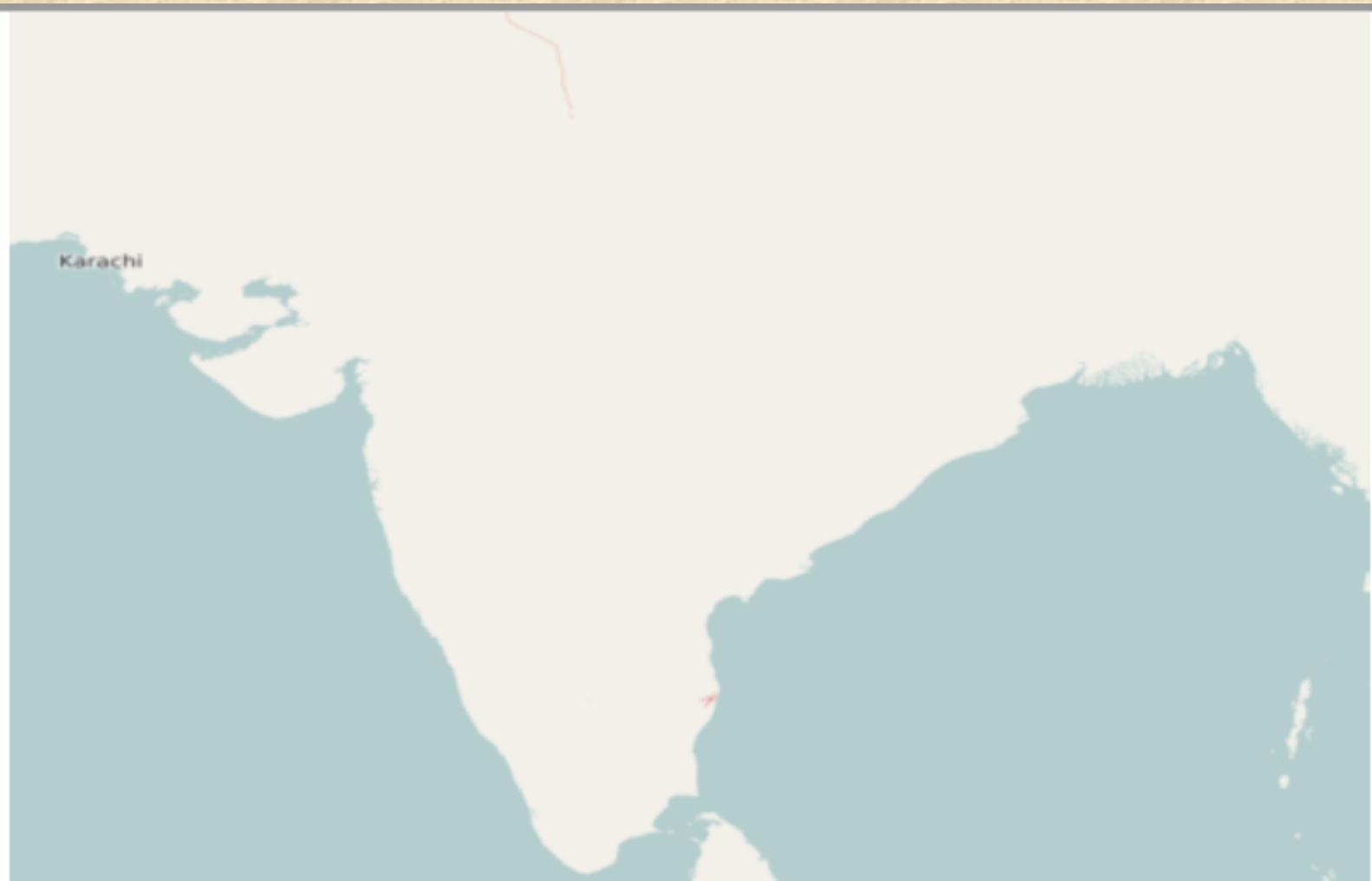


# State of the Map India 2019

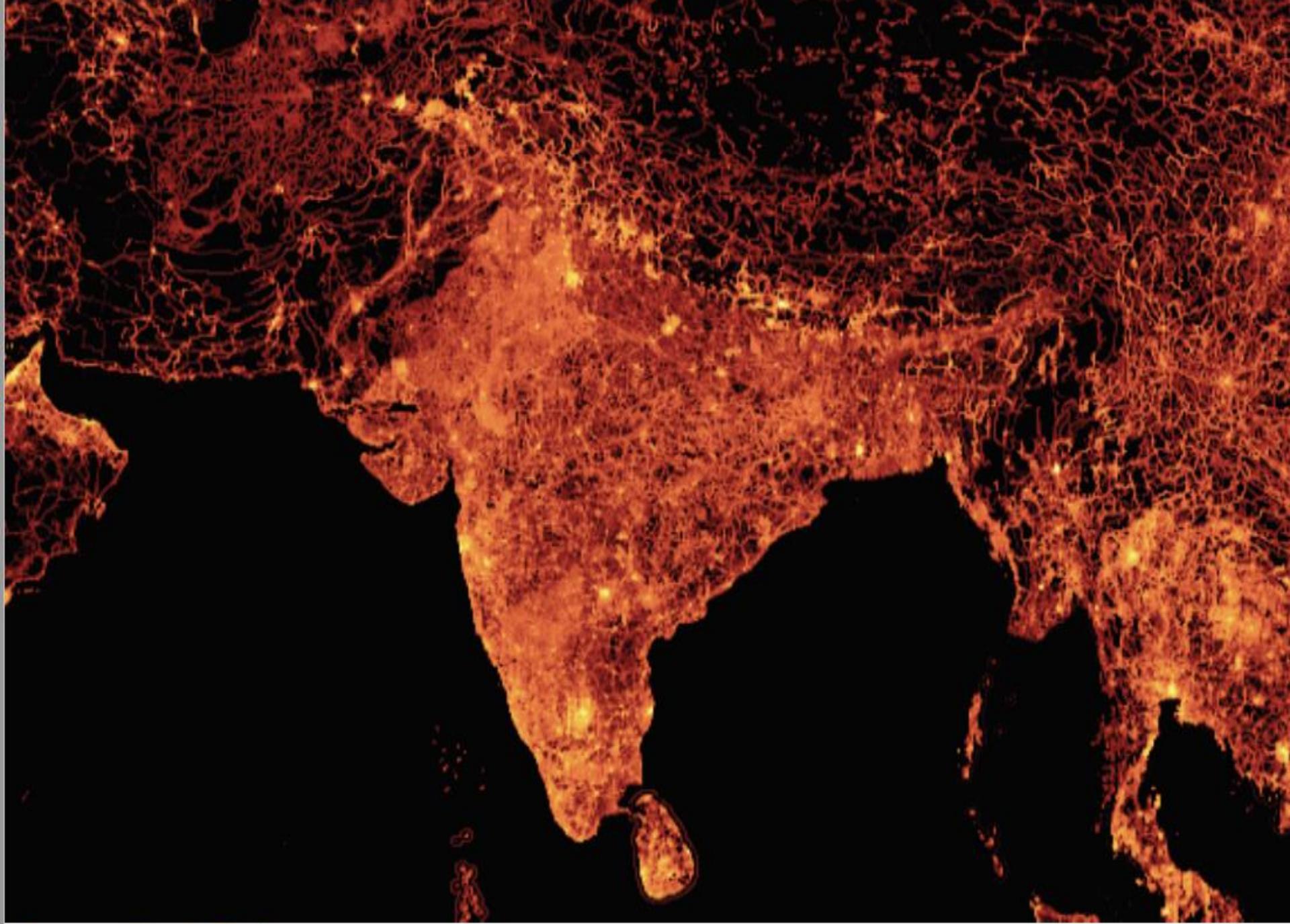


**Naveen Francis**  
Digital Humanitarian  
 @naveenpf

# The Map



India - 2007



Source: Martin Reifer

# OSM

Overview of OpenStreetMap Contributors aka Who's around me?

Copyright © Federal State Baden-Württemberg  
Map data © OpenStreetMap contributors

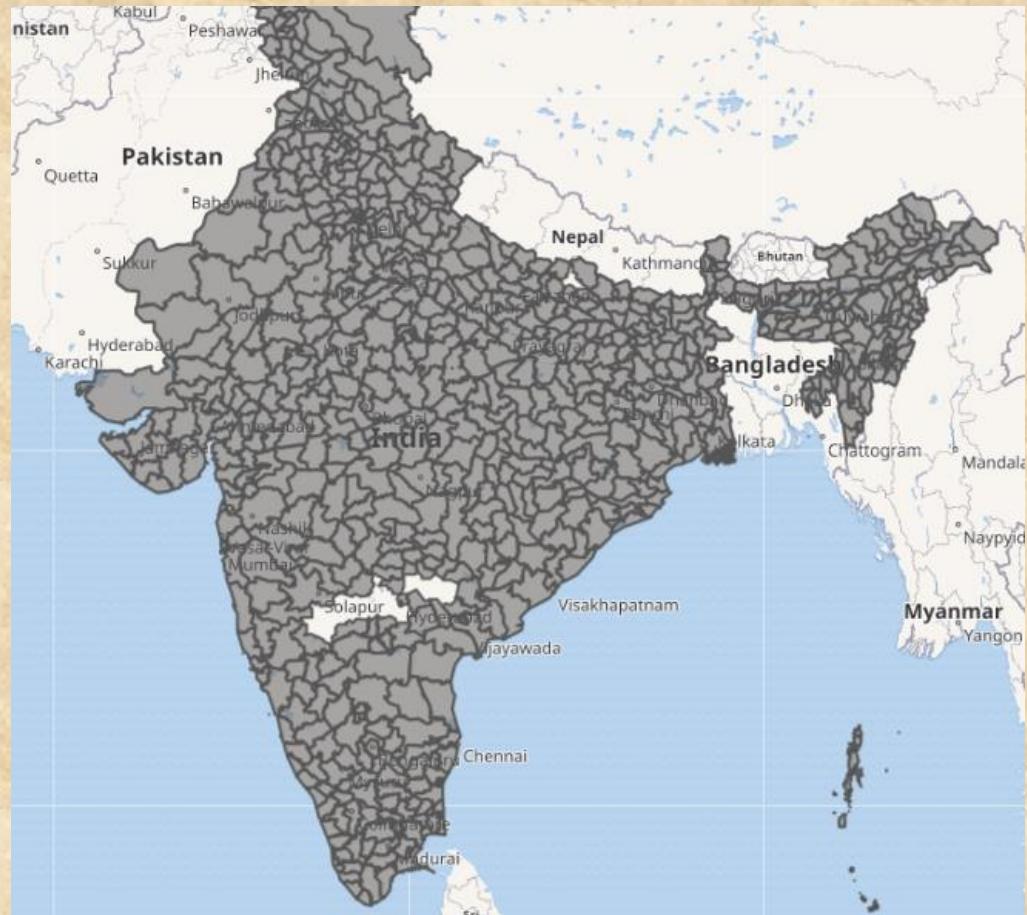
- Show Mapper-Types
-   New registered (1 ChangeSet)
  -   Nonrecurring (<10 ChangeSets)
  -   Junior (<100 ChangeSets)
  -   Senior (<500 ChangeSets)
  -   Senior+ (<2000 ChangeSets)
  -   Gold (2000+ ChangeSets)



