep40402\\_grid](https://geonepal.info/layers/geonode_data:geonode:nep40402_grid)

### 3. User Registration and Login

#### 3.1. User Registration

- i. Click on “Register”
- ii. Fill in your email address, user name, password
- iii. Press the “Sign up” button at the bottom

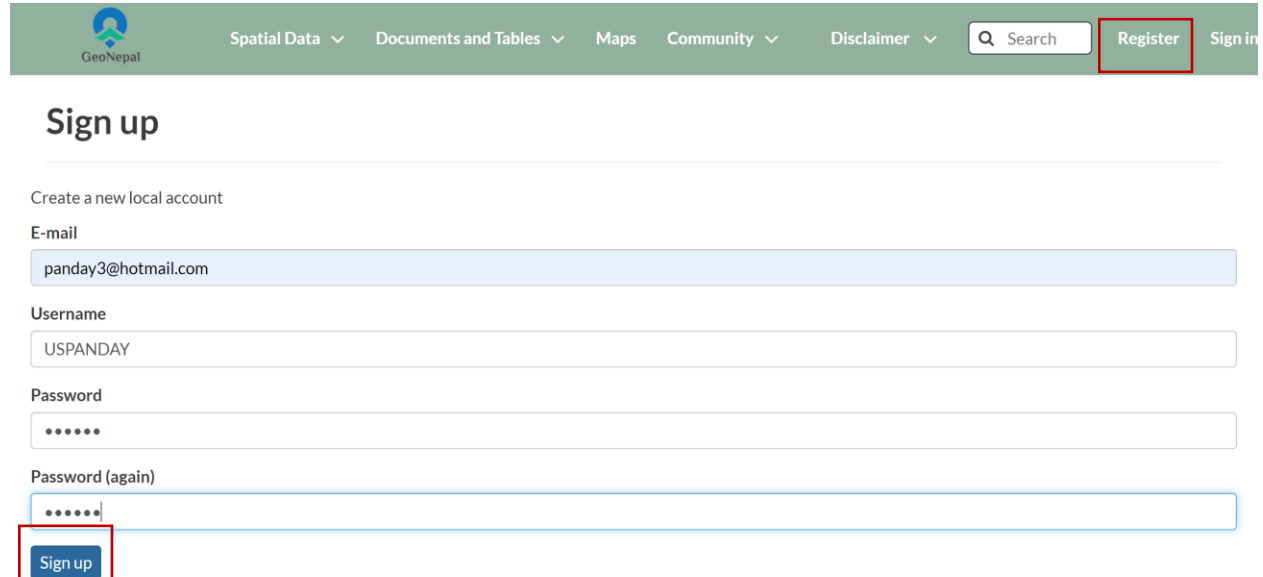


Figure 20: Registering to the GeoNepal portal

- iv. When the registration is successful, it will show you the following information. Your account will be activated after review by the GeoNepal Team. After the approval of your account, you will be able to upload spatial and non-spatial data to this portal.

