



National Initiatives of Geo- Spatial in Urban Development



**TOWN & COUNTRY PLANNING ORGANISATION
MINISTRY OF HOUSING & URBAN AFFAIRS
GOVERNMENT OF INDIA**

www.tcpo.gov.in
www.moud.gov.in

As a follow up of the National Meet on promoting use of Space Technology in Governance & Development under the Chairmanship of Hon'ble Prime Minister, the Ministry of Housing and Urban Affairs (MoHUA) has launched a Sub-scheme on formulation of GIS based Master Plans under AMRUT Mission for 500 towns in October, 2015.

The objective is to **develop common digital base maps/land use maps using Geographical Information System (GIS)** in each AMRUT city to enable them to make more informed strategic decisions for Master Plan Formulation. The major components are:

- **Geo database creation** at the scale of 1:4000 as per Design & Standards
- **Formulation of Master Plan:** Formulation of Master Plan of city as per State Town & Country Planning Act on the GIS base map.
- **Capacity Building:**
 - **Administrators level** –three days duration.
 - **Planning level** –two weeks duration.
 - **Operators and Technicians level** –four weeks duration.

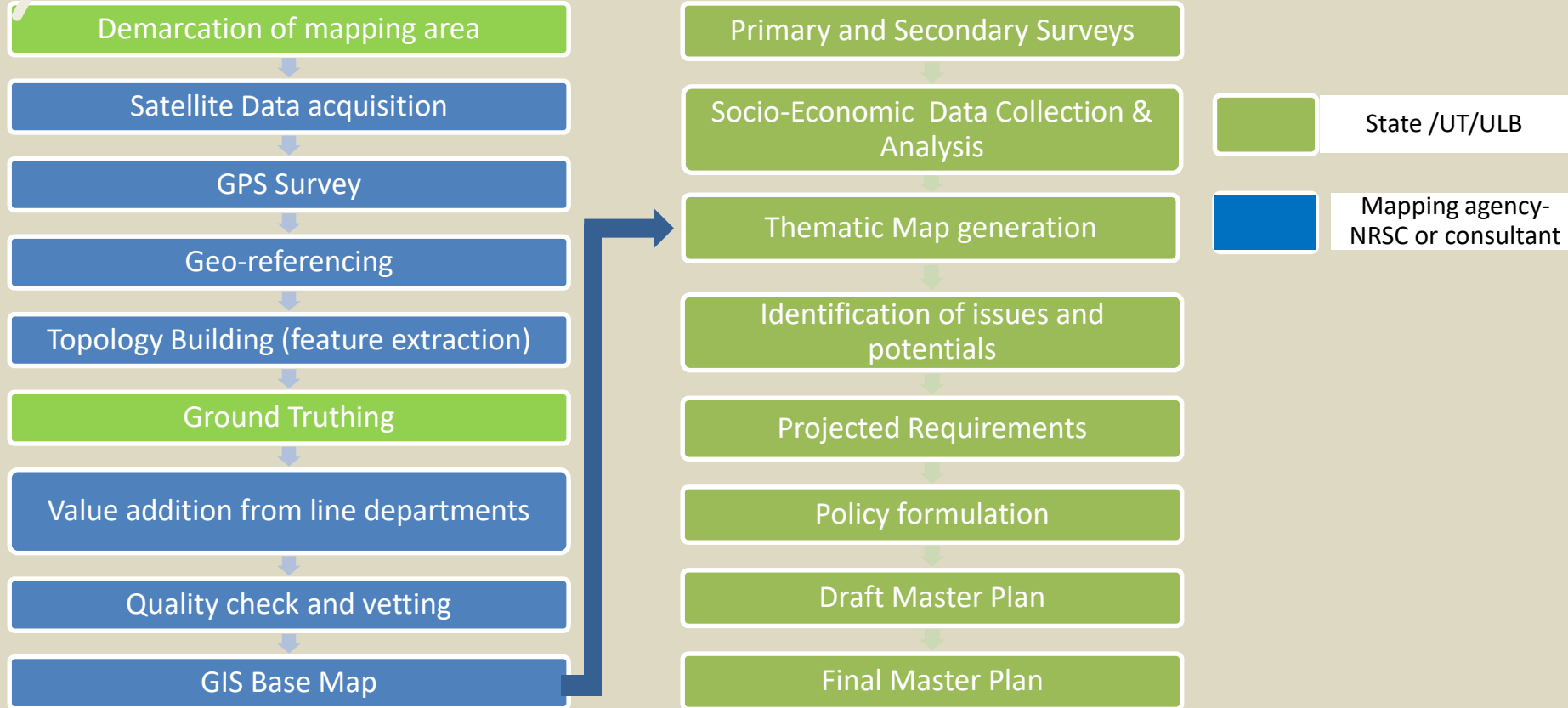
34 States/UTs with 461 towns are on board