# Community!

# Districts in India

2019 → 726 districts,  
2011 Census of India → 640  
2001 Census of India → 593



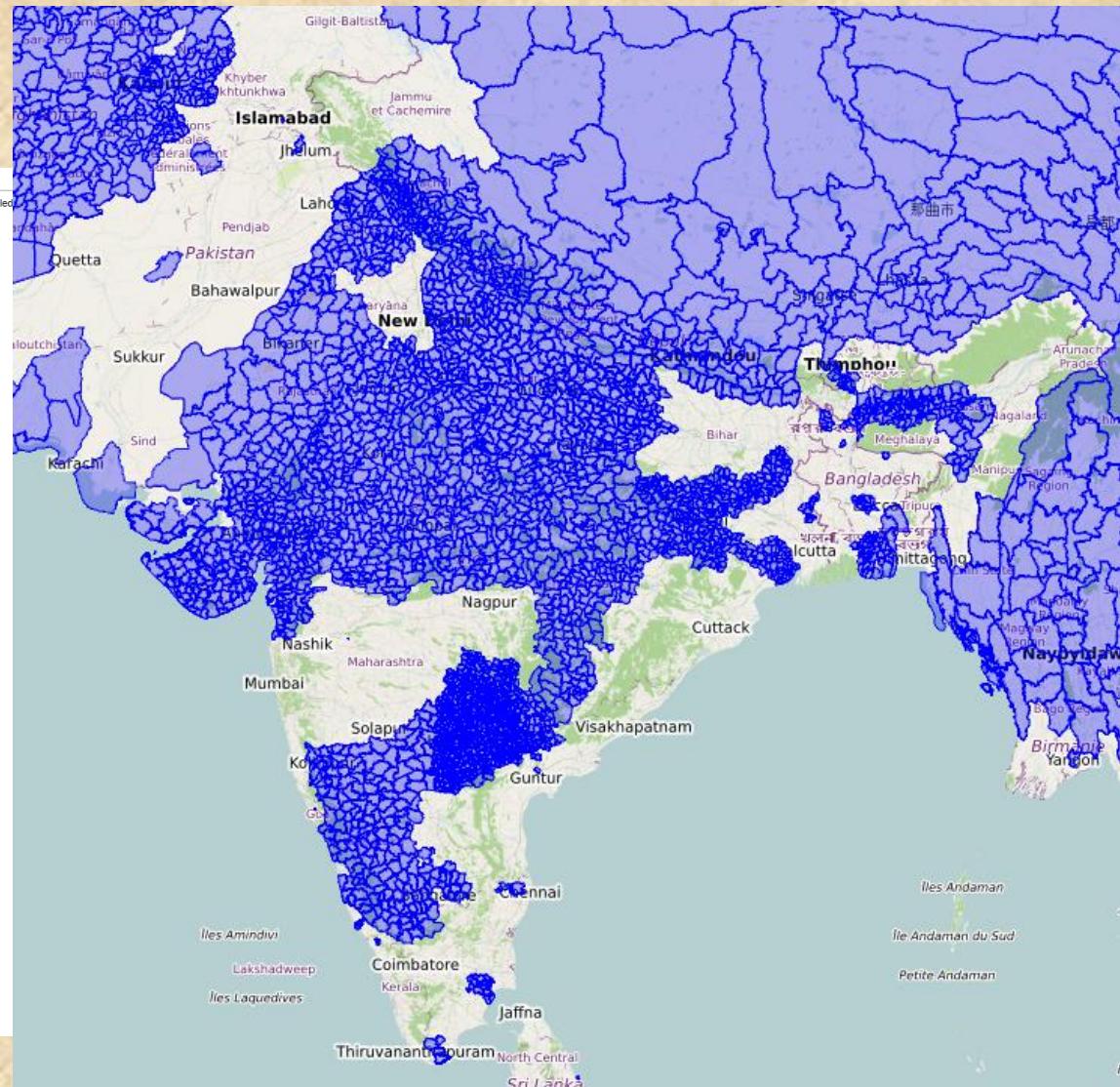
# Sub-Districts in India

6532 → taluks  
2882 mapped till now

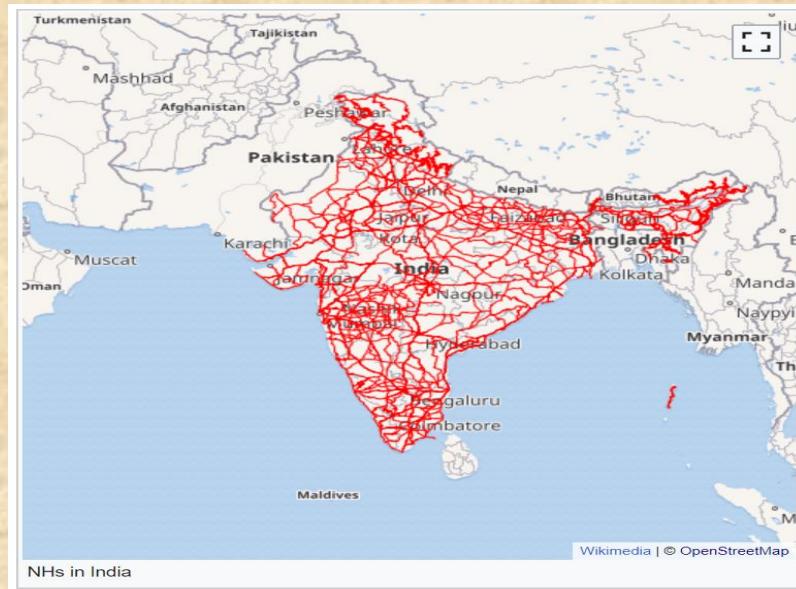
## Subdistricts of India by state

As of now, there are a total of 6,532 subdistricts, up from the 5,564 in the 2011 Census of India. States use varying names for their subdistricts. Detailed

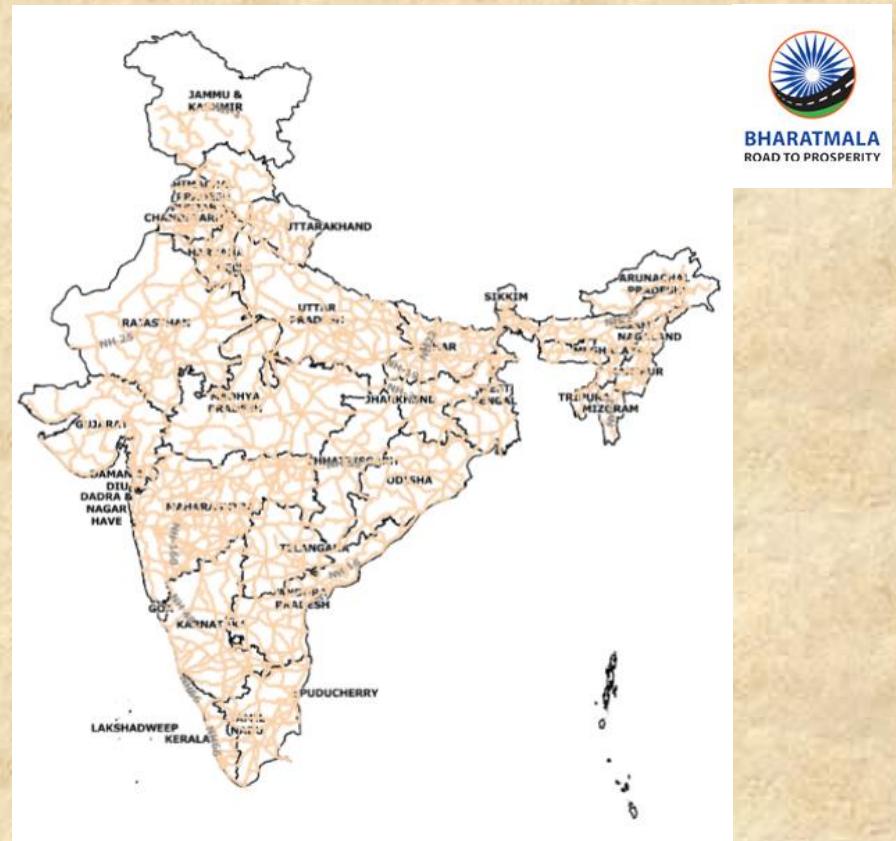
State (*) or Union Territory (*)		Subdistricts			
Map key	Name	Count	Title <sup>(1)</sup>	Status	Notes
1	Andhra Pradesh	mandal	661	✗	
2	Arunachal Pradesh	circle	149	✗	
3	Assam	sub-division	78	✗	
4	Bihar	sub-division	101	✗	
5	Chhattisgarh	tehsil	150	✗	1 not mapped
6	Goa	taluka	12	✗	
7	Gujarat	taluka	264	✗	10 not mapped
8	Haryana	tehsil	67	✗	
9	Himachal Pradesh	tehsil	117	✓	
10	Jammu and Kashmir	tehsil	59	✗	
11	Jharkhand	sub-division	264	✗	5 not mapped
12	Karnataka	taluka	176	✗	8 not mapped
13	Kerala	taluk	75	✗	
14	Madhya Pradesh	tehsil	356	✗	16 not mapped
15	Maharashtra	taluka	353	✗	
16	Manipur	sub-division	38	✗	
17	Meghalaya	sub-division	46	✗	
18	Mizoram	sub-division	26	✗	
19	Nagaland	circle	93	✗	
20	Odisha	tehsil	317	✗	
21	Punjab	tehsil	81	✓	
22	Rajasthan	tehsil	304	✗	52 not mapped
23	Sikkim	sub-division	9	✗	
24	Tamil Nadu	taluka	201	✗	
25	Telangana	mandal	598	✗	5 new not mapped
26	Tripura	sub-division	78	✗	
27	Uttar Pradesh	tehsil	327	✗	14 not mapped
28	Uttarakhand	tehsil	84	✗	78 mapped
29	West Bengal	sub-division	62	✗	
A	Andaman and Nicobar Islands	tehsil	7	✗	
B	Chandigarh	—	1	✓	
C	Dadra and Nagar Haveli	—	1	✓	
D	Daman and Diu	taluka	2	✗	
E	Delhi	tehsil	27	✗	
F	Lakshadweep	sub-division	4	✗	
G	Puducherry	commune panchayat	10	✗	
36	Total for India		6532	2829	