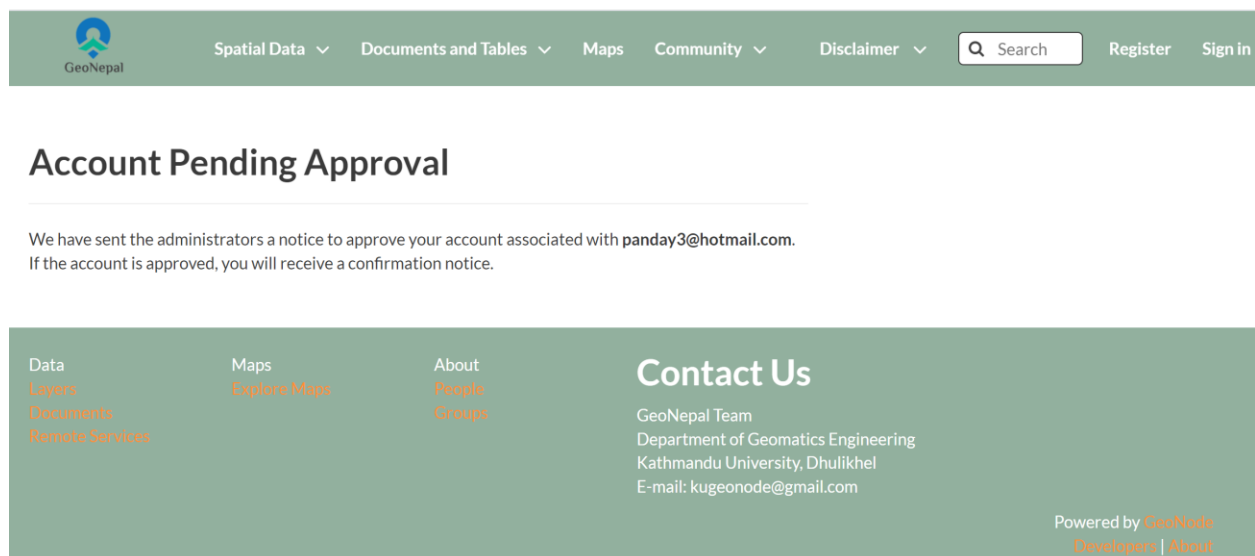


Figure 21: Registration complete

### 3.2. Logging to GeoNepal portal

- i. Click on Sign in
- ii. The Sign-in window will pop up

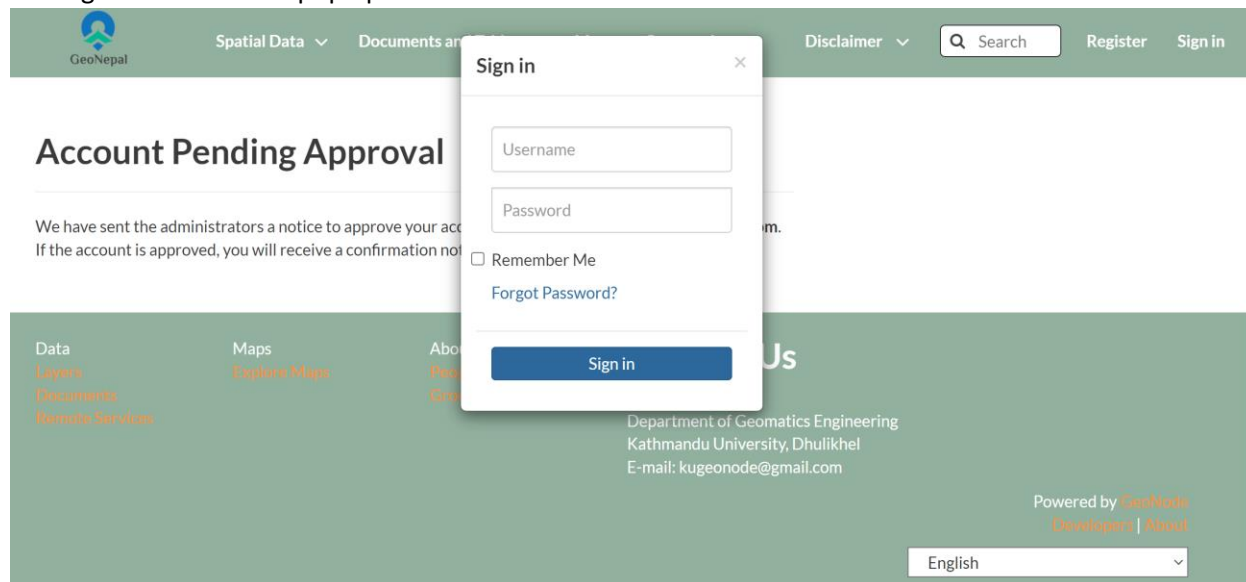


Figure 22: Signing into the GeoNepal Portal

- iii. Type your user name and password

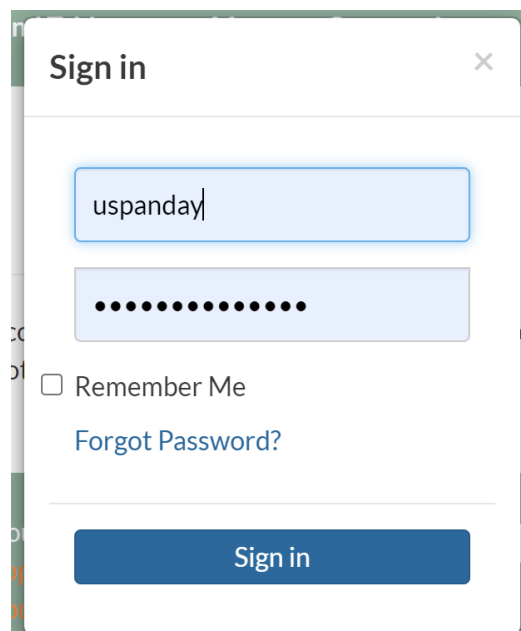


Figure 23: Signing into the portal

Now you will enjoy the features for the registered users. Some of them include uploading layers, and “Documents and Tables”, creating maps, creating layers, add remote services among several others.

## 4. Creating Maps and Uploading Data

### 4.1. Creating maps

In this section, we'll create a Map using some uploaded layers, and then share the resulting map for public viewing.

In order to create new maps you can use:

- the **Create Map** link of the Maps menu in the navigation bar. It might not be visible if you aren't logged in.

