

Status of NSDI node

National Atlas and Thematic Mapping Organisation

NSDI 12
December 2012
New Delhi

Dr. C. M. Rao
NATMO

Introduction

Major functions of Natmo in brief:

- ❖ **Compilation of the National Atlas of India**
- ❖ **Preparation of the National Atlas maps in regional languages.**
- ❖ **Preparation of thematic maps based on research studies on environmental and**
- ❖ **associated aspects and their impact on social and economic development**

- ❖ Any other work entrusted by the Central Government or its agencies to NATMO
- ❖ Installation of automated Mapping System for increasing speed and efficiency in mapping
- ❖ Division of Digital mapping System & Digitized and Scanning of existing maps on digital format
- ❖ Geographical Researches
- ❖ Remote Sensing & GIS, Digital Image processing
- ❖ Division on Cartography for the Visually Impaired
- ❖ Capacity and Infrastructure building of NATMO to convert / to upgrade in digital mode

NSDI node progress:

- Node creation: www.natmomap.in
- Operative from July 2008
- Preparing to launch new node dedicated for NSDI activities
- At present 664 scanned raster maps can be viewed from this site

Basic requirements for node development in Natmo

components:

- Infrastructure
- Hardware
- Software
- Database

Present status of Natmo node

Presently Natmo has two servers, one is working as web server as well as database server. Another server is purchased but not started due to unavailability of supporting hardware and software. So It is planned to purchase the fallowing equipment to strengthen portal.

Proposed infrastructure for node development at Natmo

1. security system
2. firewall
3. UPS
4. Leased line
5. OGC compliant software (proposed Erdas Apollo)
6. Internet security
7. Windows (Windows Server 2008 & 2008 R2 Standard and Enterprise Edition)
8. Supplementary Operating Systems for testing & development (Windows 7)

Database development:

1. Metadata creation as per the standards of NSDI
2. Modification of existing vector data into standard format to upload from NSDI geoportal through Natmo node.

Status of Digital Database:

Basic categories are as follows:

POPULATION

ADMINISTRATIVE

CLIMATE

PHYSICAL

FOREST

WATER RESOURCES

LAND RESOURCES

AGRICULTURE

SOCIAL

INFRASTRUCTURE

INDUSTRY

STATE MAPS

INDIAN OCEAN

TOURISM

HISTORICAL

EDUCATION

HEALTH

ENVIRONMENT & POLLUTION

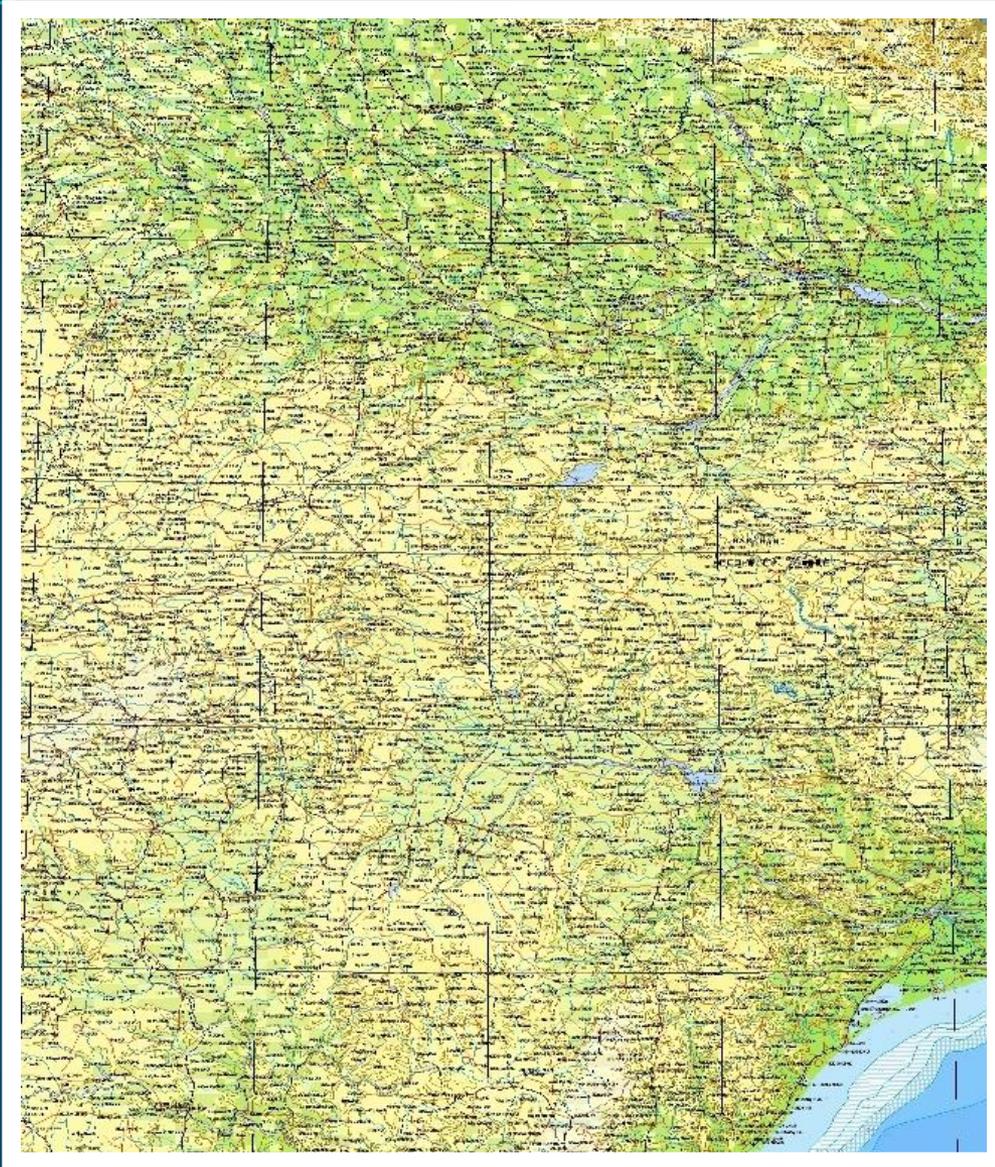
BUSINESS & ECONIMICAL

CULTURAL

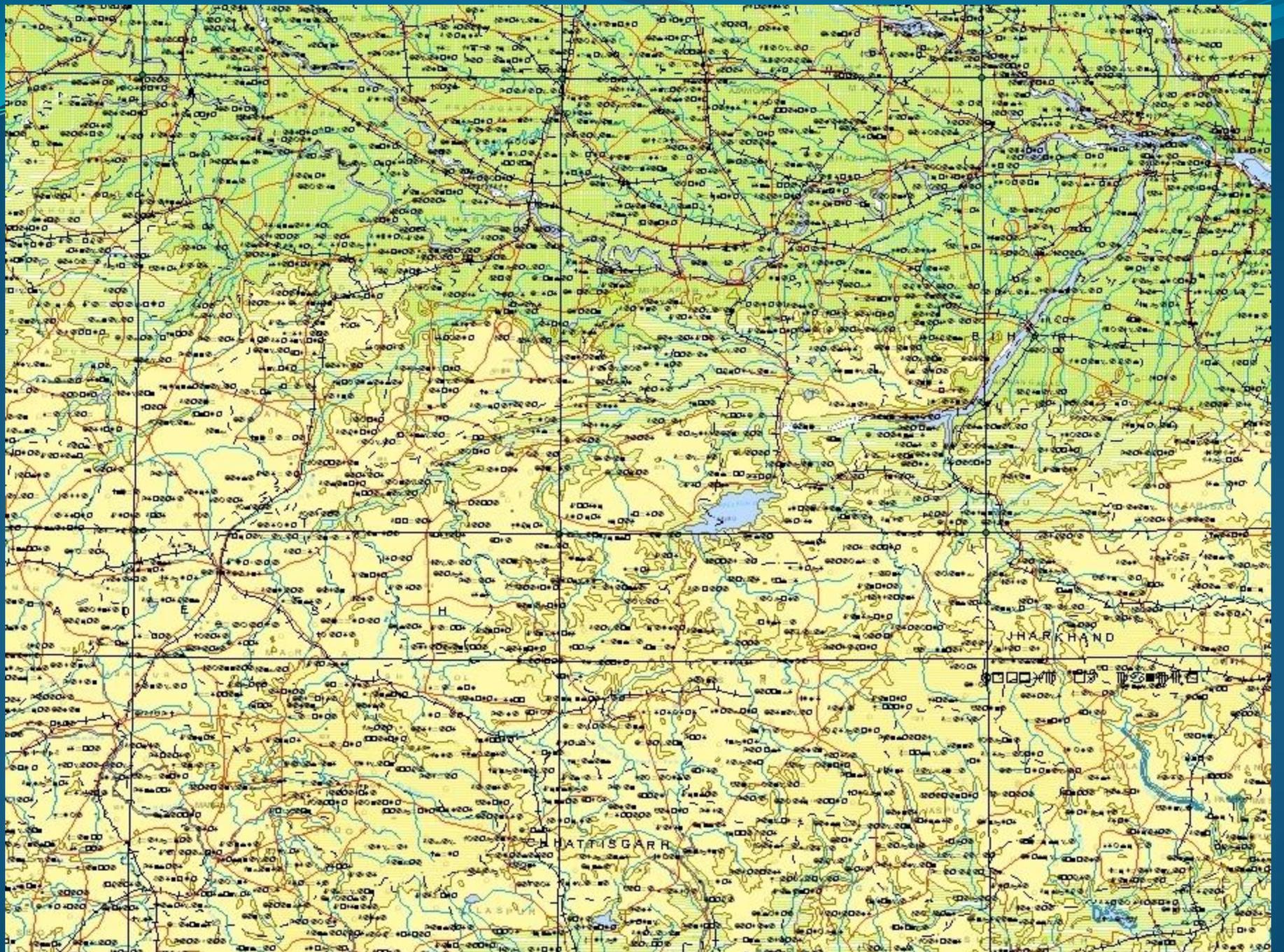
Basic level of mapping

1. National
2. State
3. District
4. Town / city
5. Special map series

National level digital data on 1:1 million and 1:2 million