# National Highway Mapping



MORTH Website:- 1,31,326km  
In OSM :- 1,26,471km

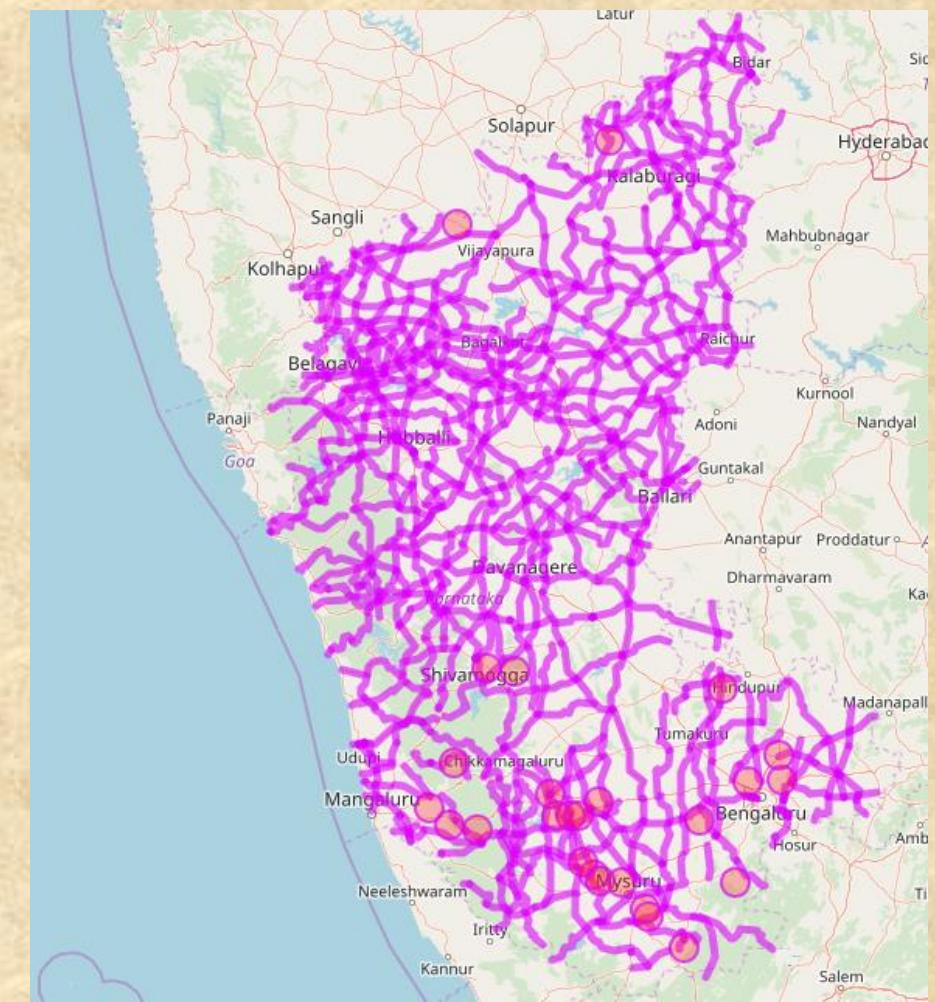


[https://en.wikipedia.org/wiki/National\\_Highway\\_\(India\)](https://en.wikipedia.org/wiki/National_Highway_(India))

# State Highway Mapping

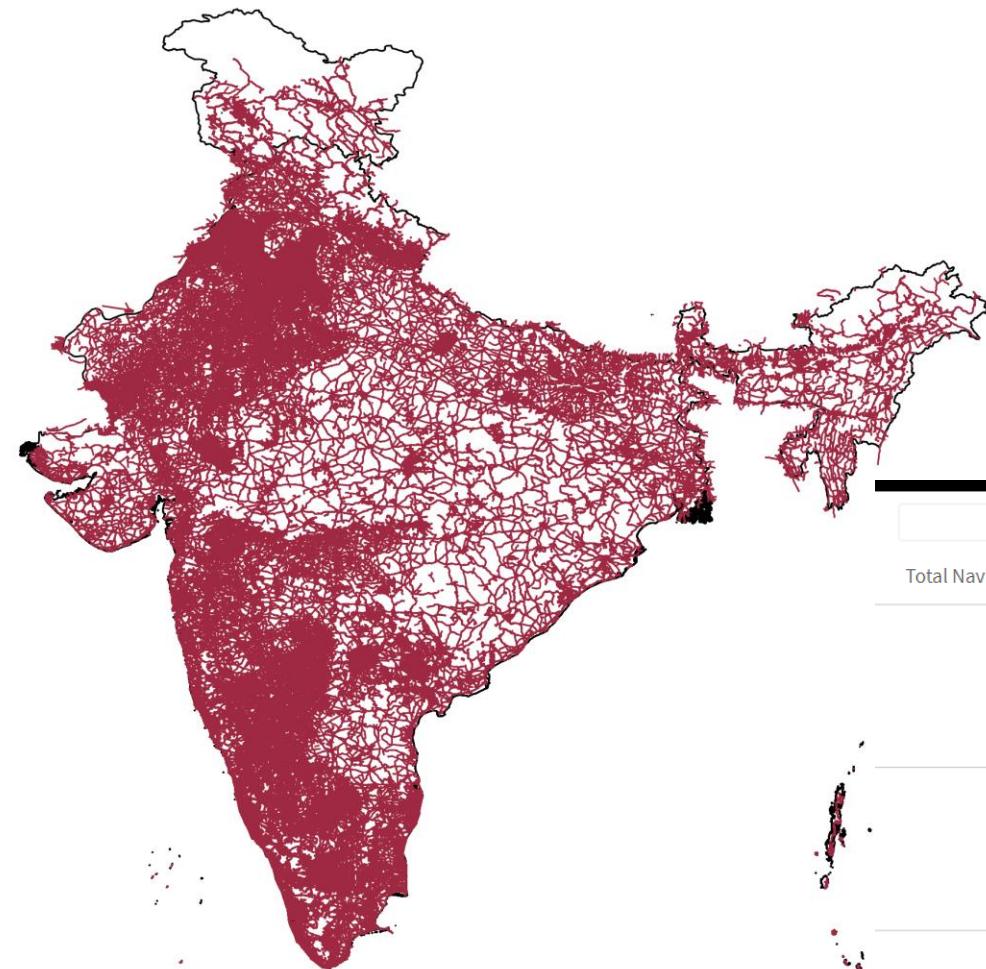
State highways [ edit | edit source ]

No	State	Network tag	Length official	Length in OSM	Next Task
1	Andhra Pradesh-SH	IN:SH:AP	6485		Mapping can be started
2	Arunachal Pradesh-SH	IN:SH:AR	8123		Data not available, no separate SH and MDR
3	Assam-SH	IN:SH:AS	3134	2232	unmapped 142km
4	Bihar-SH	IN:SH:BR	4253	2695.9	Mapping complete
5	Chhattisgarh-SH	IN:SH:CT	4462	2270	Mapping Complete
6	Goa-SH	IN:SH:GA	279		Data not available
7	Gujarat-SH	IN:SH:GU	17201	13983	unmapped : 354km
8	Haryana-SH	IN:SH:HR	1816	1569	Mapping Complete
9	Himachal Pradesh-SH	IN:SH:HP	1486	1038.5	Mapping Almost Complete
10	Jammu and Kashmir-SH	IN:SH:JK	130		Data not available
11	Jharkhand-SH	IN:SH:JH	1296		Data not available
12	Karnataka-SH	IN:SH:KA	19578	20930.3	Mapping Almost Complete
13	Kerala-SH	IN:SH:KL	4342	4036	Mapping Complete
14	Madhya Pradesh-SH	IN:SH:MP	11389	10087	unmapped:342km
15	Maharashtra-SH	IN:SH:MH	39000	17594	unmapped : 70km
16	Manipur-SH	IN:SH:MN	715		Data not available
17	Meghalaya-SH	IN:SH:ML	772		Data not available
18	Mizoram-SH	IN:SH:MZ	170	636.9	Mapping almost complete
19	Nagaland-SH	IN:SH:NL	722		Data not available
20	Odisha-SH	IN:SH:OR	4187	3427	unmapped = 250km
21	Punjab-SH	IN:SH:PB	1133	880.8	unmapped : 9km
22	Rajasthan-SH	IN:SH:RJ	15437.85	14820	unmapped:102km
23	Sikkim-SH	IN:SH:SK	701		Data not available
24	Tamil Nadu-SH	IN:SH:TN	11752		Mapping can be started
25	Telangana-SH	IN:SH:TG	2731	1616	Mapping Almost Complete
26	Tripura-SH	IN:SH:TR	329		Data not available
27	Uttar Pradesh-SH	IN:SH:UP	8432	4396	unmapped:5km
28	Uttarakhand-SH	IN:SH:UK	4521		Data not available
29	West Bengal-SH	IN:SH:WB	3612	3237.5	Mapping Complete
30	Andaman and Nicobar Islands-SH	IN:SH:AN	266		Data not available
31	Chandigarh-SH	IN:SH:CH	200		Data not available
32	Dadra and Nagar-SH	IN:SH:DN	28		Data not available
33	Daman and Diu-SH	IN:SH:DD	22		Data not available
34	Delhi-SH	IN:SH:DL	0		NA
35	Lakshadweep-SH	IN:SH:LD	0		NA
36	Puducherry-SH	IN:SH:PY	89		Mapping can be started
			176166	105449	