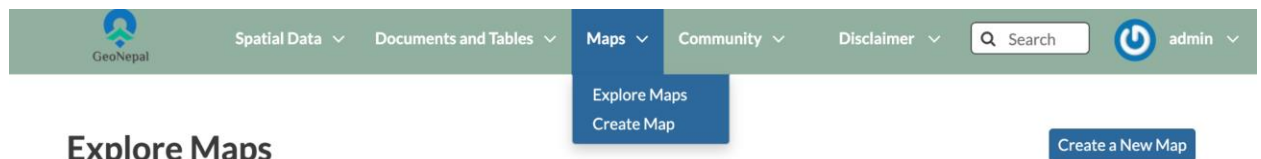


Fig: The Create Map link

- the **Create Map** button in the Layer Page (it creates a map using a specific layer)

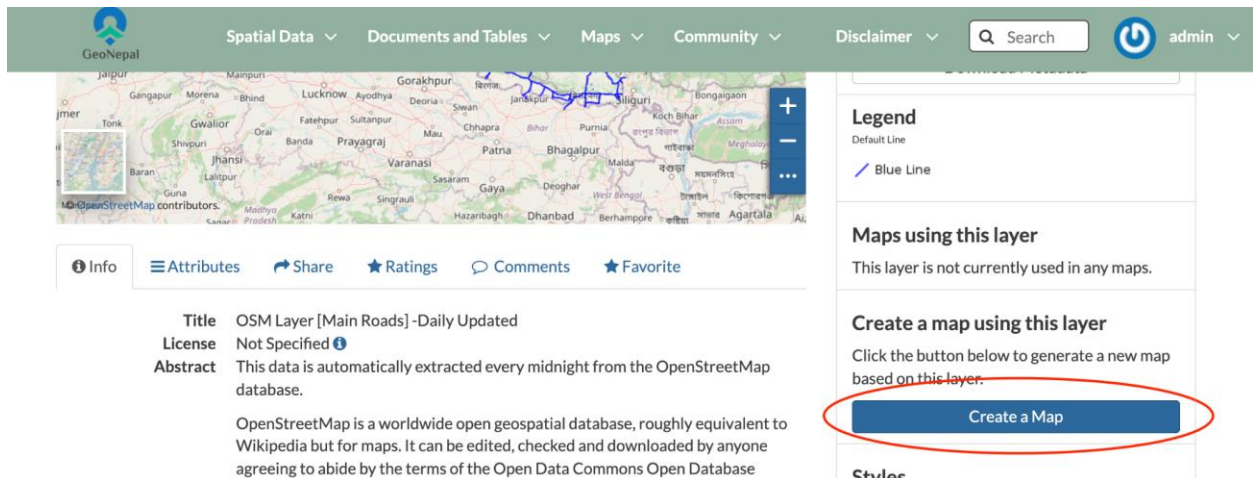


Fig: The Create Map button

- The new Map will open in a Map Viewer like the one in the picture below.

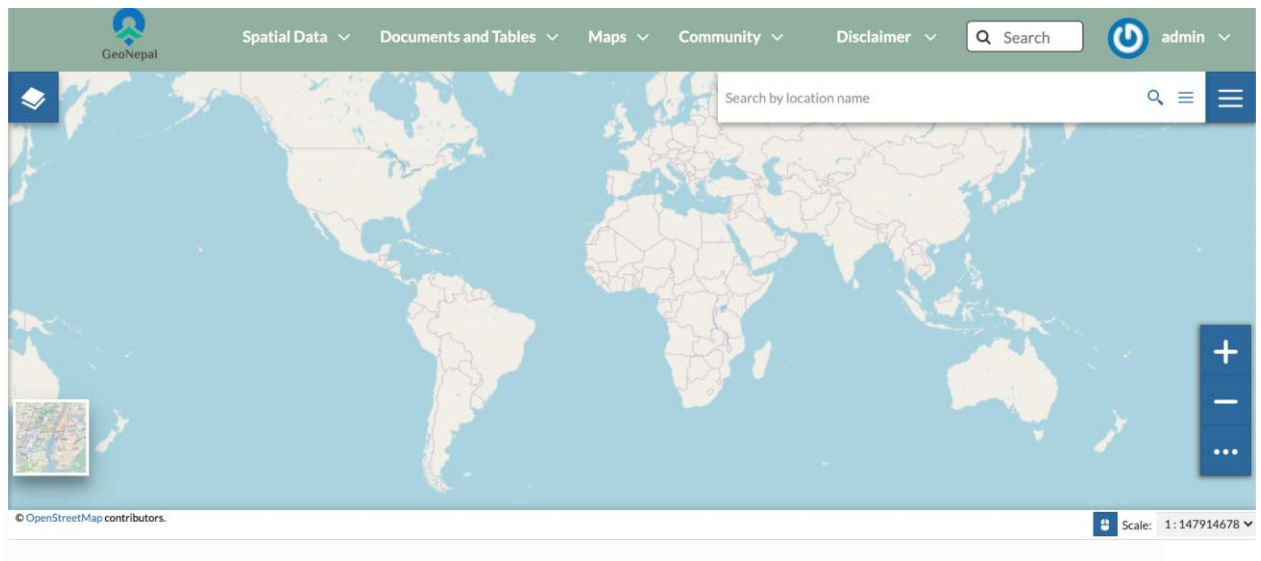




Fig: The Create Map Viewer

- In the upper left corner the  button opens the Table of Contents (TOC) of the Map. It allows you to manage all the layers associated with the map and to add new ones from the Catalog.
- From there you can click on add layers  button to add desired layers that can be used to make maps.