Central part of India



State atlases

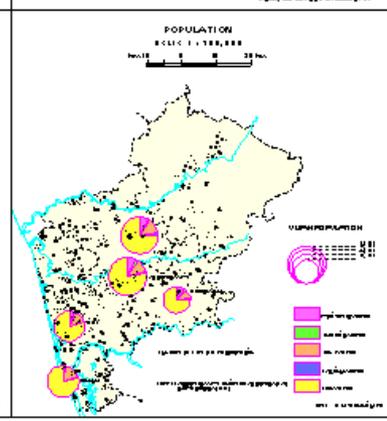
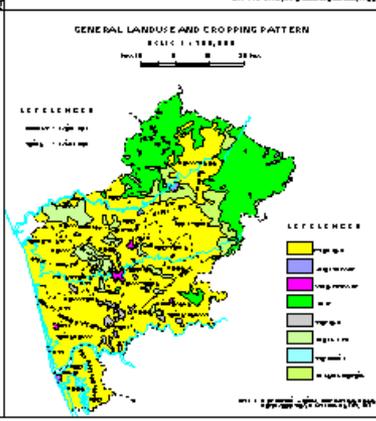
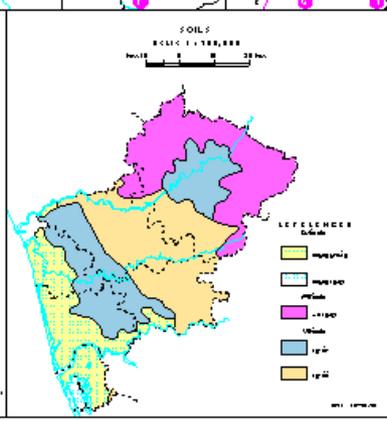
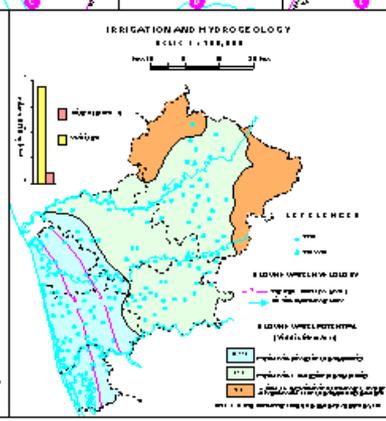
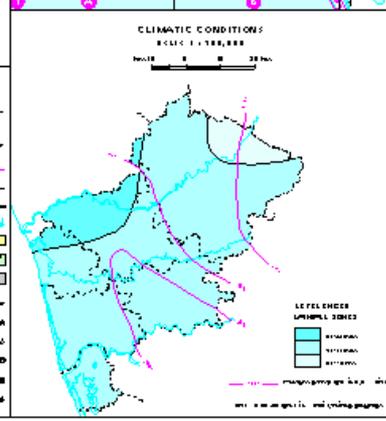
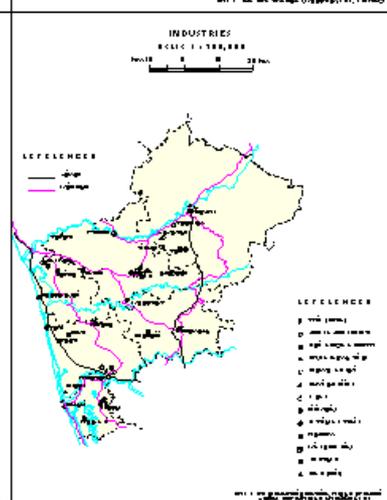
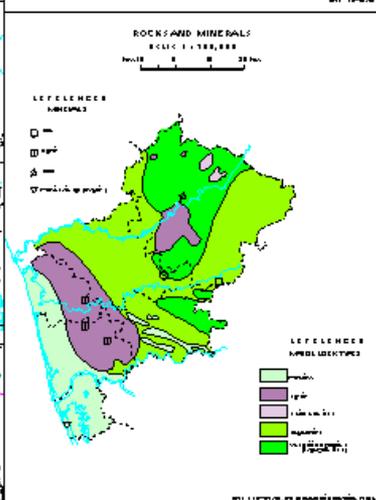
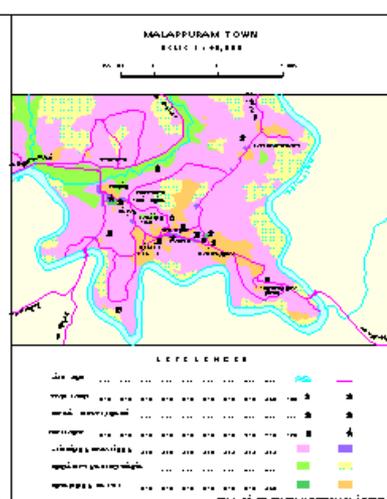
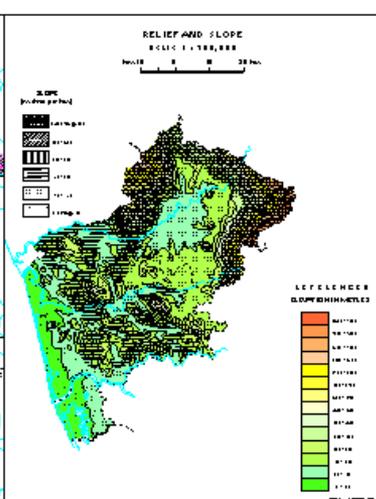
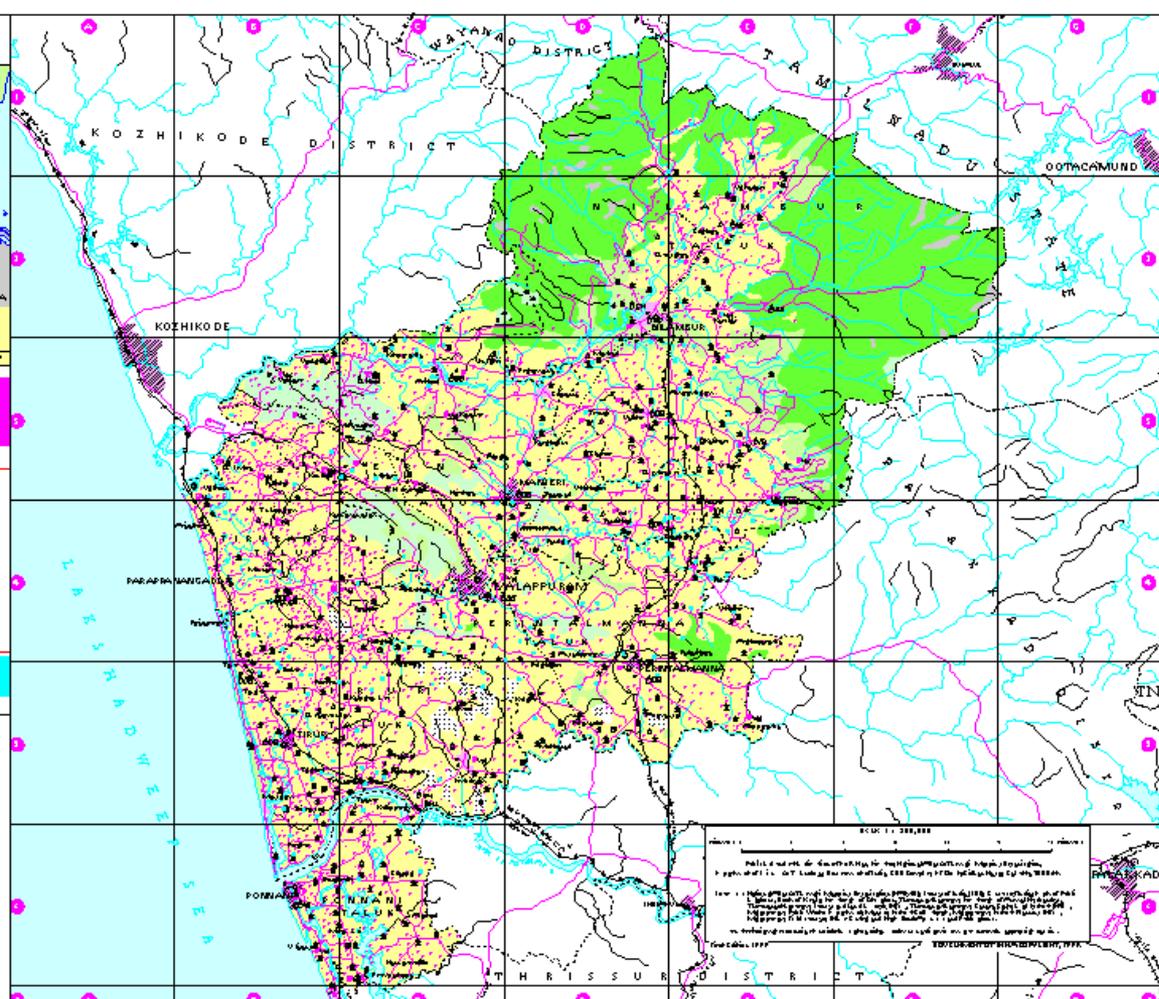
Contain more than 33 different themes