[https://wiki.openstreetmap.org/wiki/India/Roads#State\\_highways](https://wiki.openstreetmap.org/wiki/India/Roads#State_highways)

# Roads

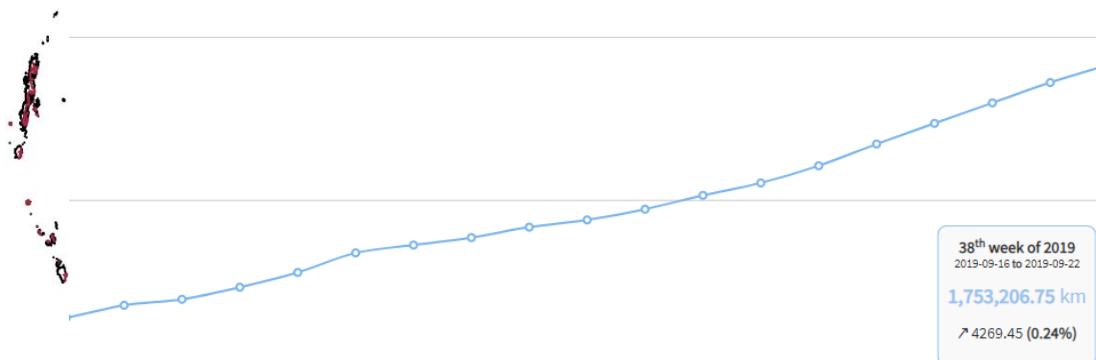


© Openstreetmap contributors

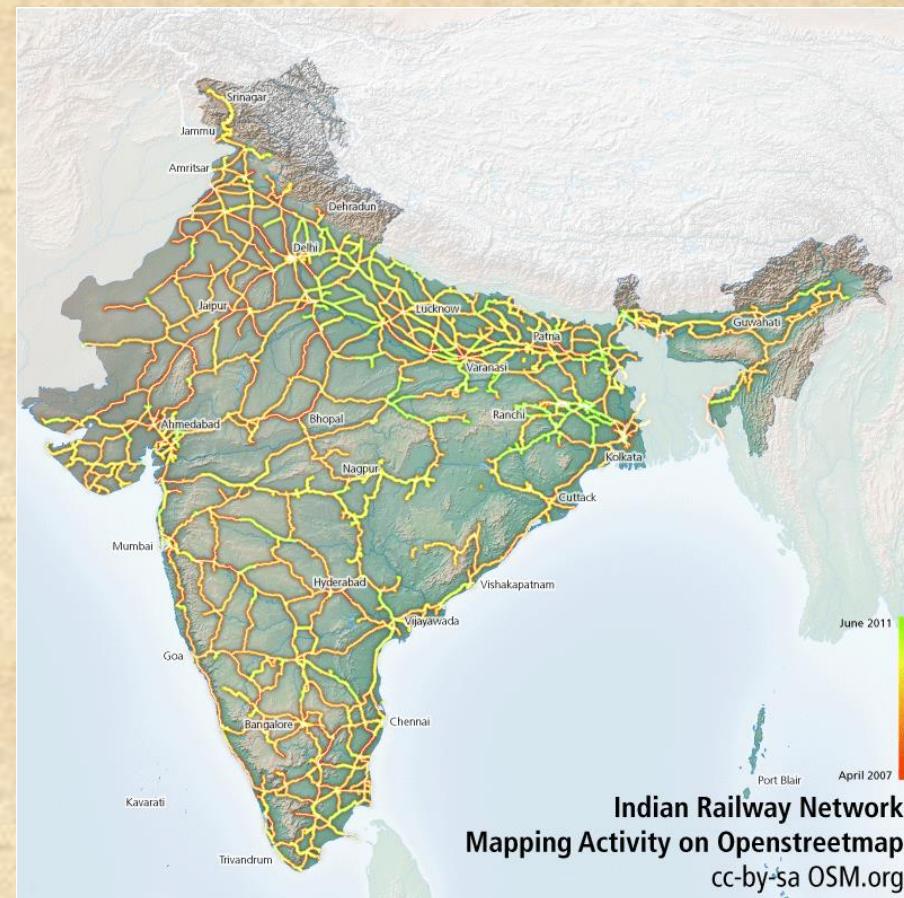
Road classification	Length (km)	Share of network length
National Highways	1,01,011	1.80 %
State Highways	1,76,166	3.14 %
District roads	5,61,940	10.03 %
Rural roads	39,35,337	70.23 %
Urban roads	5,09,730	9.10 %
Project roads	3,19,109	5.70 %
<b>Total</b>	<b>56,03,293</b>	<b>100 %</b>

India Kilometers Miles

Total Navigable Roads per week in India



# Railways



[← Go Back](#)

## Add missing station codes for Railway Stations in India

Srihari Thalla's Project

**DIFFICULTY:** Easy

**TASKS FROM:** 3 years ago

[View Leaderboard](#)

Many Railway Stations are missing their Station Codes. Your task is to find the correct code and add it to the respective station. The code shall be added as a tag "ref" with the station code as its value. Thanks for your help!

**20% FIXED (440/2198)**

**1% SKIPPED (12/2198)**

**1% ALREADY FIXED (22/2198)**

**1% TOO HARD (18/2198)**

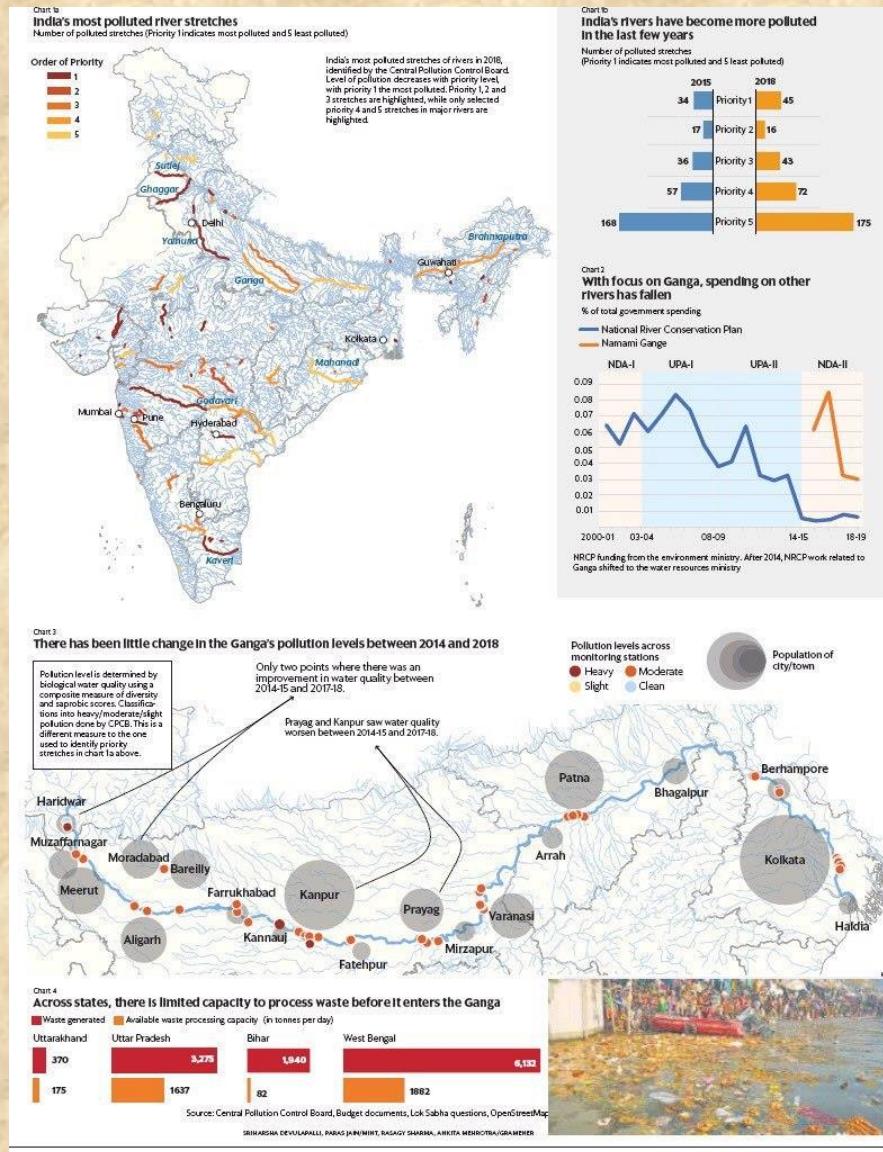
**0% NOT AN ISSUE (5/2198)**



Tasks Remaining: 1,701(77%) of 2,198

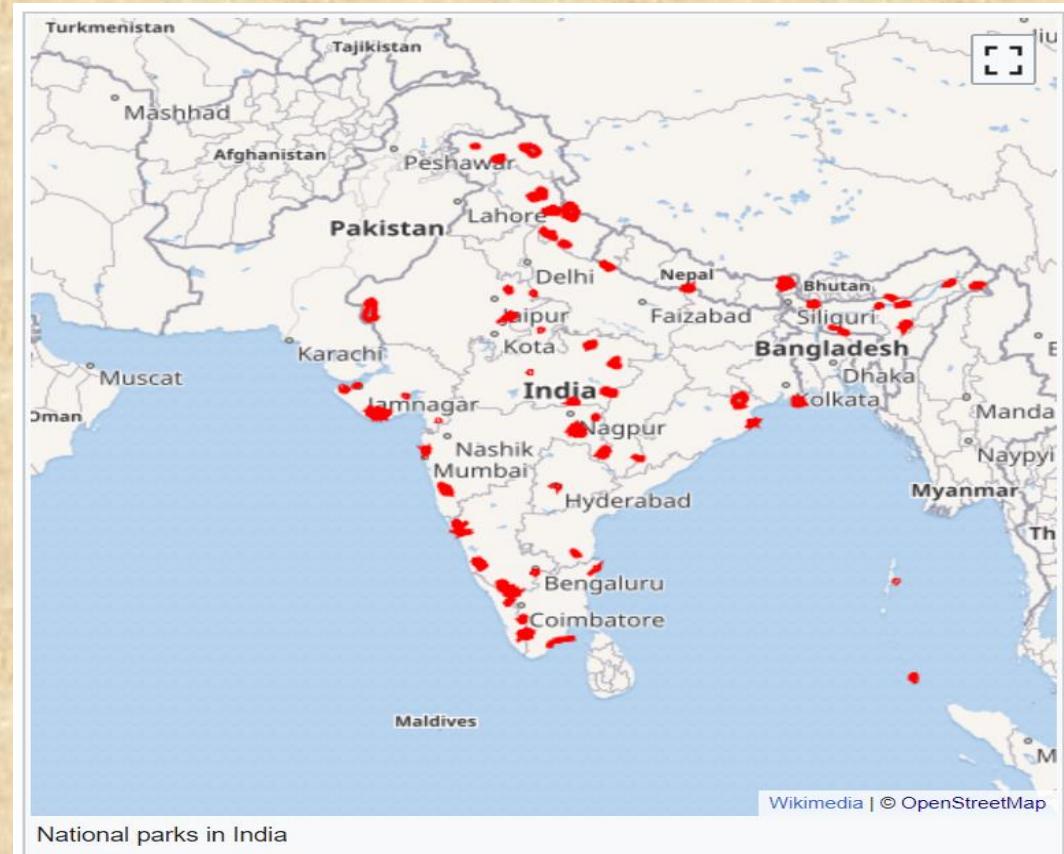
[Sign in to get started](#)