Class	No. of Towns	Symbol
Metro	40	■
Class-I	418	●
Others	3	●
Total	461	

The UTs of Dadra & Nagar Haveli and Lakshadweep have opt out



Methodology



No.	Component	Cost (₹Crores)
1.	Geo database Creation @ 1:4000 Scale	115.90
2.	GIS Based Master Plan Formulation	388.25
3.	Capacity Building	10.85
Grand Total		515.00

Component/town wise fund allocation

Type of city	Area	Geospatial data creation	Plan Formulation	Capacity Building
Metro City	500 Sq. KM	₹ 44,44,000	₹ 1,00,00,000	₹ 5,00,000
Class-I City	200 Sq. KM	₹ 17,77,600	₹ 75,00,000	₹ 2,00,000

Financial

Physical

1. Funds approved : Rs. 408.94 cr.

A. Funds released to States:

First installment (20%)-All States	Rs. 75.18 cr.
Second installment (40%) -24 States	Rs. 54.40 cr.
Third Installment (20%)-08 States	Rs. 6.37 cr.
Fourth Installment (20%)-01 State	Rs. 0.15 cr.

B. Funds released to NRSC (Two Instl.) : Rs. 17.12 cr.

2. Total Funds Released (A+B) : Rs. 153.22 cr.

3. UCs Received : Rs. 123.52 cr.

1. Geo-database Creation

Activities	Draft Maps	Geo database vetted	Final Maps Delivered
States	32	30	28
Towns	450	433	396

2. Master Plan Formulation

Activities	Draft Master Plan	Final Master Plan
States	23	9
Towns	283	148

3. Capacity Building

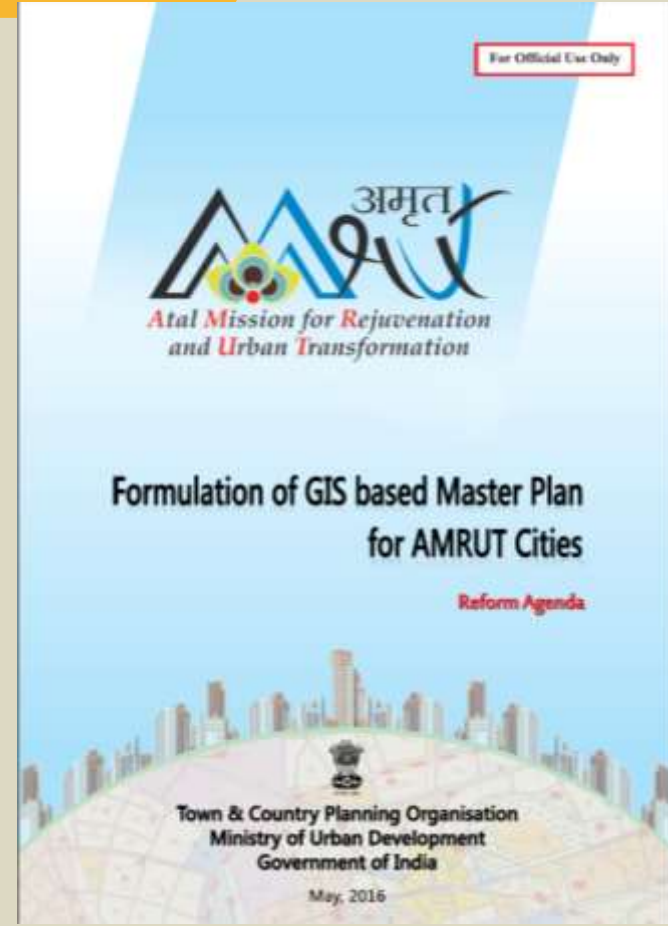
Training Organised	73
Officials trained	2606