District Planning Map Series

Main map at 1:250,000 scale showing all settlements, roads, rivers with names and block level administrative setup

Inset maps:

- ❖ Physiography
- ❖ Rocks and Minerals
- ❖ Population
- ❖ Climate
- ❖ Industry
- ❖ General Land Use and Cropping Pattern
- ❖ Irrigation and Hydrology
- ❖ Soil
- ❖ Town map

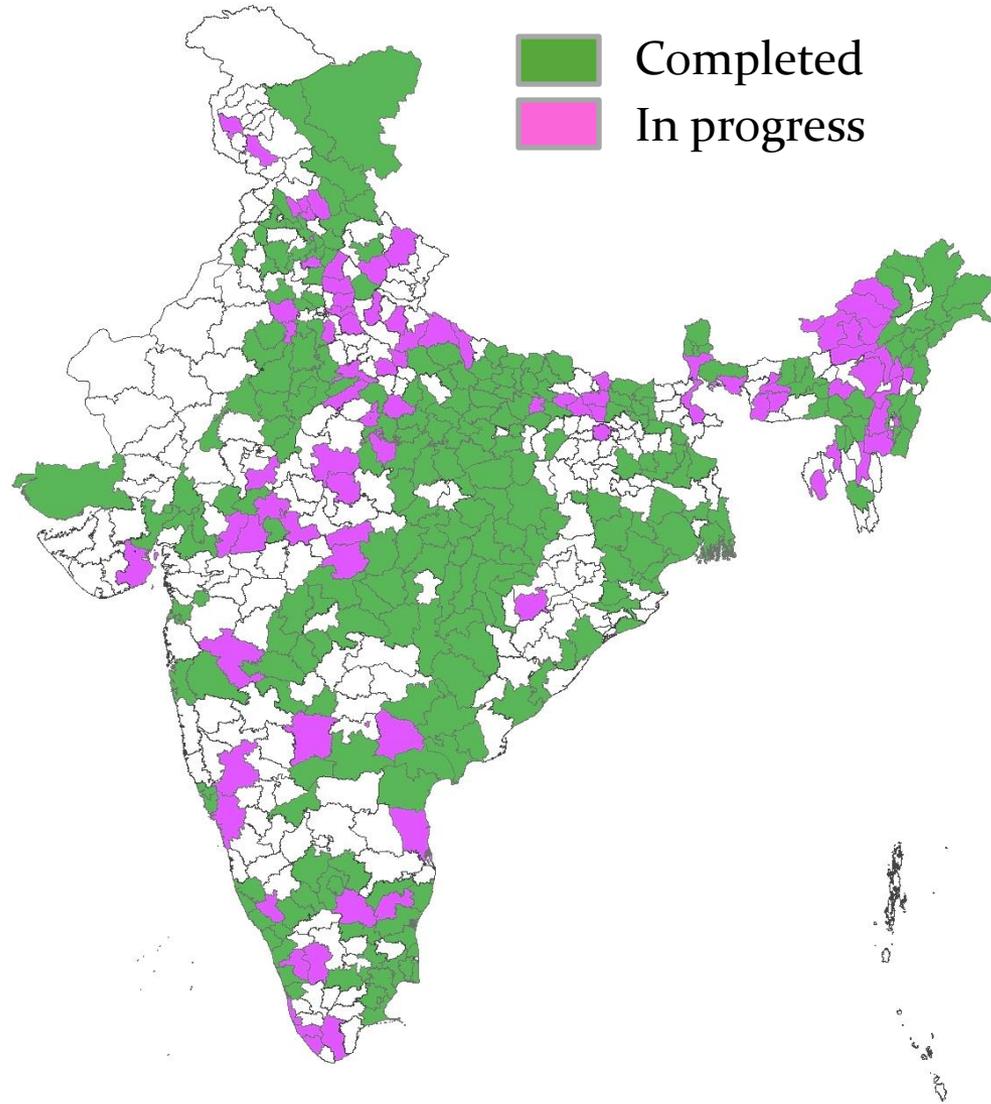


Status of mapping

Completed 250 districts

In progress 90 districts

Map showing status of DPMS



Golden map service (GMS)