# Water resources



# National Parks in India

- 104 national parks
- IUCN category II protected areas

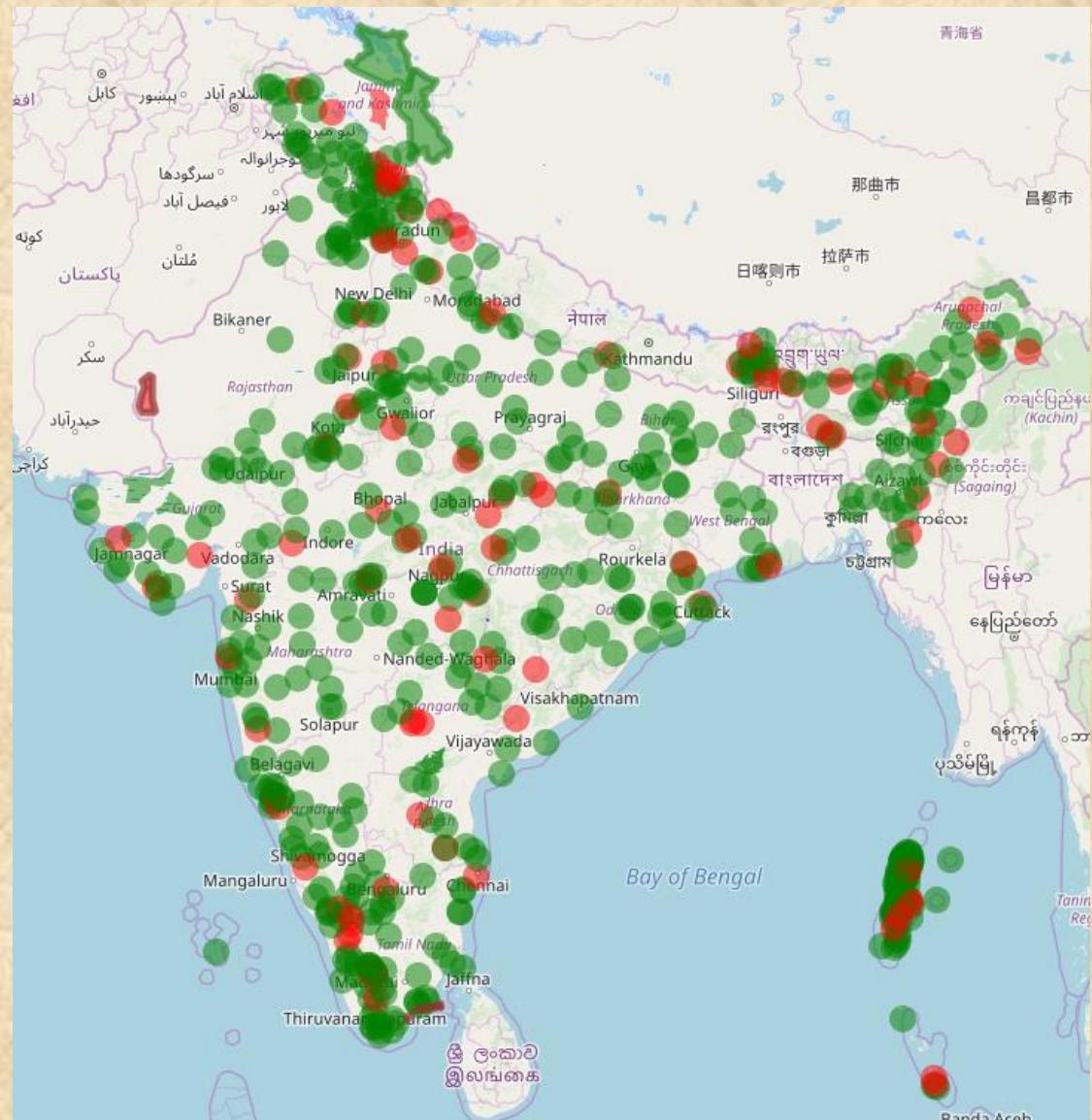


[https://en.wikipedia.org/wiki/List\\_of\\_national\\_parks\\_of\\_India](https://en.wikipedia.org/wiki/List_of_national_parks_of_India)

# Wildlife sanctuaries in India

- IUCN category IV protected areas.
- 543 wildlife sanctuaries referred to as wildlife sanctuaries category IV protected areas.

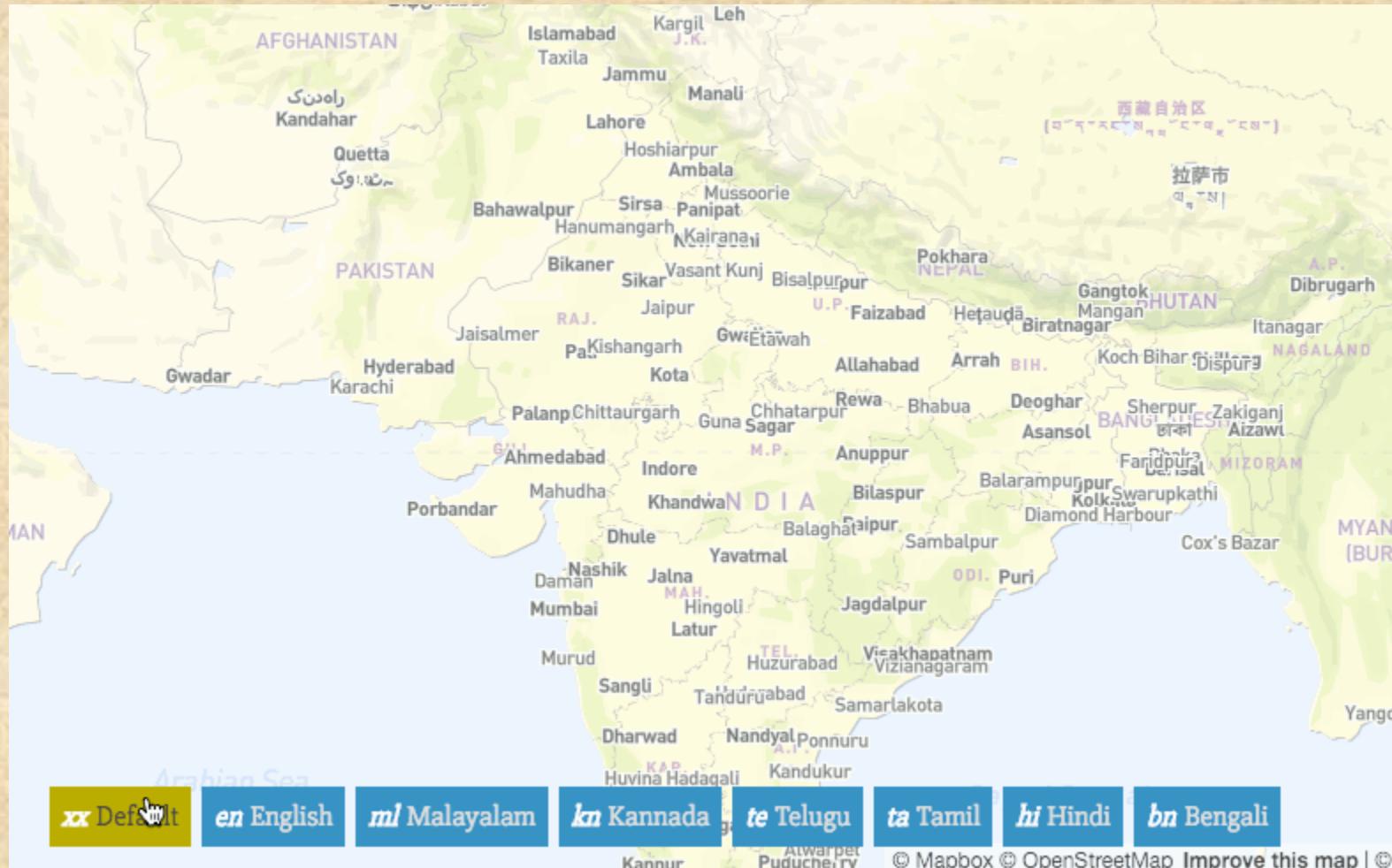
(NPs red; WLS green)



# Map internationalization (India)

22 primary languages by the Indian Constitution

99 primary languages are still not scheduled

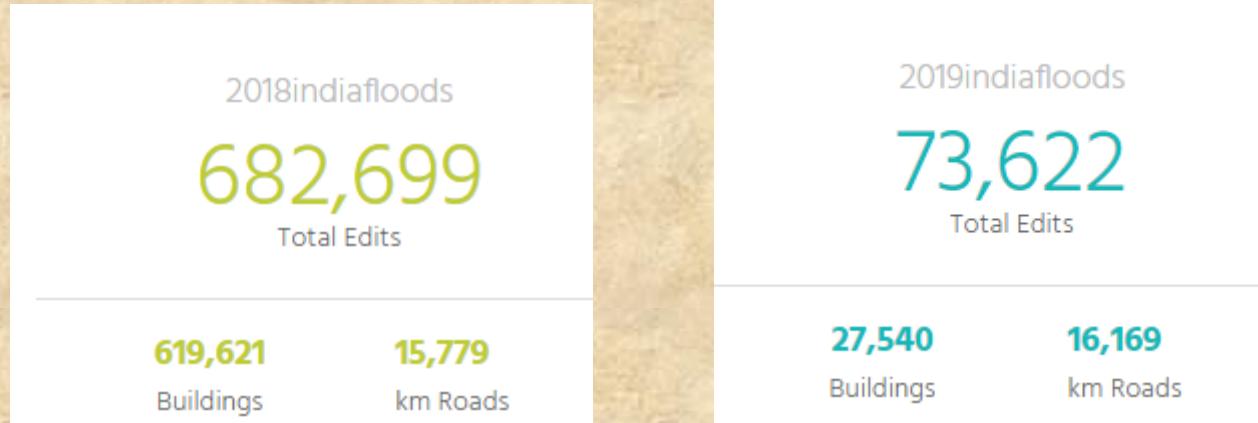


[https://wiki.openstreetmap.org/wiki/Map\\_internationalization\\_\(India\)](https://wiki.openstreetmap.org/wiki/Map_internationalization_(India))