Accomplishments

Sub Scheme Guidelines-Reform Agenda

- Objectives
- Rationale
- Scope and Coverage
- Major Deliverables
- Process of Formulation of GIS based Master Plan
- Roles & Responsibilities
- Timelines
- Budget Estimate
- Structure of Fund Management
- Review and Monitoring Mechanism

Available at = <http://tcpo.gov.in/sites/default/files/reports/Sub-Scheme-Guidelines.pdf>

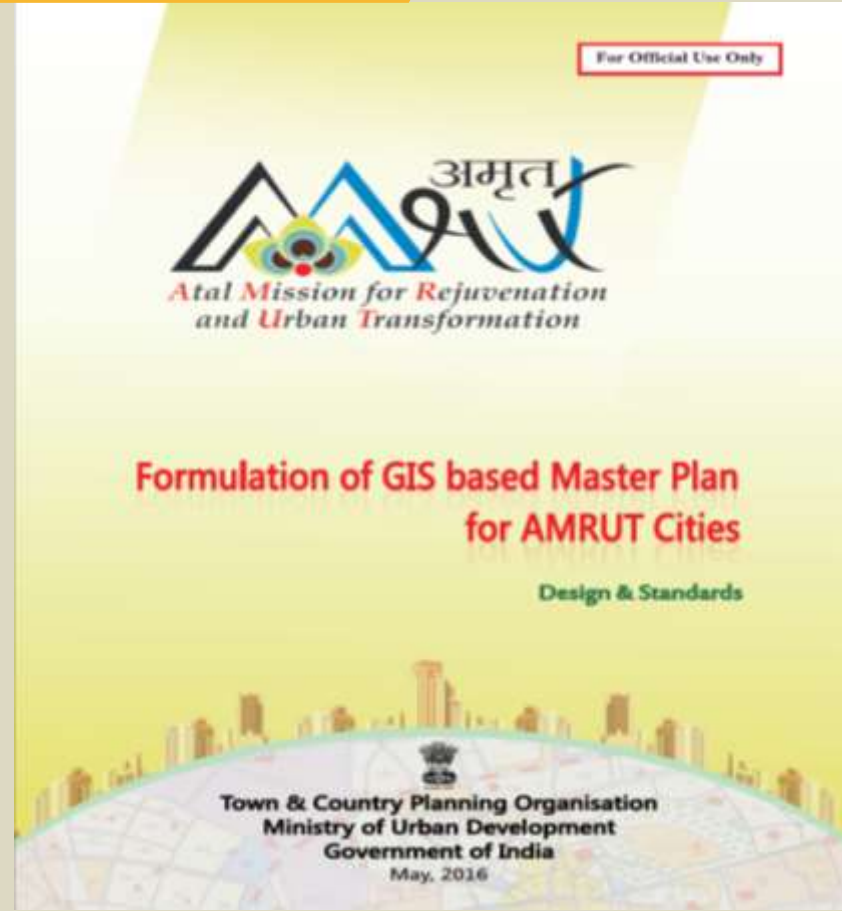


Accomplishments

Design & Standards

- Remote Sensing Image Standards (Raw Image, Ground Control Points (GCPs) & Ortho-Rectification of Satellite Data) = **0.5 mt or better**
- Spatial Reference Standards (Co- ordinate System & Map sheet frame)= **WGS 84**
- Geo-Spatial Feature Content and GIS Data structure Standards (Geo-Spatial Data Content & Feature Geometry, GIS Data Structure, Coding Scheme, Layer wise Data content, Classification and GIS data Structure & Accuracy Standards)= **69 Layers with 475 sub layers**
- Quality Assurance/Quality Check standards = **Internal/External**
- GIS database dissemination to ULBs for Master Plan formulation standards=
- Metadata standards
- **Indicative format for Urban Data Collection**