Detailed mapping at 1:5000 scale of major cities and towns

Vision

Using the latest developments in IT, the National Atlas and Thematic Mapping Organisation (NATMO) would map the entire country down to the village level using spatial technology through its Golden Map Service

The service will involve all thrust areas of geospatial technologies along with web, internet and communication technologies

FOLLOWING ATTRIBUTES ARE BEING ATTACHED IN DATABASE

		<u>Layers</u>			
1	<u>Religion</u>	2	<u>Landuse</u>	3	<u>Health</u>
	i Temple		i Bult up Area		i Hospital & Nursing Home
	ii Church		ii Park/Garden/Green Field		ii Blood Bank
	iii Mosque		iii Water Body & Tank		iii Clinic/Dispensary/Medical Centre
	iv Gurdwara		iv Drain		iv Pathological Laboratory/Diagonostic
	v Jain & Buddhist Shrine		v Cultivated Land		v Eye Bank
	vi Other Religious Centres		vi Locality Name		
	vii Idgah		vii Important Landmark		
	viii Graveyard				
5	<u>Telecom</u>	6	<u>Education</u>	7	<u>Entertainment</u>
	i Post Office		i School		i Shop & Business Establishment/Agency
	ii Post & Telegraph Office		ii College		ii Cinema Hall
	iii Telegraph Office		iii University		iii Theatre & Public Hall
			iv Other Educational & Training Institute		iv Club
11	<u>Public Utilities</u>		v Library		v Hotel/Guest House
	i Bus Terminal		vi Computer Training Centre		vi Restaurent
	ii Railway Reservation Counter				vii Marriage House/Auditorium
	iii Air Line Office				
	iv Newspaper Office				
	v Fire Station	12	<u>Communication</u>	13	<u>Railway</u>
	vi Police Station		i Television Office		i Any Railway Name
	vii Bank		ii Radio Office		ii Railway Station Name
	viii Market		iii Mobile Tower		
	ix Milk Booth				
	x Public Call Office				