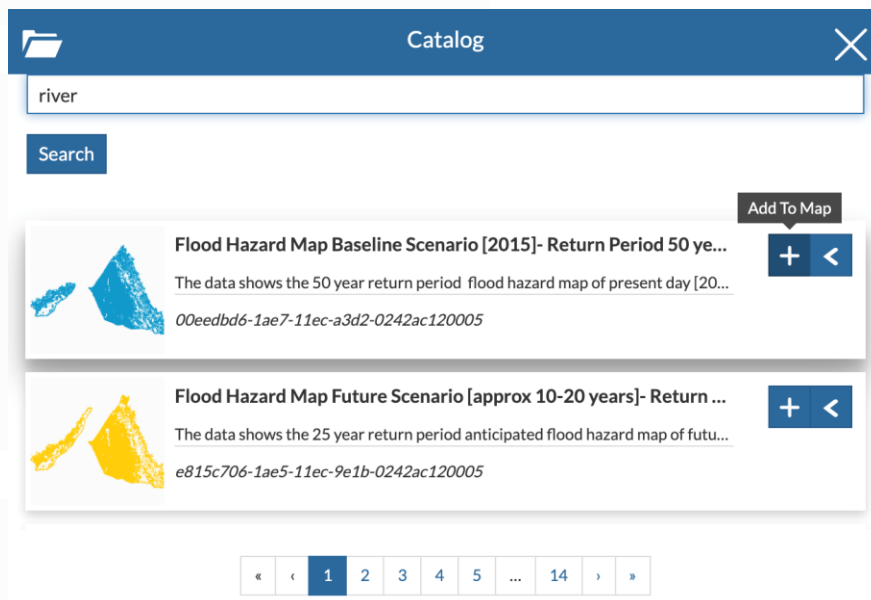




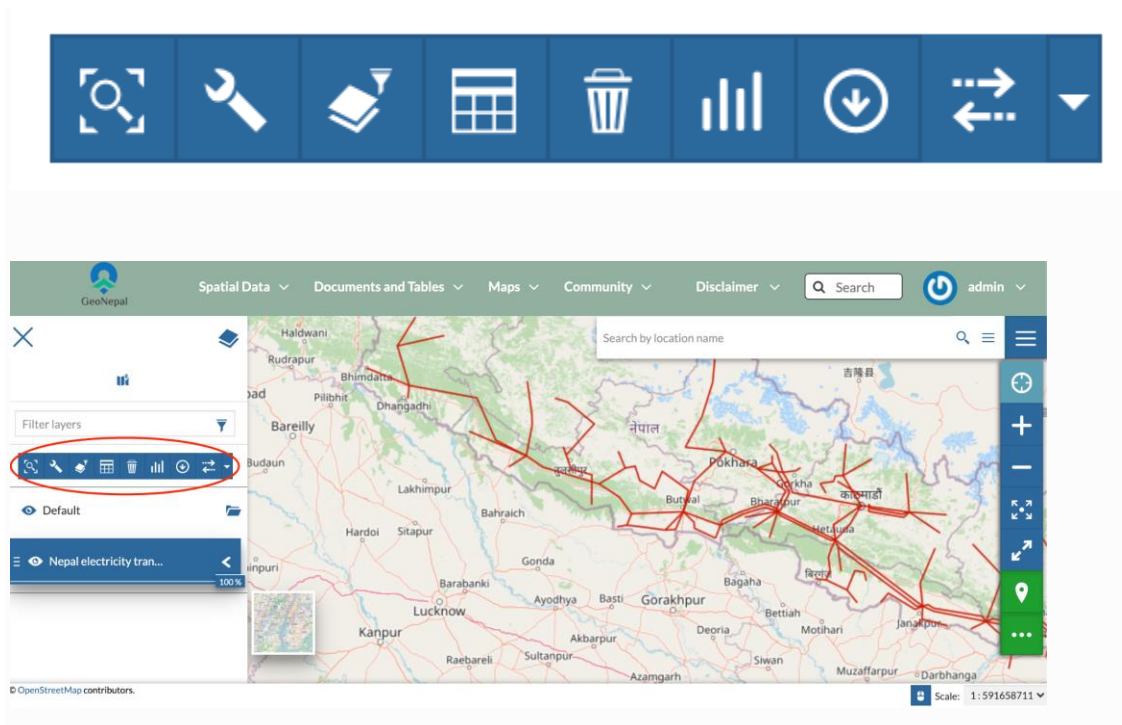



Fig: Add layers window



- The TOC component makes it possible to manage layers overlap on the map by shifting their relative positions in the list (drag and drop them up or down in the list).
- It also allows to hide/show layers (  and  ), to zoom to layers extents (  ) and to manage their properties (  ).
- If you click the desired layer on the TOC, you can see various options such as changing styles, creating charts, and viewing the attribute table.