Available at = <http://tcpo.gov.in/guidelines>



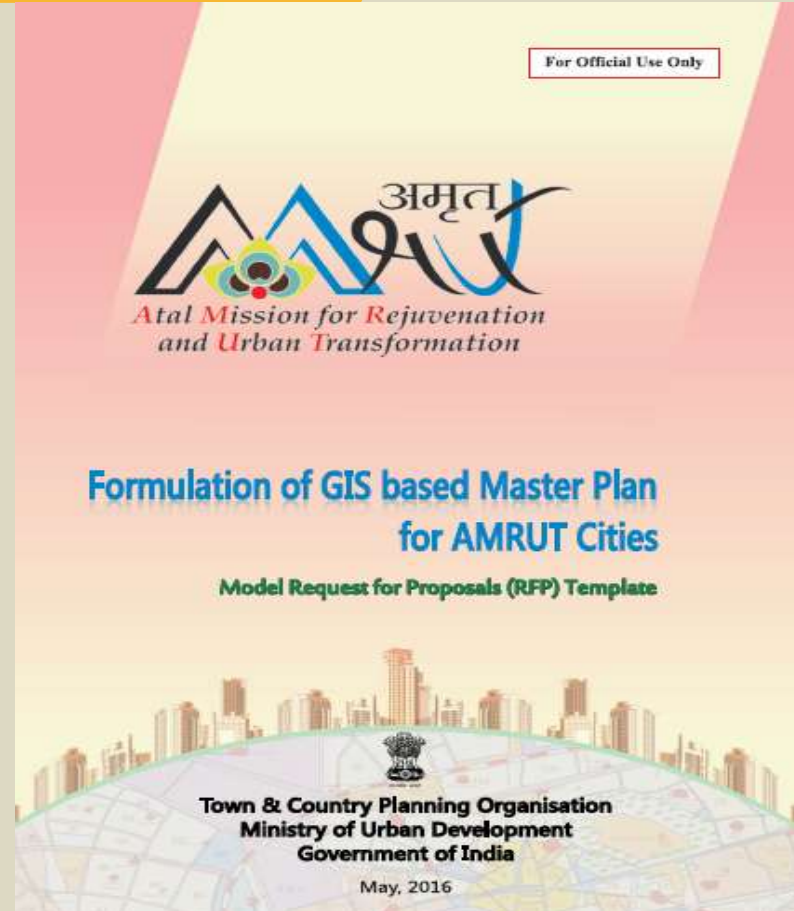
Accomplishments

Model RFP

The document help State Govt. in hiring the consultancy firms. The document comprises of :-

- Letter of Invitation
- Terms of Reference
- Information to Consultants
- Prequalification
- Technical Proposal - Standard Forms
- Financial Proposal - Standard Forms
- Standard Form of Contract

Available at :-
<http://tcpo.gov.in/sites/default/files/reports/ModelRFP.pdf>



Accomplishments



State Action Plan

- The document help to submit the proposal to the Ministry for getting financial assistance.

Available at
<http://tcpo.gov.in/sites/default/files/reports/StateActionPlan-Template.pdf>

For Official Use Only



Formulation of GIS based Master Plan for AMRUT Cities

State Action Plan (SAP) Template

Town & Country Planning Organisation
Ministry of Urban Development
Government of India

May, 2016

- Geo-database creation.
- Vetting & attribute data collection.
- Awarding of contract for formulation of GIS based Master Plan.
- Submission of Utilisation certificate.