Humanitarian  
OpenStreetMap  
Team

# India Floods



- 18 tasking manager projects in 2018
- 6 tasking manager projects in 2019

[https://wiki.openstreetmap.org/wiki/2018\\_India\\_Disaster\\_Response\\_Mapping](https://wiki.openstreetmap.org/wiki/2018_India_Disaster_Response_Mapping)  
[https://wiki.openstreetmap.org/wiki/2019\\_India\\_Disaster\\_Response\\_Mapping](https://wiki.openstreetmap.org/wiki/2019_India_Disaster_Response_Mapping)

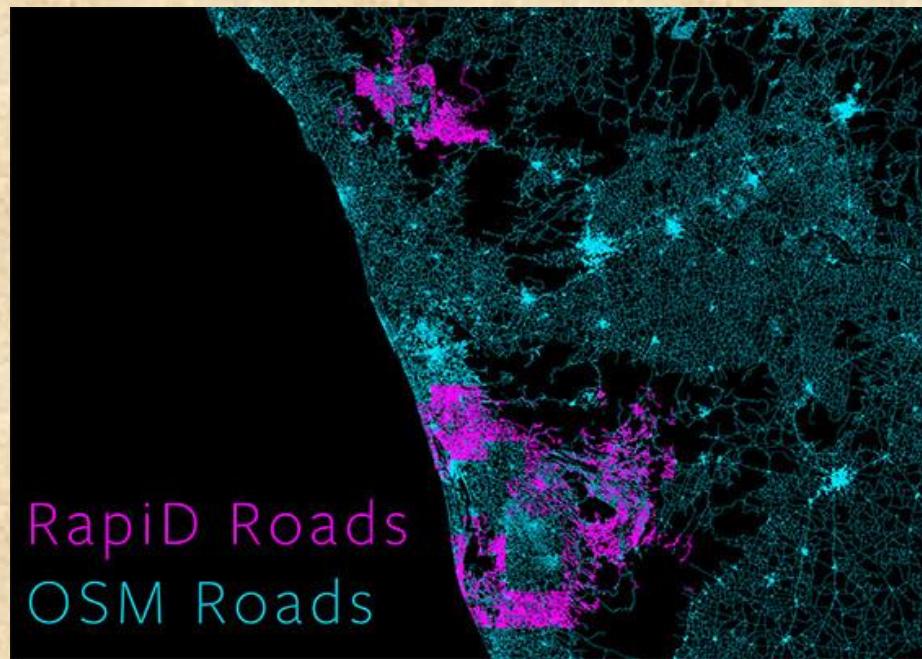
# Facebook's Kerala Road Import via AI/ML

52,369 Total Edits

13,143 km Roads

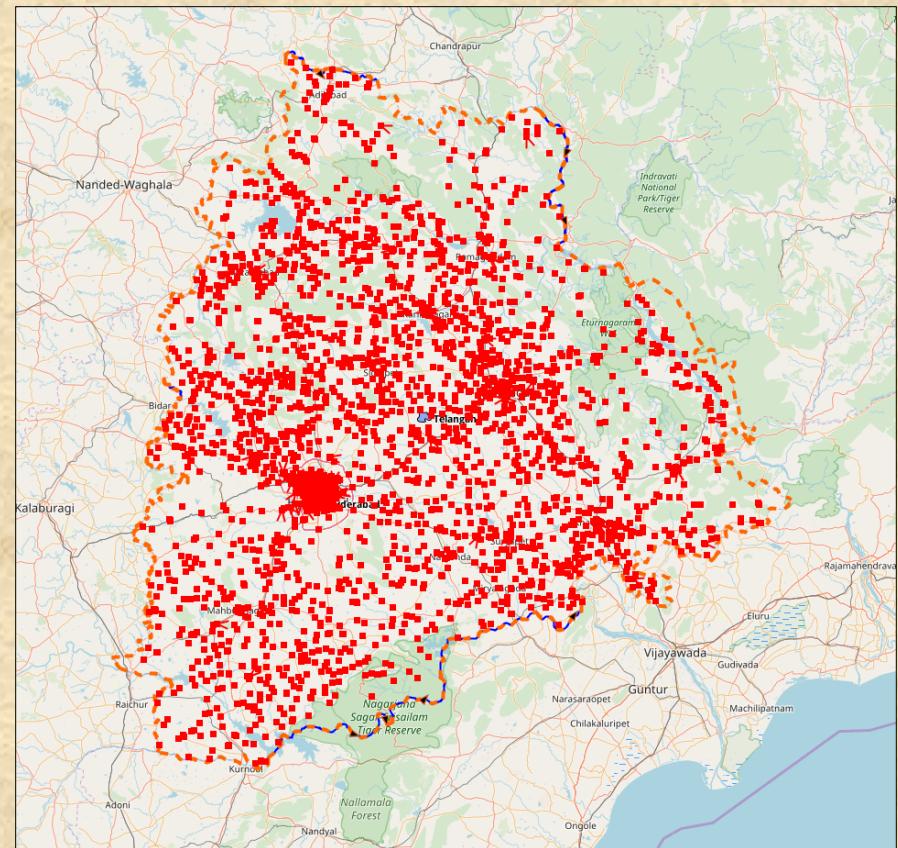
For more details :-

[https://wiki.openstreetmap.org/wiki/Kerala\\_Road\\_Import](https://wiki.openstreetmap.org/wiki/Kerala_Road_Import)



# Health Facilities Import - India

- The goal is to provide accessible data of accurate health care information from the [Open Government Data](#) directories for Hospitals, Health facilities, Blood banks, Health Centers and Health Clinics information which can be useful for all the people and also the Humanitarian team in India.

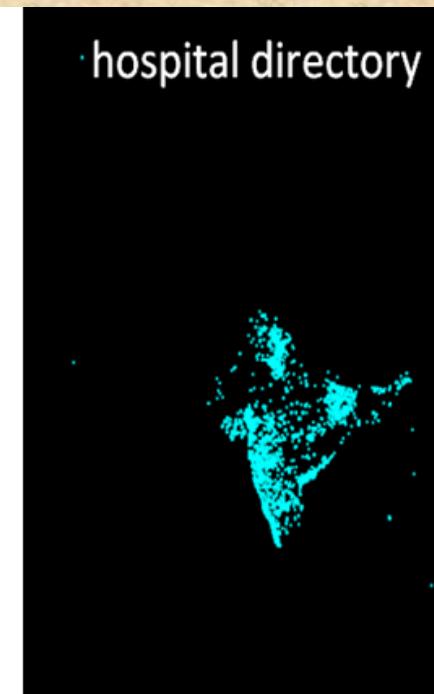
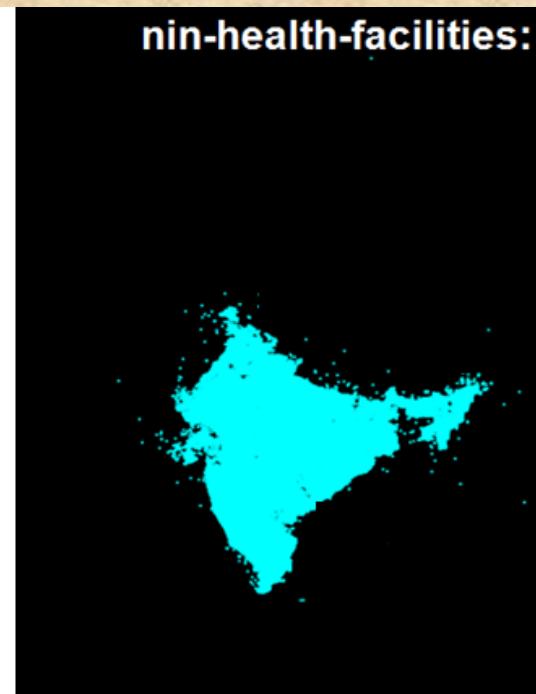


# Open Government Data

Data source site: <https://data.gov.in>

- National Hospital - [Click here](#)
- National identification number (NIN) Health-facilities - [Click Here](#)
- Blood-bank - [Click Here](#)

File	Total Records	Missing Lat Long	Incorrect Lat Long (-x:-y)
Hospital directory	30274	19322	133
nin-health-facilities	192905	25915	13
Blood Bank	2823	370	-



## Sample showing enhancement of the Hospital attributes:

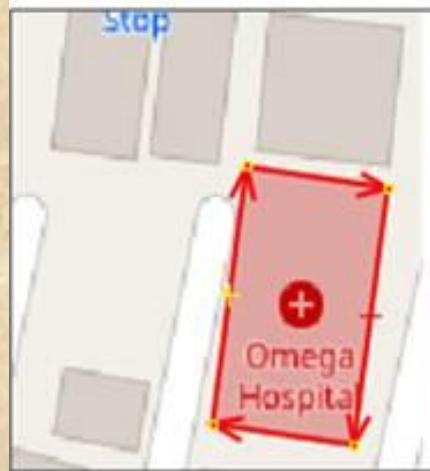
Before Improving



Key	Value
addr:city	Hyderabad
addr:housename	Jubilee Hills
addr:postcode	500096
amenity	hospital
building	yes
emergency	yes
name	Apollo Hospital
wheelchair	yes