Select a Category to Search

SEARCH

 Transport

 Public Facility

SHAHID MINAR

 Entertainment

 Financial Institutes

 Tourist

 Emergency

 Saltlake

Kolkata City Map



Buildings

Locality

Kolkata

Building/Office Type

Monument

Building/Office

Sahid Minar

View in Map

View List

SHAHID MINAR

Help



Buildings

Locality
Kolkata

Building/Office Type
Office/Establishment

Building/Office
Kolkata Municipal Corporation

View in Map

View List



Kolkata Municipal Corporation

SALT LAKE





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Select a Category to Search

SEARCH

Public Facility

Health

NATMO
HEADQUARTERS

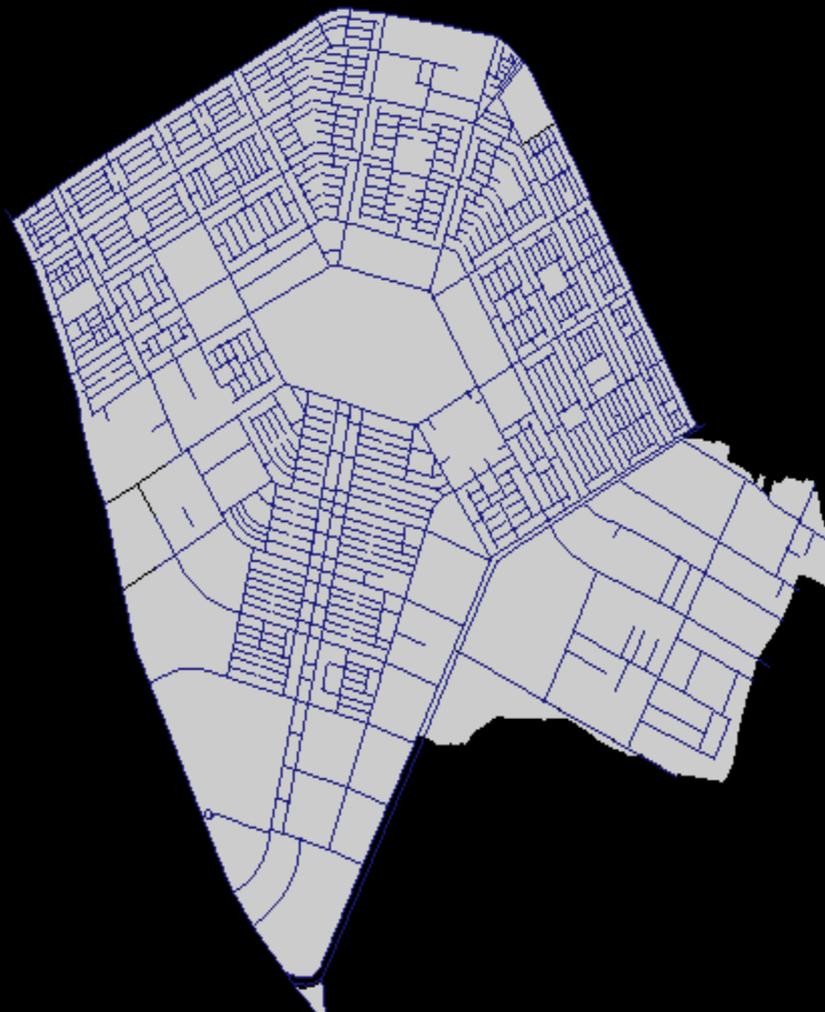
Emergency

IT Establishment

Plots

Kolkata

Salt Lake Map



Buildings

Select Locality

Salt Lake

Building/Office Type

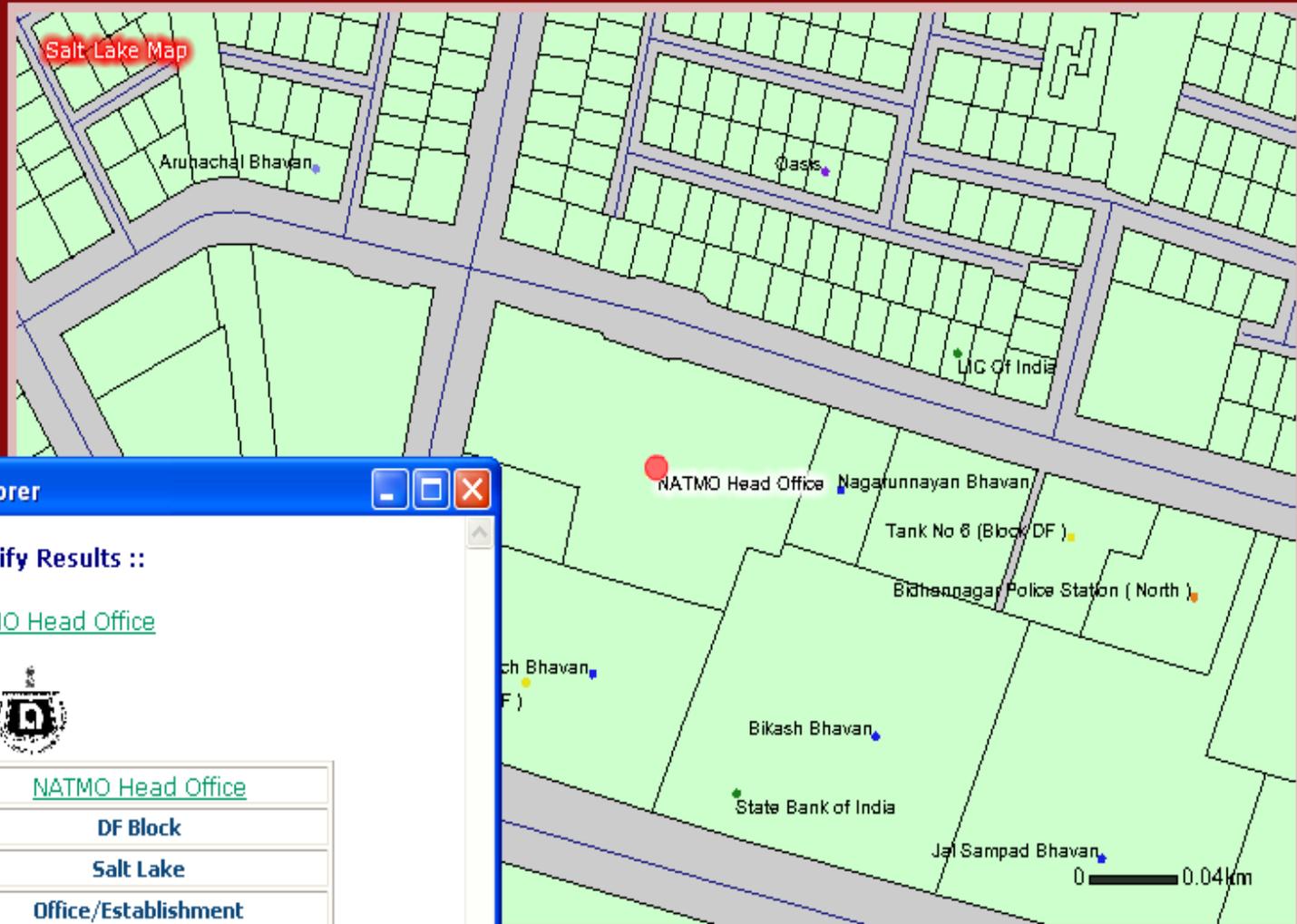
Office/Establishment

Building/Office

NATMO Head Office

View in Map

View List



Identify - Microsoft Internet Explorer

:: Identify Results ::

 [NATMO Head Office](#)



NAME	NATMO Head Office
LOCALITY	DF Block
CITY	Salt Lake
BUILD_TYPE	Office/Establishment