Outcomes:



Accurate and faster way of formulation of Master Plans

The sub scheme will set a path to formulate the Master Plan in an accurate & faster way using Remote Sensing and Geographical Information System (GIS) Technologies.

Easy up-dation of Geo-database and revision of Master Plans

The up-dation on regular basis of Geo-database created at 1:4000 scale under the sub-scheme will be easy and also help to the great extent for revision of Master Plans.

Monitoring and implementation of Urban Development Projects

The sub-scheme will help in monitoring and implementation of various urban development projects with high accuracy and transparency.

Online Building Permission System (OBPS)

The existing/proposed land use database created under the sub-scheme will be a supporting platform for OBPS in transparent and faster delivery of services. [Dashboard](#)



A Sub-Scheme under Atal Mission for Rejuvenation and Urban Transformation 2.0



Formulation of GIS based Master Plans of Class-II Towns with population of 50,000 - 99,999





RATIONALE AND OBJECTIVE

- AMRUT 2.0 is a step towards Aatma Nirbhar Bharat with aim of making the cities 'water secure' and providing functional water tap connections to all households.
- AMRUT 2.0 guidelines mandate this reform, - **A Sub-Scheme on Formulation of GIS based Master Plans of Class-II Towns with population of 50,000 - 99,999**
- The Sub-Scheme envisages to develop standardized base maps, master plans, urban geo-portal and land use maps using Geographical Information System (GIS) for towns having population 50,000 - 99,999.



SCOPE AND COVERAGE

The AMRUT 2.0 GIS Sub-Scheme envisages covering

- all Class-II Towns with population of 50,000 - 99,999.
- however, in case of hilly and north-eastern States and UTs, alongside Class II towns, the next class of statutory towns may also be taken up.
- the number of cities/ towns proposed to be covered in the AMRUT 2.0 GIS Sub-Scheme is 675.
- the State Town Planning Departments/ State Mission Directorates of AMRUT who are the implementing agencies shall prioritize and intimate the number of cities to be taken up in the AMRUT 2.0 GIS Sub-Scheme through State Action Plan (SAP).