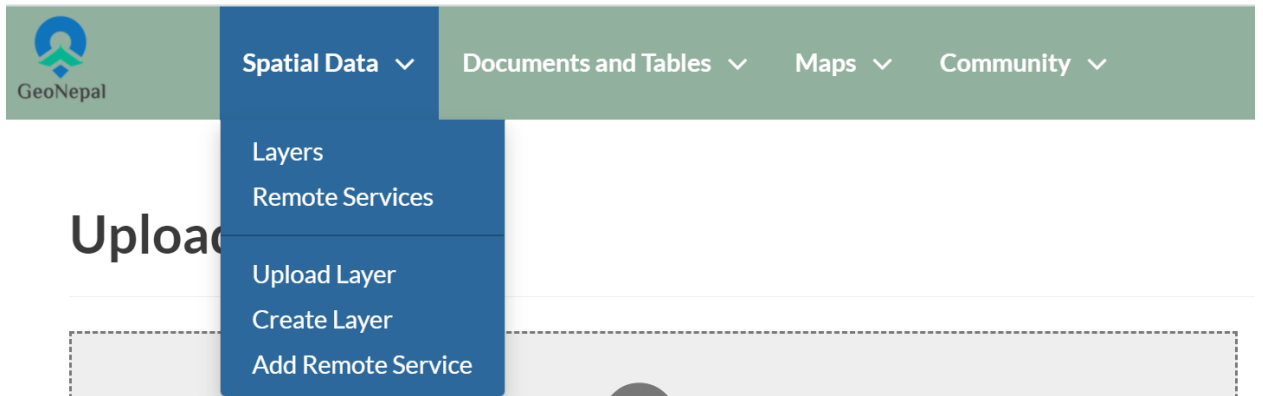
- Now you can make the map with desired styles and add other map elements.
- Once the map layers have been settled it is possible to save the Map by clicking on  and choosing Save as.

- If you followed the steps above, you have just created your first Map. Now you should see it in the Explore Maps page, see Map Information for further details.

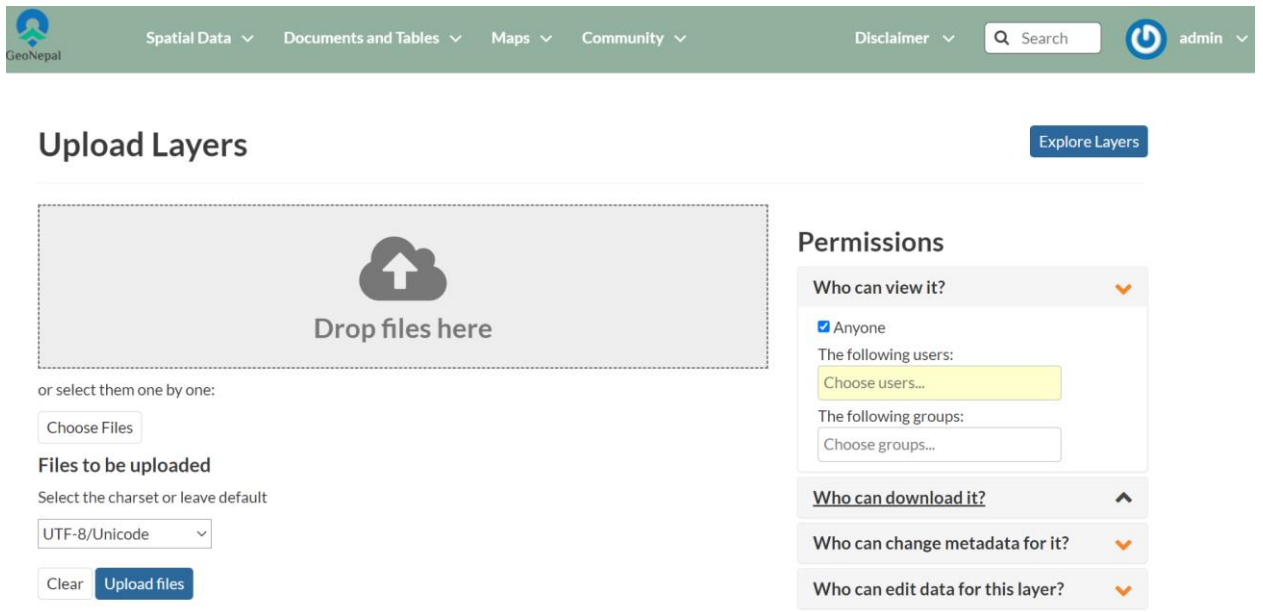
## 4.2. Uploading Spatial Data

Do the following to upload spatial data:

- Click on the “Spatial Data” menu and then select “Upload Layer”




- Drag and drop the file you want/need to upload at “Drop files here” or click on “Choose Files” and select the file to be uploaded.