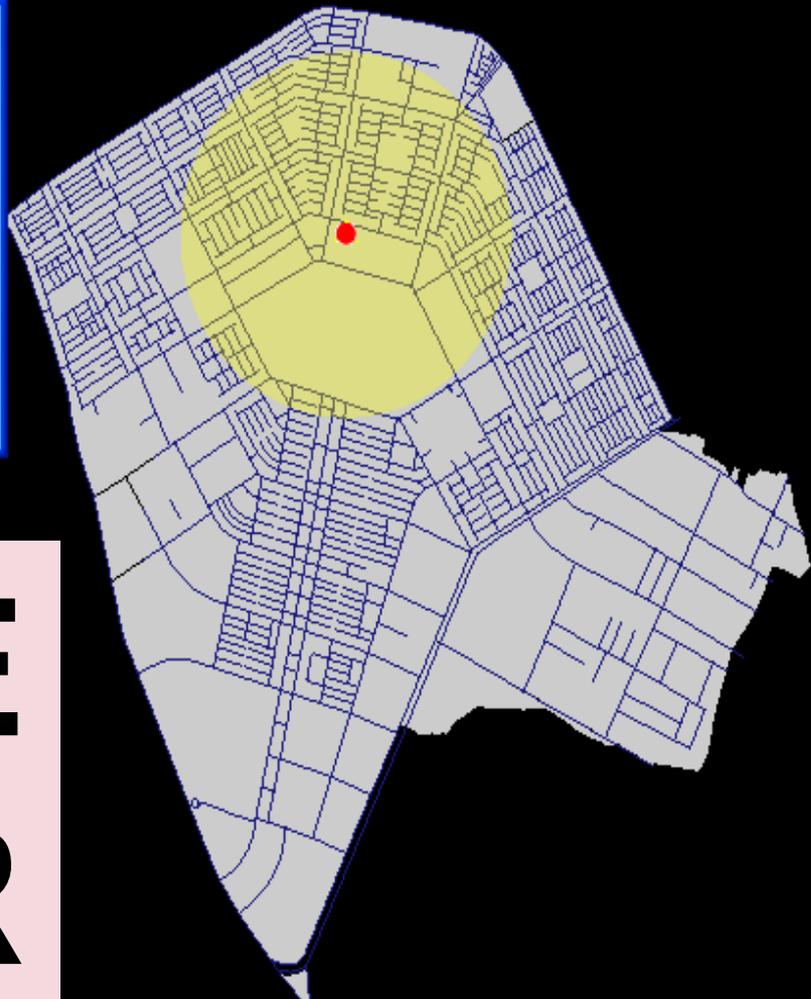
Close

Buffer - Microsoft Internet Explorer

your active layer is Important_Buildings

Select Target Layer :

Buffer distance (in meters) :



CREATE BUFFER



Mapping status



Web interface

www.nationalatlas.gov.in

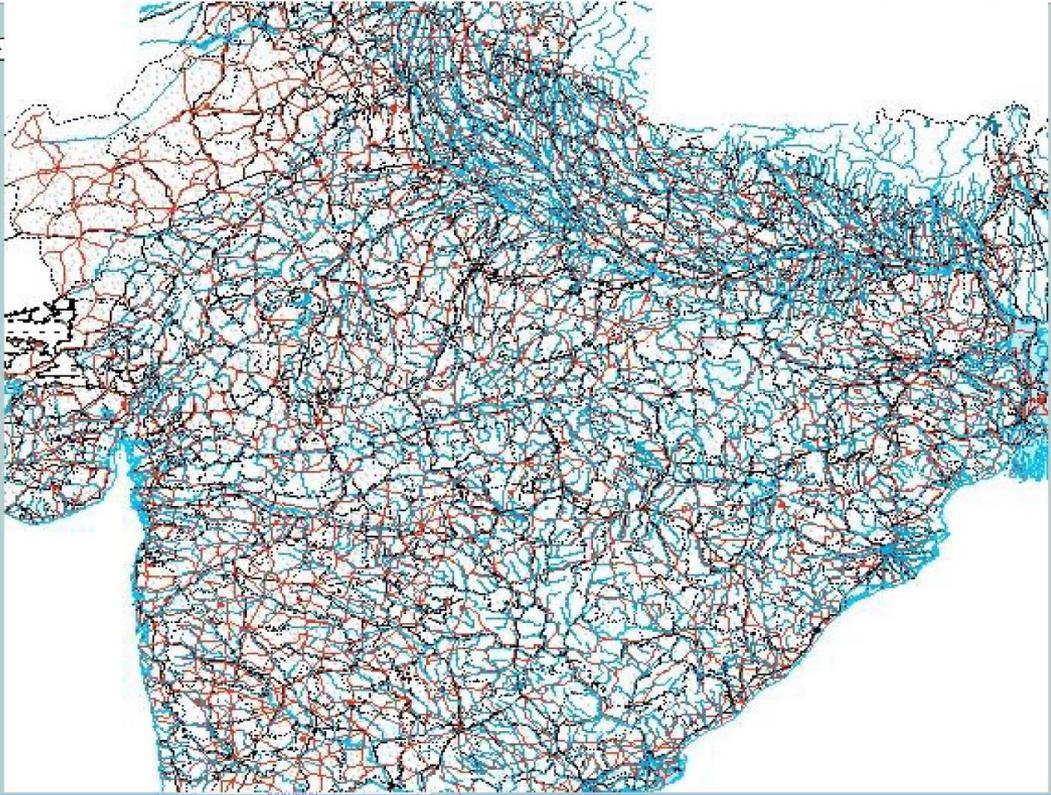
National Atlas and Thematic Mapping Organisation
Department of Science and Technology
Government of India

Home Layers Tables Files Groups

Categories search

- Maps and Atlases
 - International
 - National
 - State
 - District
 - City
 - Historical
 - Travel
 - Environmental
 - DPMS
 - GMS

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- Tables
- Files
- Groups

Categories

National Atlas of India

Political

Northern India + Add
 scale 1: 2m
 views : 56 downloads : 21
 updated Nov 1998

Physical

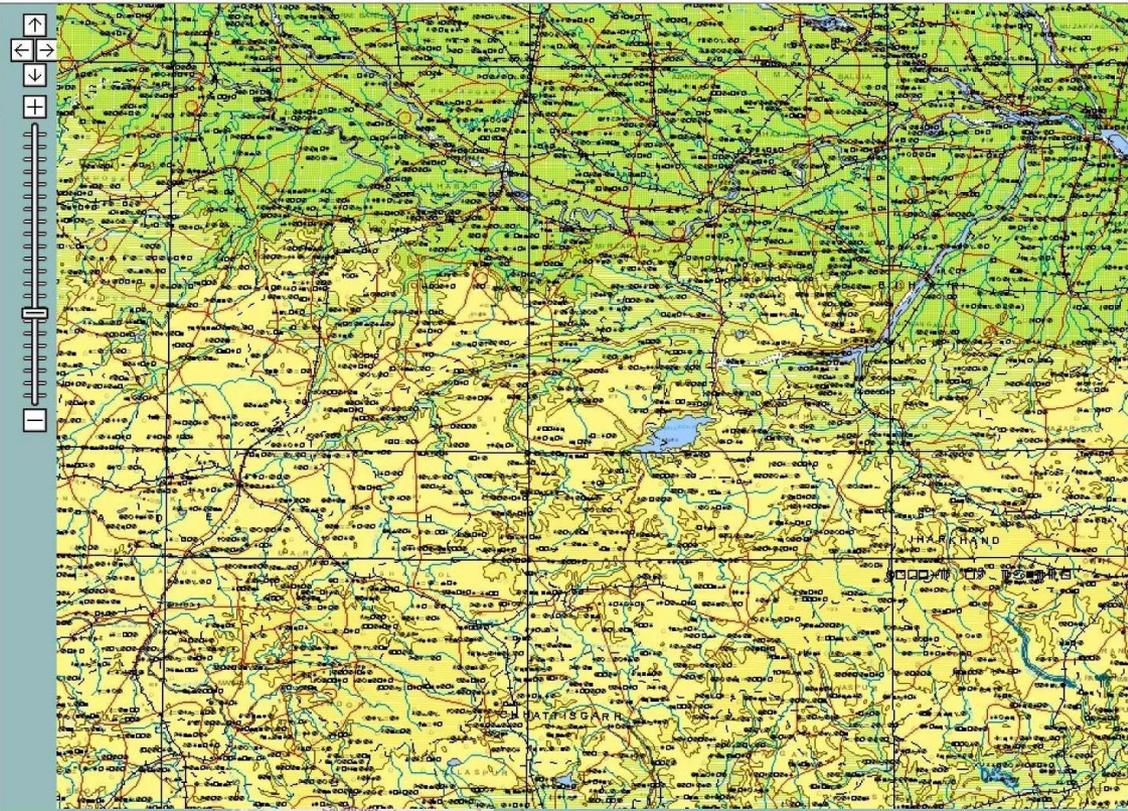
Southern India + Add
 scale 1: 2m
 views : 56 downloads : 21
 updated Nov 1998