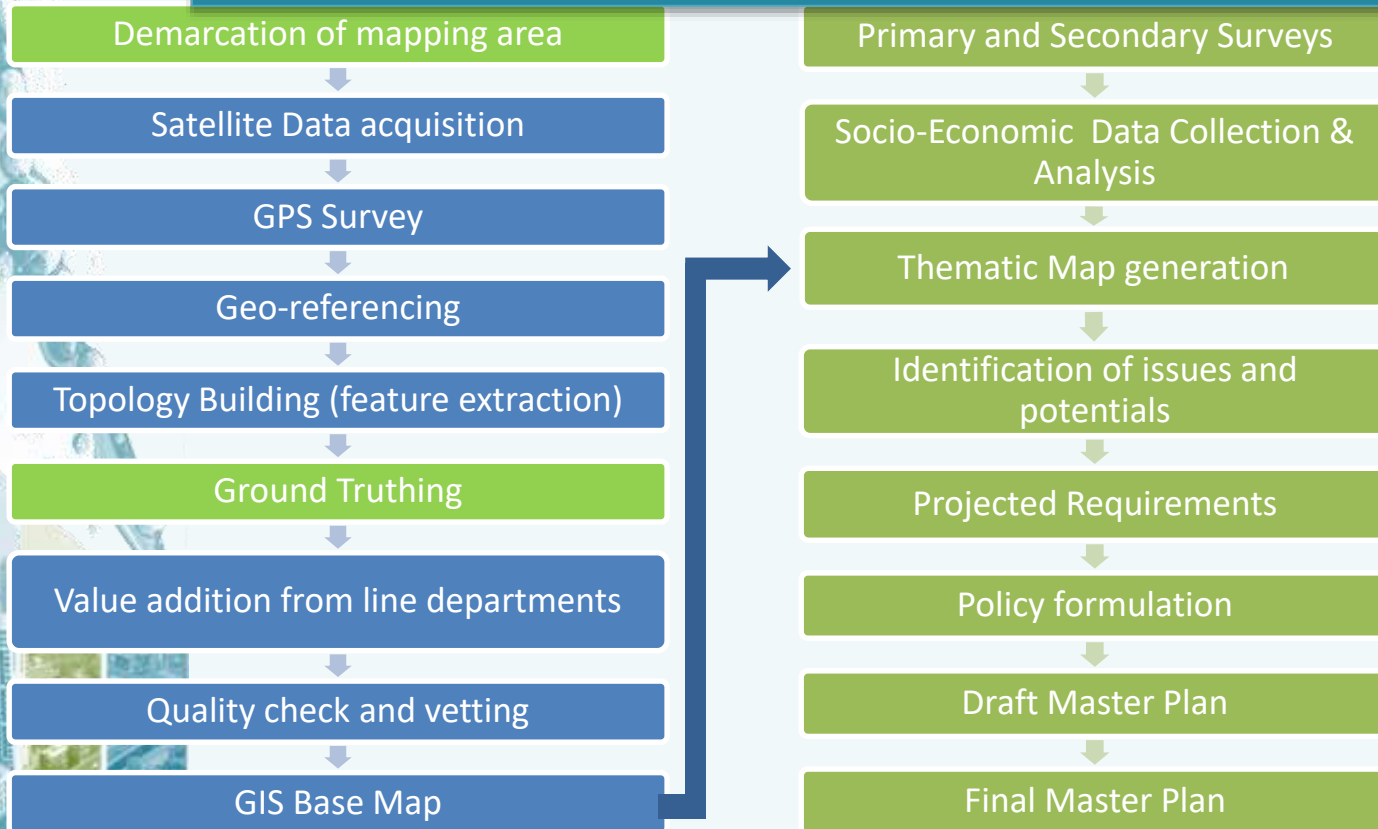


MAJOR DELIVERABLES

1. **[Creation of Geo-database](#)** as per Design & Standards documents published by Ministry of Housing and Urban Affairs (MoHUA) in May, 2016 and October, 2020.
2. **[Formulation of GIS based Master Plan](#)** as per State Town & Country Planning Act using the geo-database created as per Design & Standards documents.
3. **[Capacity Building](#)** amongst State/UT town planning departments and other concerned personnel in the use of GIS technology.
4. **[Development of Centralized National Urban Geo-portal](#)** provide a single window services to States/ UTs/ ULBs and other departments.
5. **[Development of Integrated Mobile Application](#)** for Vetting and Attribute Data collection and primary data collection for Master Plan Formulation.



PROCESS OF FORMULATION OF GIS-BASED MASTER PLAN



Responsibility Index

Green box	State /UT/ULB
Blue box	Mapping agency- NRSC or consultant



TIMELINES

Components	2022	2023	2024	2025	2026
Creation Of Geo-database	Development				
Master Plan Formulation	Development				
Capacity Building	Development				
Integrated Mobile Application		Development	Support	Support	
Centralized National Urban Geo-portal		Development	Support	Support	



ESTIMATED BUDGET

S. N.	Components	Cost (Rs. In Cr.)
1.	Creation of Geo-database	121.50*
2.	Formulation of GIS based Master Plan	472.50**
3.	Capacity Building	14.00#
4.	Centralized National Urban Geo-portal	22.23^
5.	Integrated Mobile Application	0.90##
TOTAL		631.13

* Cost calculated as per inputs received from National Mapping Agencies SOI and NRSC

** Cost calculated as per inputs received from State Town & Country Planning Departments

Cost includes Rs. 2 lakhs per towns for 675 towns and cost for organizing National/Regional Workshops

^ Cost calculated as per rates received from National Informatics Centre (NIC), MeitY, GoI.