After Improving

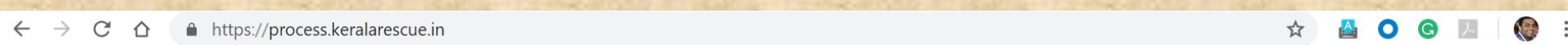
Key	Value
addr:district	Hyderabad
addr:full	Apollo Hospitals, Jubilee Hills
addr:postcode	500033
addr:state	Telangana
amenity	hospital
building	yes
contact:email	apollohealthhy@apollohospitals.com
emergency	yes
health_facility:type	Inpatient;Accommodation;Food and Beverage
healthcare:specialty	Multispeciality
medical_system	Allopathic
name	Apollo Hospitals
operator:type	private
phone	040 23607777
source	<a href="https://data.gov.in">https://data.gov.in</a>
website	<a href="http://www.apollohospitals.com">http://www.apollohospitals.com</a>
wheelchair	yes



Key	Value
addr:district	Hyderabad
addr:full	Plot No: 8-2-293/82/L/276A, MLA Colony, Jubilee Hills, Hyderabad, Telangana, India
addr:postcode	500034
addr:state	Telangana
amenity	hospital
building	yes
contact:mobile	9160900045
email	info@omegahospitals.com
fax	040 23550327
healthcare:specialty	Cancer Subspecialties;General Health I...
medical_system	Allopathic
name	Omega Hospital
operator:type	private
phone	040 23551034
source	<a href="https://data.gov.in/Local Knowledge">https://data.gov.in/Local Knowledge</a>
website	<a href="http://www.omegahospitals.com/">http://www.omegahospitals.com/</a>

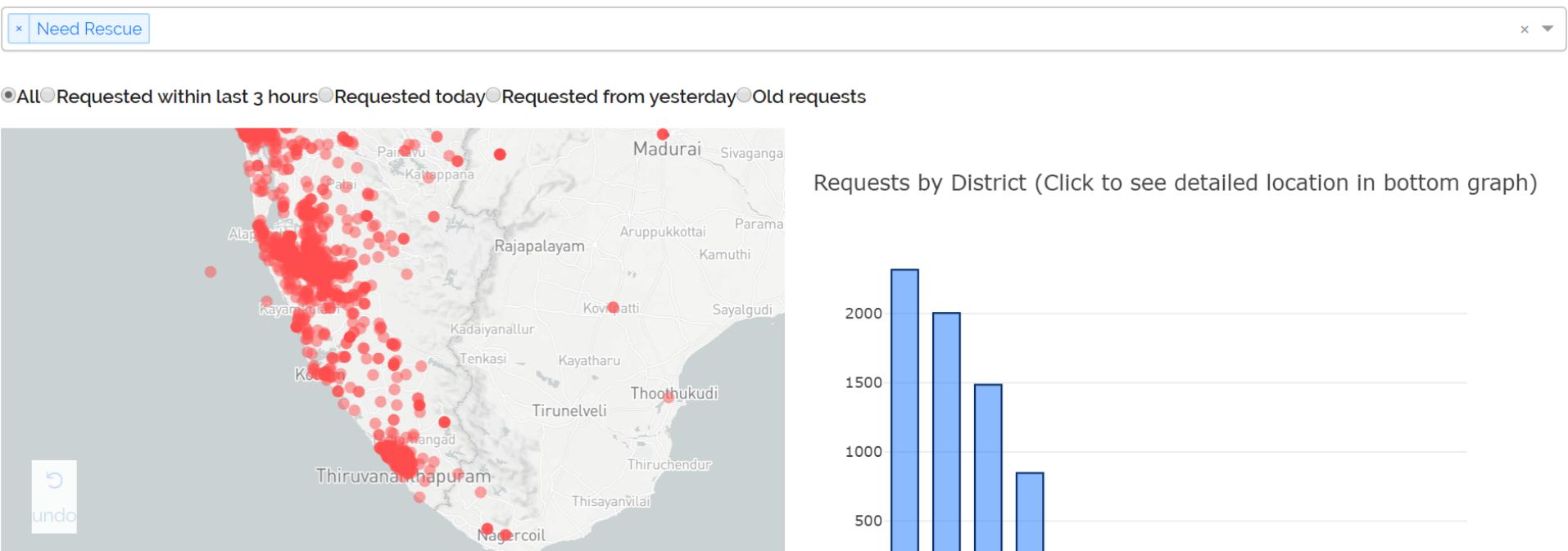
Key	Value
addr:district	Hyderabad
addr:full	Plot No: 8-2-293/82/L/276A, MLA Colony, Jubilee Hills, Hyderabad, Telangana, India
addr:postcode	500034
addr:state	Telangana
amenity	hospital
building	yes
contact:mobile	9160900045
email	info@omegahospitals.com
fax	040 23550327
healthcare:specialty	Cancer Subspecialties;General Health I...
medical_system	Allopathic
name	Omega Hospital
operator:type	private
phone	040 23551034
source	<a href="https://data.gov.in/Local Knowledge">https://data.gov.in/Local Knowledge</a>
website	<a href="http://www.omegahospitals.com/">http://www.omegahospitals.com/</a>

# OSM in Action



[Click here for Rescue Dashboard](#) || [Click here for Relief Camps Dashboard](#)

## Kerala Rescue Dashboard (Data updated on August 22, 2018 at 10:29)



<https://process.keralarescue.in/>

# OSM in Action

https://www.microid.in/keralaflood/#7.47/9.985/76.694

**Flooded Streets**  
Kerala  
1273 flooded streets in this region.  
This is a crowdsourced effort to map inundated roads in Kerala. All the data is open source.  
**How-To ?**  
Report a flooded street by zooming into the map and clicking it.  
OR  
Click on a marked road to unmark it once it is clear.  
**Useful Links**  
[Location of people to be rescued](#)  
[Kerala Flood rescue locations](#)

<https://www.microid.in/floodmap/>



SOTM  
ASIA  
2018

# State of the Map Asia 2018



**39 Volunteers,  
4,404  
Edits**

**2,799  
Buildings  
118 km  
Roads**

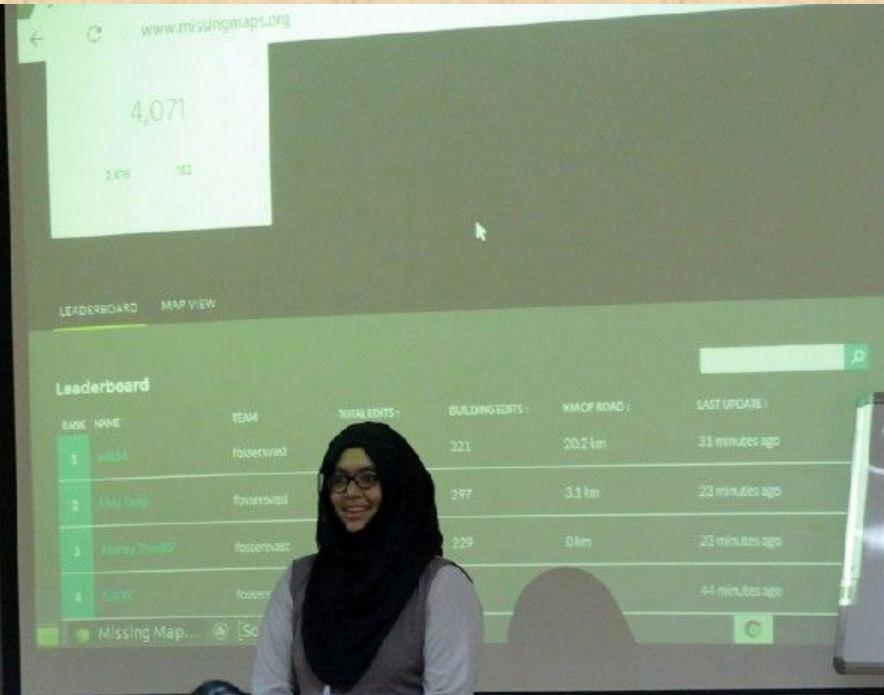
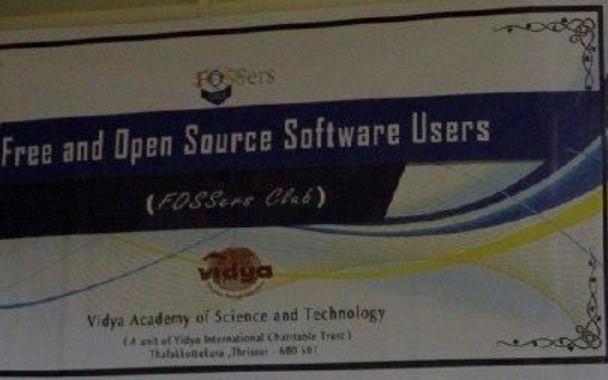


## OpenStreetMap Mapathon



Humanitarian  
OpenStreetMap  
Team





Manoj Karingamadathil



# Government-NITI Aayog

Not secure | niti.gov.in/content/aspirational-districts-baseline-ranking-map

[Home](#) | [About Us](#) | [Cooperative Federalism](#) | [Statistics](#) | [Resources](#) | [NGO Darpan](#) | [SDGs](#) | [Schemes](#) | [Services](#) | [Governance & Research](#) | [Samavesh](#) | [Nutrition \(NTBN\)](#) | [Career](#)

