

# Open Data: The Kerala Journey

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# Background

- Data are recognized at all levels as a valuable resource that should be made publicly available and maintained over time to ensure that their potential value is realized.
- There has been an increasing demand by the community, that data should be made more readily available to all, to enable rational debate and better decision making.
- Large volumes of data assets generated using public funds are not accessible for planning developmental needs of civil society

# Background

- Inaccessible data becomes a non performing asset
- Current policy framework is restrictive for sharing of even non-sensitive data
- Even in areas where there are no restrictions, lack of Interoperability of data gathered without standardized formats pose challenges.
- Digital India envisages to propel the country into a knowledge society by increasing efficiency and improving interactions between government departments and citizens. It aims to ensure government services are made available electronically to reduce paperwork. It is structured on nine pillars of which Pillar Six **(Information for All)** is of prominence with respect to Open Data in India. It entails the online hosting of information and documents and the proactive engagement and interaction of government and citizens through social media, online messaging, etc.

# @the National Level - NDSAP 2012

To facilitate

“Availability and access to data and information available in both human readable and machine readable form through a network all over the country in an obligatory and time bound output oriented manner, not violative of national security and policy, thereby permitting a wider use and accessibility of public data and information. “

NIC has developed a multi-tenant cloud based Open Government Data Platform India “[data.gov.in](https://data.gov.in)”, for Indian government departments, ministries and States to publish their datasets for easy and open access by citizens.

# OPEN DATA CHARTER 2015

Vision Where governments collect, share, and use well-governed data, to respond effectively and accountably to our most pressing social, economic, and environmental challenges

## Principles



1.

**Open By Default**



2.

**Timely and  
Comprehensive**



3.

**Accessible and Usable**



4.



5.



6.

## 1. Open By Default

This represents a real shift in how government operates and how it interacts with citizens. At the moment we often have to ask officials for the specific information we want. Open by default turns this on its head and says that there should be a presumption of publication for all. Governments need to justify data that's kept closed, for example for security or data protection reasons. To make this work, citizens must also feel confident that open data will not compromise their right to privacy.

## 2. Timely and Comprehensive

Open data is only valuable if it's still relevant. Getting information published quickly and in a comprehensive way is central to its potential for success. As much as possible governments should provide data in its original, unmodified form.

## 3. Accessible and Usable

Ensuring that data is machine readable and easy to find will make data go further. Portals are one way of achieving this. But it's also important to think about the user experience of those accessing data, including the file formats that information is provided. Data should be free of charge, under an open license, for example, those developed by Creative Commons

#### 4. Comparable and Interoperable

Data has a multiplier effect. The more quality datasets you have access to, and the easier it is for them to talk to each other, the more potential value you can get from them. Commonly-agreed data standards play a crucial role in making this happen.

#### 5. For Improved Governance & Citizen Engagement

Open data has the capacity to let citizens (and others in government) have a better idea of what officials and politicians are doing. This transparency can improve public services and help hold governments to account.

#### 6. For Inclusive Development and Innovation

Finally, open data can help spur inclusive economic development. For example, greater access to data can make farming more efficient, or it can be used to tackle climate change. Finally, we often think of open data as just about improving government performance, but there's a whole universe out there of entrepreneurs making money off the back of open data.



Revolution	Year	What happened?
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1
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1784
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Steam, water, mechanical production equipment
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2
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1870
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Division of labour, electricity, mass production
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3
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1969
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The computer, electronics and the internet
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4
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?
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The barriers between man and machine dissolve
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# Principles of Data sharing and accessibility

- Openness,
- Flexibility,
- Transparency,
- Legal conformity,
- Protection of intellectual property,
- Formal Responsibility,
- Professionalism,
- Interoperability,
- Quality, Security,
- Efficiency,
- Accountability,



kerala.data.gov.in



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9,820 RESOURCES | 371 CATALOG | 31 DEPARTMENTS