Cost calculated as per rates received from Indian Institute of Remote Sensing (IIRS), ISRO, GoI



IMPLEMENTATION MECHANISM

State Level

- **Consultancy Evaluation & Review Committee (CERC)/ Monitoring and Review Committee (MRC)**

CERC will monitor the consultation work for geo database creation & master plan formulation, while in-house work will be administered by MRC.

The CERC/ MRC will report to State Level Technical Committee (SLTC).

- **State Level Technical Committee (SLTC)**

Will oversee the progress of the technical implementation of the Reform

- **State level High Powered Steering Committee (SHPS)**

Will look into overall coordination and implementation of the Reform



REVIEW AND MONITORING MECHANISM

Central Level

- **National Monitoring and Review Committee (NMRC)**

Chairman: Chief Planner, TCPO

Will monitor the Physical and Financial Progress and will report to TAC

- **Technical Advisory Committee (TAC)**

Chairman: AS(MD-AMRUT), MoHUA, GoI

Will report to Apex Committee of AMRUT

- **The Apex Committee**

- **Chairman: Secretary, MoHUA, GoI**

Will monitor/ review overall progress and achievements and address any inter-agency issues.



Accomplishments

- Reform Agenda has been approved by MoHUA and circulated to State Govts.
- Model Request for Proposal (RFP) Template for procurement of consultancy services for formulation of GIS-based master plans has been prepared and under consideration of Ministry.
- State Action Plan (SAP) Template has been approved. Online Template for SAP has been designed and under consideration of Ministry.
- Memorandum of Understanding (MoU) for Development of National Urban Geo-portal through NIC is under consideration of the Ministry.
- Memorandum of Understanding (MoU) for creation of geo-spatial database using VHRS data through NRSC/ drone technology through Sol and Development of integrated mobile application through IIRS; under process.
- 4 Online Regional Workshops on 2nd, 5th, 7th and 13th September 2022 have been organized for stake holders.
- 2 duly approved SAPs have been received from Andhra Pradesh & Manipur till date.

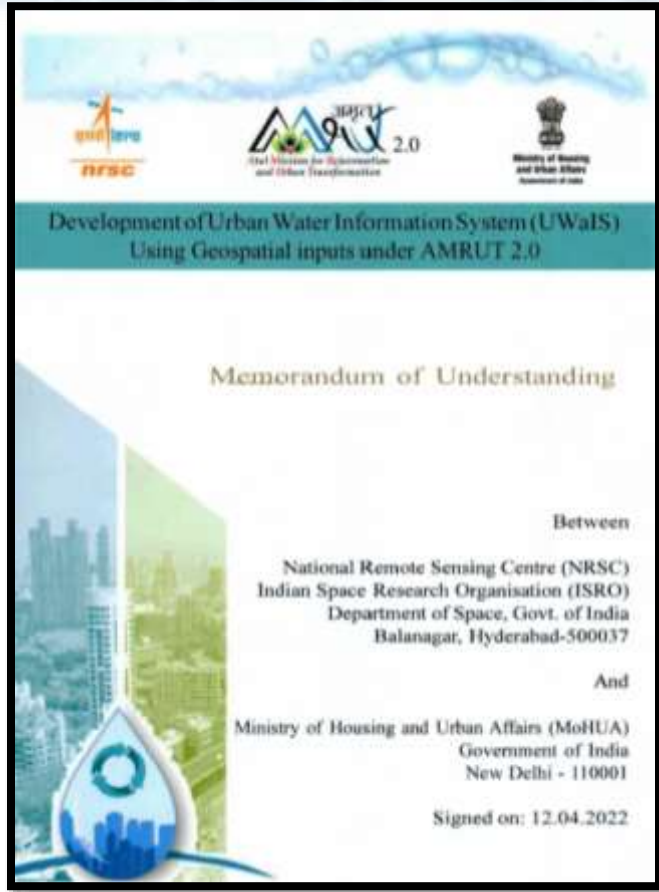


JAI HIND



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AMRUT 2.0: Urban Water Body Information System (UWaIS)



MoHUA has conceptualized **Urban Water body Information System (UWaIS)** under **AMRUT 2.0** in association with NRSC.