Landuse

Eastern India + Add
 scale 1: 2m
 views : 56 downloads : 21
 updated Nov 1998

Population

Western India + Add
 scale 1: 2m
 views : 56 downloads : 21
 updated Nov 1998



Your Map

Crop Download or Order

National Spatial Data Infrastructure NATMO

National Atlas and Thematic Mapping Organisation

www.nationalatlas.gov.in

National Atlas and Thematic Mapping Organisation
Department of Science and Technology
Government of India

Home Layers Tables Files Groups

Northern India (physical)
NSDI / National Atlas and Thematic Mapping Organisation

Description **Metadata** Spatial Attributes History

PDF XML

Metadata

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Language
eng

Character Set
Character Set Code
utf8

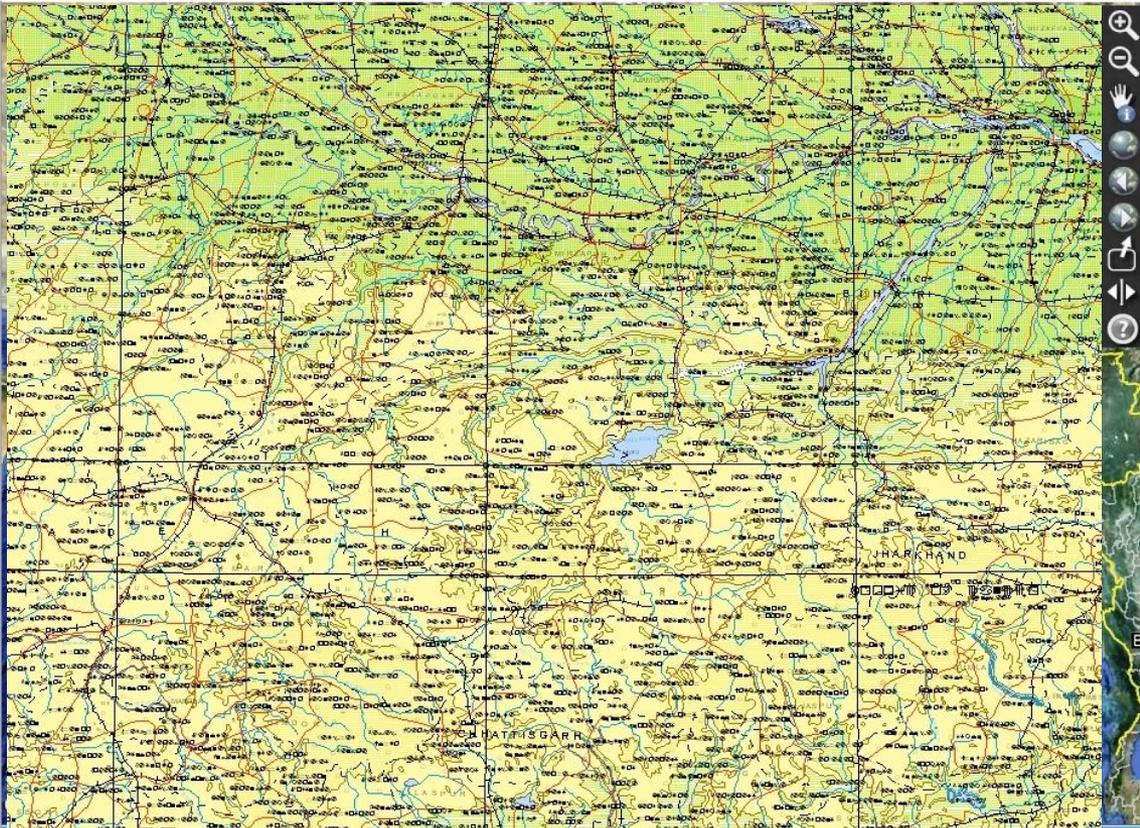
Hierarchy Level
Scope Code
dataset

Hierarchy Level Name
dataset

Contact
Responsible Party
Individual Name

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National Spatial Data Infrastructure
NATMO

Major challenge ahead.....

1. CREATION OF METADATA AS PER ISO ISO 19119 STANDARDS COMPATIBLE WITH INTERNATIONAL STANDARDS (OGC) .
2. TO PROVIDE METADATA OF ALL GEOINFORMATION CREATED BY NATMO TO NSDI.
3. TO PROVIDE A LINK OF NATMO GEOINFORMATION PORTAL TO NSDI.

Thank you