## Discover Datasets By Sectors



AGRICULTURE



CENSUS AND SURVEYS



COMMERCE



ECONOMY



ENVIRONMENT AND  
FOREST



FINANCE



FOOD



GOVERNANCE AND  
ADMINISTRATION



HEALTH AND FAMILY  
WELFARE



HOME AFFAIRS AND  
ENFORCEMENT



INDUSTRIES



INFORMATION AND  
COMMUNICATIONS



INFRASTRUCTURE



LABOUR AND  
EMPLOYMENT



POWER AND ENERGY



RURAL



SOCIAL DEVELOPMENT



STATISTICS



TRANSPORT



WATER AND

- Kerala State Spatial Data Infrastructure (KSDI) is an Internet based Geo-spatial Data Repository for the state that facilitates users of the system to share data and explore data from various agencies.
- Kerala has established KSDI and the Geoportal on January, 2013 on similar lines as National Spatial Data Infrastructure (NSDI)
- Data Visualization through **Kerala Geoportal** ([www.ksdi.kerala.gov.in](http://www.ksdi.kerala.gov.in))

## MAJOR ACTIVITIES

- Geo-Spatial Data Repository
- Data Standardization
- Technical Support/Guidance
- GIS Systems Consultancy
- Policy Preparation
- Proposal Evaluations
- Common GIS Services
- Capacity Building



**KERALA GEOPORTAL**

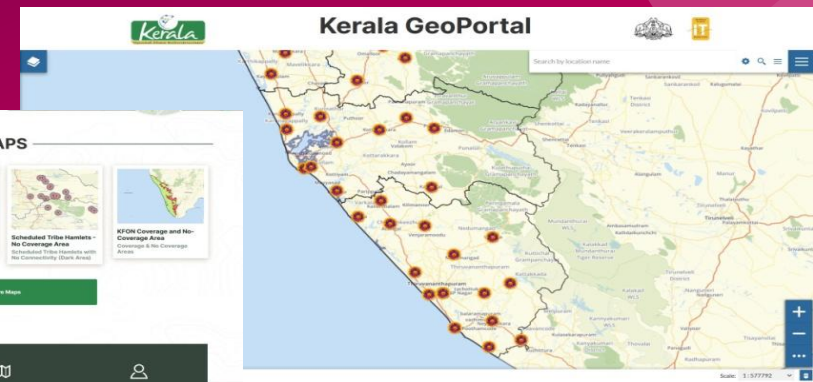
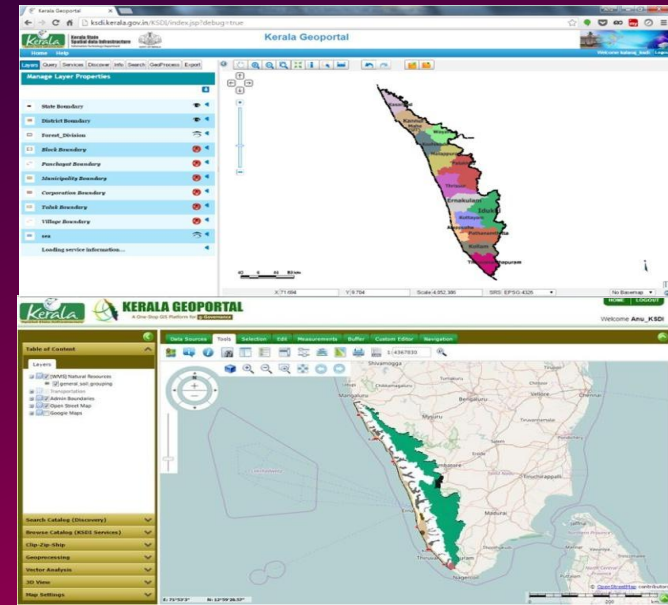
A One-Stop GIS Platform for **g-Governance**



The first **Kerala Geoportal** was launched on 18th January, 2013 with ERDAS Apollo 2011 platform

Later in 2017 the portal **Kerala Geoportal** was upgraded to ERDAS Apollo 2016 version.

**Kerala Geoportal 2.0 is now based on FOSS**



## Important Datasets in Kerala Geoportal 2.0

KSDI collected data from 30+ departments with 800+ layers. After quality checking and standardization uploaded a total of 500 layers including 80+ seamless layers. Some of the important layers are listed below

- Administrative Boundaries (State, District, Block)
- LSGB Boundary
- Drainage Network (Streams and Rivers)
- Landuse
- Soil Type
- Watershed
- Road Network
- Govt Office Locations
- Fire & Rescue Stations
- Quarry
- Ponds
- Schools
- Akshaya Centres
- Public Health Institutions
- T&CP Masterplans
- Kerala Bank
- ISM Ayurvedic Dispensaries
- Bus Stops etc..