- Leave the “Permissions” as default.

## 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).** 

iv. Leave charset as default

v. Click on the “Upload files” button

vi. The file will start uploading and a progress bar will show you the percentage of the file uploaded.

### friction\_walking\_dry\_1993

## GeoTIFF

- friction\_walking\_dry\_1993.tif [Remove](#)

Your upload has started



vii. Press Continue

## GapaNapa-Danusha

### ESRI Shapefile

- GapaNapa-Danusha.prj [Remove](#)
- GapaNapa-Danusha.sbn [Remove](#)
- GapaNapa-Danusha.sbx [Remove](#)
- GapaNapa-Danusha.shp [Remove](#)
- GapaNapa-Danusha.shp.xml [Remove](#)
- GapaNapa-Danusha.shx [Remove](#)
- GapaNapa-Danusha.cpg [Remove](#)
- GapaNapa-Danusha.dbf [Remove](#)

Files are ready to be ingested! [Continue](#)

## Files to be uploaded

### kathmandu

### ESRI Shapefile

- kathmandu.sbn [Remove](#)
- kathmandu.sbx [Remove](#)
- kathmandu.shp [Remove](#)
- kathmandu.shp.xml [Remove](#)
- kathmandu.shx [Remove](#)
- kathmandu.cpg [Remove](#)
- kathmandu.dbf [Remove](#)
- kathmandu.prj [Remove](#)

Preserve Metadata XML ☐

Select the charset or leave default

UTF-8/Unicode

viii. Select “Coordinate Reference System” as “(4326) WGS 84”

## Upload Layers

### Provide CRS for "kathmandu"

#### Coordinate Reference System

EPSG Code (Source SRS) :

(4326) WGS 84



Advanced Options:

Target SRS

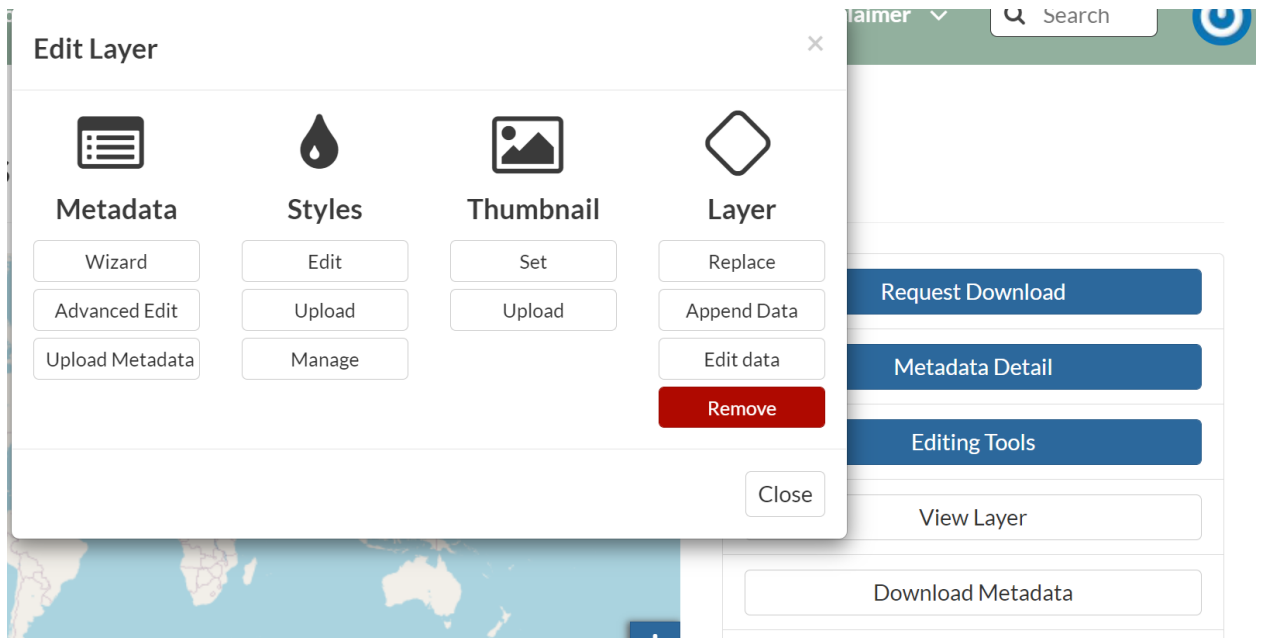
Additional Help



ix. Click on the “Next” button

x. Click on “Editing Tool”