Aspirational Districts Baseline  
Ranking Map

WORKING WITH THE STATES

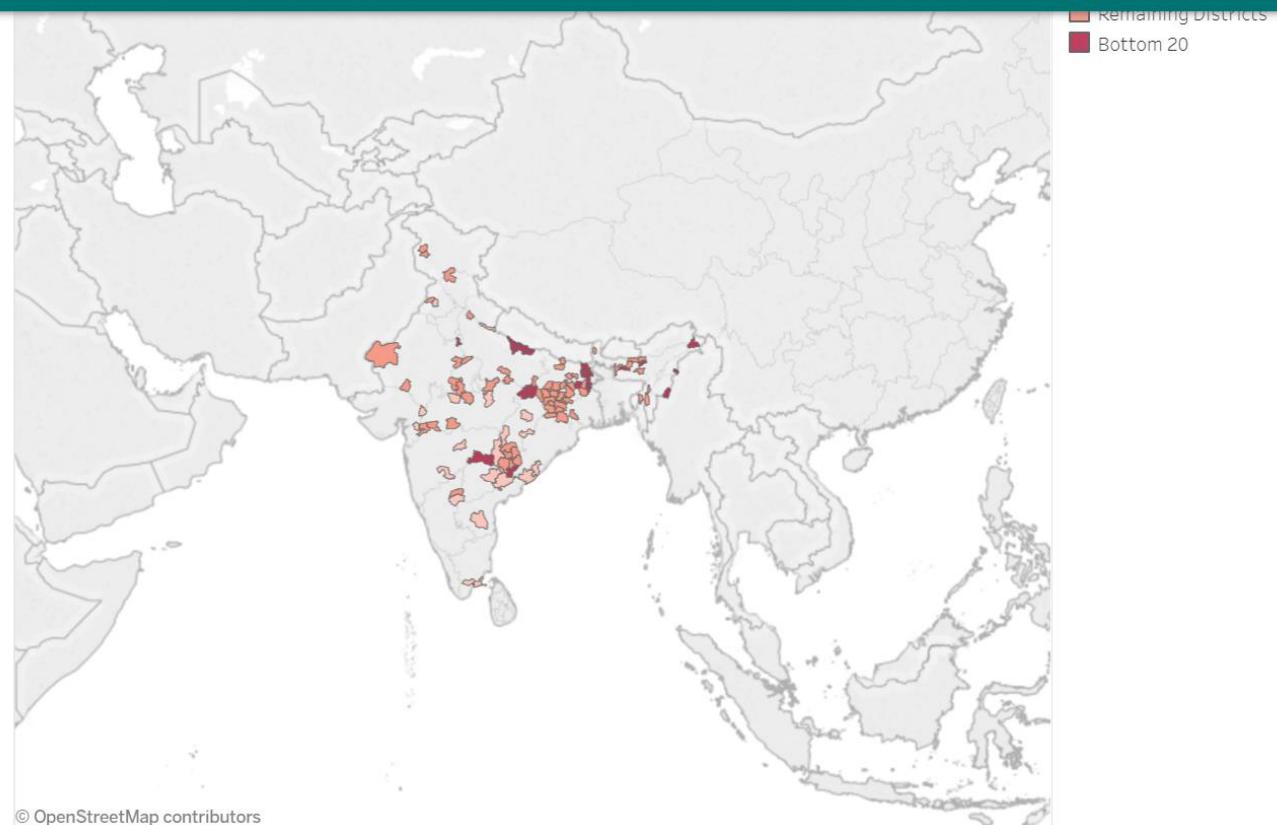
SUSTAINABLE DEVELOPMENT  
GOALS

STATISTICS

REPORTS AND PUBLICATIONS

KNOWLEDGE HUB

NITI'S INITIATIVES



## Aspirational Districts Baseline Ranking Map



mapmykerala.in/contribute?difficulty=ALL

TASKING MANAGER Contribute Learn About What is New? English naveenpf

## Contribute

Grid view Map view

Search Search project description or project number

Priority: URGENT #5 Wayanad, Kerala , Road Network Improvement

Wayanad is a rural district in Kerala state, southwest India. Mapping project intended to update road network of the area.

Organization: KSTIM Campaign: 2019IndiaFloods Level: BEGINNER

Priority: HIGH #6 Wayanad, Kerala, Building Footprint Improvement

Wayanad, Kerala, India Building Footprint Improvement Mapping project in response to 2019 Flooding in India.

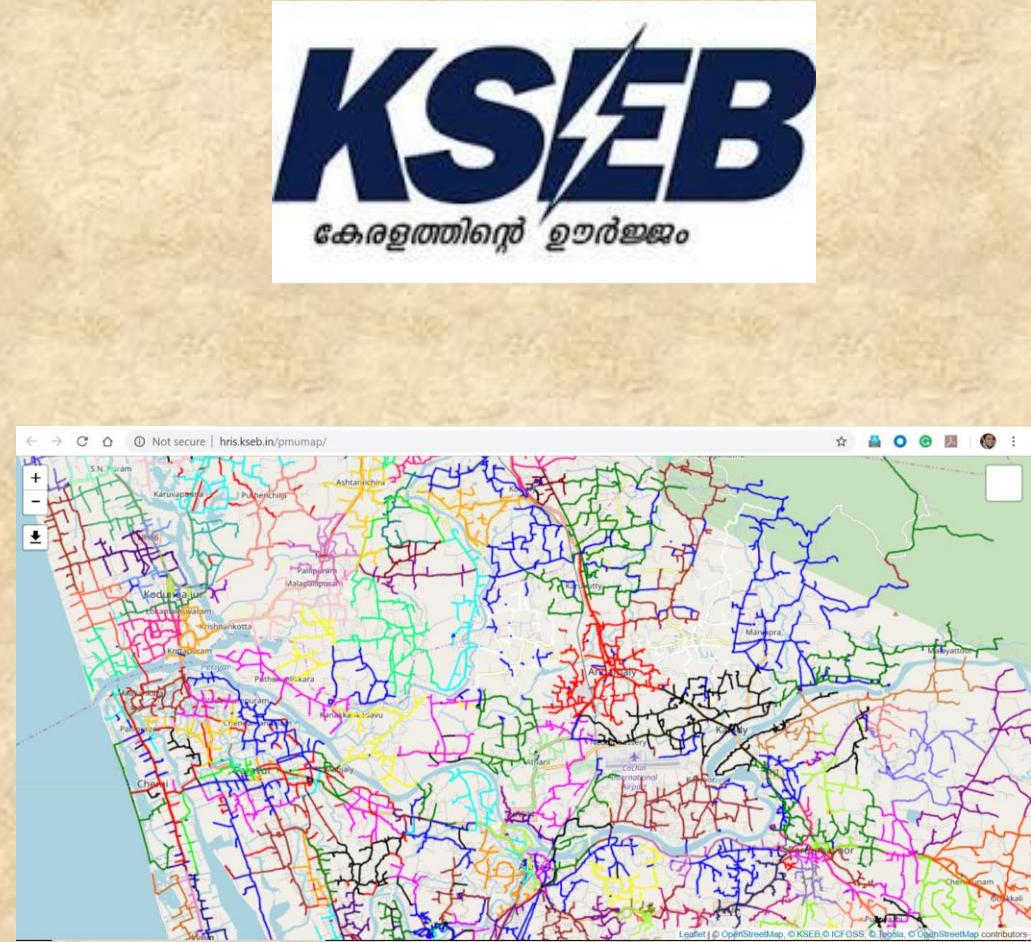
Organization: KSTIM Campaign: 2019IndiaFloods Level: BEGINNER

45% Mapped 0% Validated

Mapping difficulty All

Organisation All

<https://mapmykerala.in/>



<http://hrис.kseb.in/pmumap/>



I—SEC. I] THE GAZETTE OF INDIA, MARCH 17, 2012 (PHALGUNA 27, 1933) 93

MINISTRY OF SCIENCE & TECHNOLOGY  
(DEPARTMENT OF SCIENCE & TECHNOLOGY)

### National Data Sharing and Accessibility Policy (NDSAP) – 2012

#### 1. Preamble

1.1 Asset and value potentials of data are widely recognized at all levels. Data collected or developed through public investments, when made publicly available and maintained over time, their potential value could be more fully realized. There has been an increasing demand by the community, that such data collected with the deployment of public funds should be made more readily available to all, for enabling rational debate, better decision making and use in meeting civil society needs. Principle 10 of the United Nations Declaration on Environment and Development (Rio de Janeiro, June 1992), stated

*".....each individual shall have appropriate access to information concerning the environment that is held by public authorities ..... and the opportunity to participate in the decision making process. States shall facilitate and encourage public awareness and participation by making information widely available."*

Section 4(2) of the Right to Information Act, 2005 reads

*"It shall be a constant endeavor of every public authority to take steps in accordance with the requirements of clause (b) of sub-section (1) to provide as much information suo motu to the public at regular intervals through various means of communication, including Internet, so that the public have minimum resort to the use of this Act to obtain information"*

### Topics of the most popular open datasets

- |    |  |                                                                                                            |
|----|--|------------------------------------------------------------------------------------------------------------|
| 1  |  | <b>Police and crime:</b> Police incidents; jail bookings; police station locations; crime statistics       |
| 2  |  | <b>Transportation:</b> Taxi licenses; transit data; traffic counts; road infrastructure data; parking data |
| 3  |  | <b>Emergency calls:</b> Police, fire, and EMS responses; 911 calls; response times; incident reports       |
| 4  |  | <b>Development:</b> Commercial developments; housing developments; property data; housing affordability    |
| 5  |  | <b>Building safety:</b> Building permits; safety permits; certificates of occupancy                        |
| 6  |  | <b>Finance:</b> Revenue; spending; employee salaries; capital budgets; payments                            |
| 7  |  | <b>Elections:</b> Election results; polling locations; campaign finance reports                            |
| 8  |  | <b>Businesses and licenses:</b> Business licenses; liquor licenses; vendor, contract, and procurement data |
| 9  |  | <b>Inspections and service requests:</b> Restaurant health inspections; 311 requests; code violations      |
| 10 |  | <b>Education:</b> Schools information; student health data; after-school programs; library locations       |



Open Government Data (OGD) Platform India

- Admin Boundaries:- Districts, Taluk, Village
- Political Boundaries:- Lokshaba Constituency, Assembly Constituency
- Local Government Boundaries.

## OGL India

[OGL India text](#)

Key points:

- Permitted uses include derivatives and lawful commercial use (3). A bit unknown what exactly is lawful uses under Indian law.
- Attribution expressly allows for a link to a separate page that includes attribution statements where multiple data sources are used together (4.b)
- There is the possibility of termination of the license by the data provider, but only if it's discovered that personal data was accidentally released (7.c), so it's very unlikely to affect OSM. There's also a 30-day cure period for violations (7.a).

Tentative recommendation: Compatible

[https://wiki.osmfoundation.org/wiki/OGL\\_India](https://wiki.osmfoundation.org/wiki/OGL_India)

# Companies working from India



600..800 Employees ??



# What next...

- Chapter/Usergroup
- Youthmappers Chapter
- Association of Geospatial Industries  
Membership (India)
- SOTM India
- FOSS4G- SOTM India



# OSM India

Website:- <http://openstreetmap.in>

Facebook:- [OSM India Facebook group](#)

Telegram:- <https://t.me/OSMIndia>

Twitter:- [https://twitter.com/osm\\_in](https://twitter.com/osm_in)

Forum:- [Indian OpenStreetMap Forum](#)

Github:- <https://github.com/osm-in>

Public Mailing List:- <https://lists.openstreetmap.org/pipermail/talk-in/>

Thank you