## Common Tools and Solutions available for use

- Kerala Geoportal 2.0
- Map My Office
- MIS for Town and Country Planning
- Forest Geoportal & associated viewers
- MIS for Haritha Kerala Mission (Pachathuruthu Mapping)
- Geospatial Survey Tool
- OpenStreetMap eLearner in Moodle Platform
- Geodata Digger
- Choropleth Map Viewer (Covid 19)
- Jalakam, the Map Viewer and Map printing application\*
- Geocoder Application\*
- Public Grivence Portal (Public Grievance portal)\*
- Seema (Boundary editor application)\*

\* (Security Auditing is ongoing)



# Mapathon Keralam

- Mapathon Keralam : aim to promote detailed **living** map of Kerala through a participatory process
- The Mapathon Kerala will precede as community Mapathon activities at different levels.
- The free online map, Open Street Map, is used for this purpose



## MAJOR ACTIVITIES

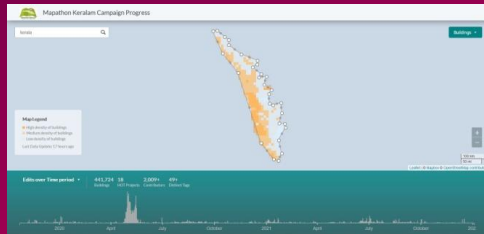
- Promotional Material Development
- Technical Infrastructure Development
- Training/ Workshops
- Recognitions and rewards
- Pilot Projects
- Panchayath Mapping sessions
- Municipality Mapping sessions
- Corporation Mapping sessions

## Trainings

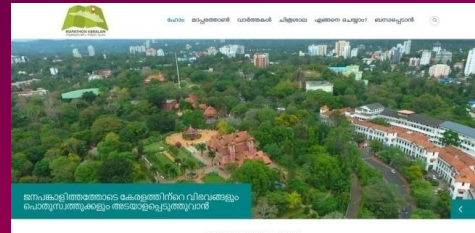
Master Training for NSS – (109 Nos)  
Geography/Geology Trainers - (128 Nos)  
Government Departments – (517 Nos)  
Other Trainer Training – (129 Nos)  
NSS MK Campaign training – 7 Nos (1101 Nos)  
Internship Training programs – (280 Nos)

# Mapathon Keralam - Major Tools Developed

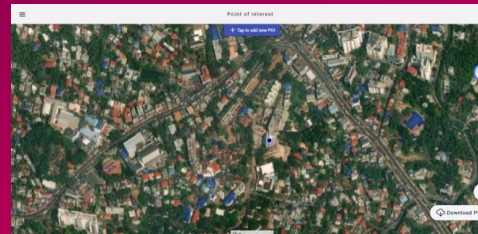
- [Mapathon Keralam Webportal](#)
- [Mapathon Keralam Tasking Manager](#)
- [Mapathon Keralam Analytics - Campaign Progress Tracking System](#)
- [Mapathon Keralam Pol Data Capture System](#)
- [Geo-spatial Survey Application](#)
- [Mapathon Keralam Leader Board](#)
- [OpenStreetMap Tile Server](#)



MK Analytics



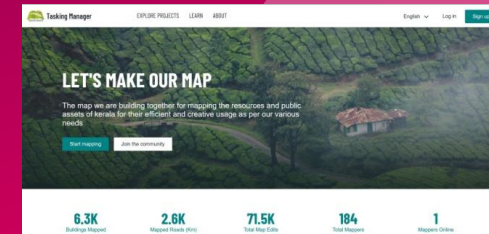
MK Webportal



MK Pol Mapper



OSM Tile Server



MK Tasking Manager

## Recent updates in OSM

- +55,150 Buildings
- +38,100 Km Stream/Rivers
- +1308,000 Km Road
- +94,800 Amenities
- +10,600 Schools
- +1,375 Quarries
- +27,000 Ponds
- +2,706 Akshaya Centers/Sub-centers
- +950 Police Stations
- +1,151 Public Health institutions
- +5,500 New Mappers in OSM.



Thank You