xi. Click on “Wizard”

xii. Click on “Thumbnail” -> “Edit” and then click on “Save”

xiii. Select “Regions”, “Data quality statement” and “Restrictions” if any

Edit
Preview
Settings

Mandatory
Mandatory
Optional

1
2
3
4

Basic Metadata
Location and Licenses
Optional Metadata
Dataset Attributes

Language ?
English
License ?
Open Data Commons Open Database License
Attribution ?
authority or function assigned, as to a ruler, le...
\* Field declared Mandatory by the Metadata Schema
Regions
Choose option
\* Field declared Mandatory by the Metadata Schema
Data quality statement
File Edit View Insert Format Tools Table
Help
Data Description goes here
P 4 WORDS. POWERED BY TINY
\* Field declared Mandatory by the Metadata Schema
Restrictions ?
\* Field declared Mandatory by the Metadata Schema
Other constraints
File Edit View Insert Format Tools Table
Help
P 0 WORDS. POWERED BY TINY
\* Field declared Mandatory by the Metadata Schema

xiv. Similarly, update other fields

1
2
3
4

Basic Metadata
Location and Licenses
Optional Metadata
Dataset Attributes

Other, Optional, Metadata
Edition ?
version of the cited resource
DOI ?
a DOI will be added by Admin before publicat...
Purpose
File Edit View Insert Format Tools Table
Help
P 0 WORDS. POWERED BY TINY
Supplemental information
File Edit View Insert Format Tools Table
Help
temporal extent start
temporal extent end
Maintenance frequency ?
Spatial representation type ?
Responsible Parties
Point of Contact
uspanyday
Responsible and Permissions
Owner
uspanyday
Metadata Author
uspanyday

#### xv. Metadata

After a layer has been uploaded, or if you are in the Layer View interface, you can use Edit Metadata to provide detailed information about the layer. There are four categories of metadata, where two are mandatory and the other two are optional. Some fields are auto-filled while some need your inputs. You should add as much information as you can in the metadata so that your layer would be more visible while searching.

### 1. Basic Metadata

- Thumbnail: You can click on the “Edit” button, the customized thumbnail appears automatically, if you are satisfied with it, you can click the “Save” button.
- Title: Give your layer an explanatory name. The name should not follow data file naming rules, but rather accurately reflect key elements of the data.
- Abstract: Give your layer a name and a brief description. This text will appear with your layer in search results, for example.
- Data Type: Choose one from the given options: Creation, Publication, Revision
- Date: Auto-filled current date
- Category: Choose one suitable category for your layer from the dropdown list. Example: Environment/Health.
- Group: Select an assigned group for your user type.
- Free-Text Keywords: Mostly auto-filled. You can type suitable keywords that describe your layer.

### 2. Location and Licenses

- Language: Select language used in the dataset
- License: You can choose one type of license the layer is created and distributed. If you are not sure you can choose “Not specified”.
- Attribution: In this section you must give proper credit, including a link to the license, and state whether or not any changes were made. For example: CHIRPS data is in the public domain as registered with Creative Commons.
- Regions: Specify region/spatial extent of your layer e.g.: Global, Regional, Nepal, etc.
- Data quality statement: General explanation of the data producer’s knowledge about the lineage of a dataset
- Restrictions: Specify if there are any restrictions for the layer uploaded.
- Other constraints

### 3. Optional Metadata

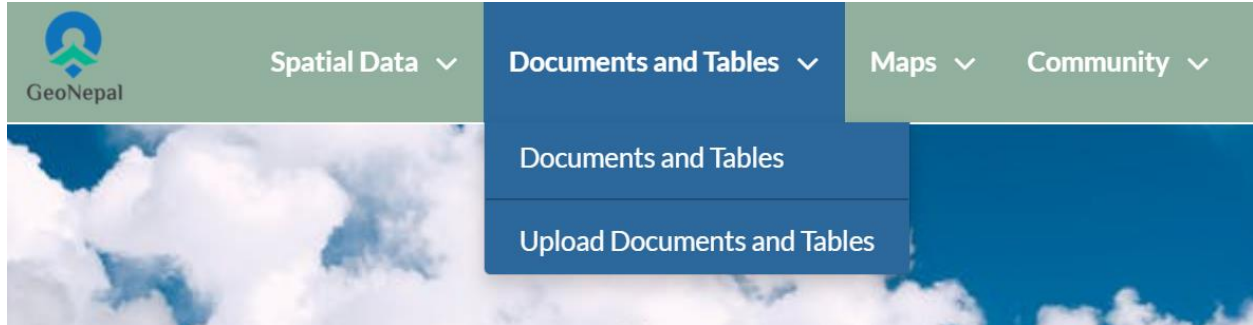
- Edition: to indicate the reference or the source of the document
- DOI: Will be added by Admin before publication
- Purpose: Add purpose and objectives of the layer.
- Supplemental information: Please specify if there are any useful information for the users of the layers
- Temporal extent start: If you layer has temporal dimension you can add the start date
- Temporal extent end: If you layer has temporal dimension you can add start date
- Maintenance frequency: Add how frequently your dataset is updated/maintained
- Spatial representation type: Choose from dropdown list, how data was created
- Point of contact: Auto-filled by username, you can change it if point of contact is different from the user.
- Owner: Auto-filled by username, you can change it if the owner is different from the user.
- Metadata author: Auto-filled by the username, you can change it if the metadata author is different from the user.

4. **Dataset attributes:** In this section, please add detail information about the attribute data on your uploaded layers.

xvi. Likewise, edit Style and set thumbnail.

### 4.3. Uploading a document

- i. Click on “Documents and Tables” and select “Upload Documents and Tables”.



- ii. “Choose File” to be uploaded and click on “Upload”. Leave “Permissions” as default.

A screenshot of the 'Upload Documents' page on the GeoNepal website. The page has a green header with the GeoNepal logo and navigation links. Below the header, there's a section titled 'Upload Documents' with a button 'Explore Documents'. A list of 'Allowed document types' is shown, including various file formats like .txt, .log, .doc, .docx, .ods, .odt, .sld, .qml, .xls, .xlsx, .xml, .bm, .bmp, .dwg, .dxf, .flr, .gif, .jpg, .jpe, .jpeg, .png, .tif, .tiff, .pbm, .odp, .ppt, .ptx, .pdf, .tar, .tgz, .rar, .gz, .7z, .zip, .alf, .alff, .au, .mp3, .mpga, .wav, .aif, .avi, .avs, .fli, .mp2, .mp4, .mpeg, .ogg, .webm, .3gp, .flv, .vdo. Below this, there's a form with fields for 'Title', 'File' (with a 'Choose File' button), 'URL', and 'Link to'. The 'Title' field contains 'Building ArcGIS Tools using Python -Hydrology.pdf'. To the right of the form is a 'Permissions' section with four expandable sections: 'Who can view it?' (set to 'Anyone'), 'Who can download it?', 'Who can change metadata for it?', and 'Who can manage it? (update, delete, change permissions, publish/unpublish it)'.

- iii. Click on “Edit Document”

# Building ArcGIS Tools using Python -Hydrology.pdf

Download the Building ArcGIS Tools using Python -Hydrology.pdf document

[Info](#) [Share](#) [Ratings](#) [Comments](#) [Favorite](#)

Title	Building ArcGIS Tools using Python -Hydrology.pdf
License	Not Specified <a href="#">i</a>
Abstract	No abstract provided
Publication Date	Dec. 14, 2021, 2:01 a.m.
Regions	<a href="#">Global</a>
Responsible	<a href="#">uspanday</a>
<a href="#">More info</a> -	

Metadata Detail

Download Document

Edit Document


Download Metadata


**Resources using this document**  
This document is not related to any maps or layers


**Permissions**  
Click the button below to change the permissions of this document.  
Change Document Permissions

iv. Upload metadata by clicking the “Wizard” menu. Select appropriate parameters.

Edit Document ×

  
**Metadata**  
Wizard  
Advanced Edit


  
**Thumbnail**  
Upload

  
**Document**  
Replace  
Remove

Close

## 4.4. Uploading tabular data

i. Click on “Documents and Tables” and select “Upload Documents and Tables”.

 Spatial Data ▼ Documents and Tables ▼ Maps ▼ Community ▼

Documents and Tables

Upload Documents and Tables

ii. “Choose File” to be uploaded and click on “Upload”. Leave “Permissions” as default.



# Upload Documents

Explore Documents

Allowed document types:

.txt .log .doc .docx .ods .odt .sld .qml .xls .xlsx .xml .bm .bmp .dwg .dxf .ff .gif .jpg .jpe .jpeg .png .tif .tiff .pbm .odp .ppt .pptx .pdf .tar .tgz .rar .gz .7z .zip .aif .aifc .aiff .au .mp3 .mpga .wav .afl .avi .avs .fl .fl .mp2 .mp4 .mpg .ogg .webm .3gp .flv .vdo

Title:

subnational-infant-mortality-rate-TEST.xlsx

name by which the cited resource is known

File:

Choose File subnational-infant-mortality-rate-TEST.xlsx

URL:

The URL of the document if it is external.

Link to:

Upload

## Permissions

Who can view it?

☒ Anyone

The following users:

x uspanday

The following groups:

Choose groups...

Who can download it?

Who can change metadata for it?

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

iii. Click on “Edit Document” and update the metadata as you did for documents.