The project aims to provide web based geospatial information support on water bodies in and around towns / cities in the country for their sustainability, rejuvenation and creation of lung spaces and to reduce urban floods and enhance amenity value for the engineers, planners and decision-makers.

UWaIS: Objectives

1. Water bodies Inventory - Number of water bodies and water body size distribution in each Town/State (Water bodies of more than 1 ha size, from NRSC's existing Water body Information System - WBIS, <https://bhuvan-wbis.nrsc.gov.in>)
2. Water spread area dynamics – Fortnightly /Monthly water spread area of each water body (2012 to till date from WBIS)
3. Sustainable water bodies – Water availability in the water bodies in a given year
Generate Land Use / Land Cover (LULC) for 100 m buffer areas for two-time periods around the shortlisted water bodies for all cities / towns using IRS LISS-IV ortho-rectified satellite data.
4. Use of web enabled UWaIS with query tools for supporting informed decision making on the lines of the prototype developed to plan suitable conservation / rejuvenation measures by ULB.
5. UWaIS Dossier for each city on AMRUT 2.0 City page

Prototype of UWaIS developed for 11 pilot cities

Information generated

- **Water bodies Inventory** - Number of water bodies and water body size distribution in each Town/State (Water bodies of more than 1 ha size, from NRSC's existing Water body Information System - WBIS)
- **Water spread area dynamics** - Monthly water spread area of each water body (2012 to till date from WBIS)
- **Sustainable water bodies** - Availability of water in the water bodies in a year (2018 – 2020 from WBIS)
- **Land use/Land cover(LULC) dynamics** – LULC dynamics using high resolution satellite data for shortlisted water bodies.

Prototype of UWaIS developed for 11 pilot cities

Features

- Visualisation
 - Overview of water bodies in each town
 - Water spread dynamics of each water body
 - Water availability in months
 - LULC dynamics of 2-3 shortlisted water bodies each town
- Query Module – Prioritise water bodies for rejuvenation based on selection criteria
 - Area of water body - 3 to 10ha or Greater than 10ha
 - Proximity to Town Centre - 1 to 20km radius
 - Number of months water availability – 7 to 8 months
 - Maximum water spread area – 10% to 90%
 - Year - 2018 to 2020

1 . Overview of UWaIS - Opening view

The screenshot displays the opening view of the Urban Water Body Information System (UWaIS) web application. The browser address bar shows the URL `http://bhuvan-app3.nrsc.gov.in/jjrv`. The page header includes the ISRO logo and the text "Indian Geo-Platform of ISRO" on the left, and the title "Urban Water Body Information System" in the center. On the right side of the header, it says "Welcome test45 Logout" and features the Government of India emblem.

The main interface is divided into a left sidebar and a central map area. The sidebar contains the following sections:

- Select Your Town:** Includes dropdown menus for "State" (currently showing "Select State") and "Town" (currently showing "Select Town").
- Know Your Water Body:** A blue header for the main content area.
- Sustainable Water Bodies:** A blue button.
- Query for Shortlisting Water Bodies:** A blue button.
- Shortlisted Water Bodies:** A blue button.

The central map area shows a map of India with various states and union territories labeled. The map is overlaid with green and blue markers representing water bodies. In the top right corner of the map area, there are map style controls: "Map", "Satellite", "Hybrid", and "Terrain", along with a zoom control (+/-). The map also shows neighboring countries like Afghanistan, Pakistan, Nepal, China, Myanmar, and Sri Lanka.

At the bottom of the page, there is a footer with the text "Discussion Forum | Send Mail | Legend".

2. Selection of State/Town - On selection, Zoom to town AOI and highlights the water bodies in the AOI

Indian Geo-Platform of ISRO

Urban Water Body Information System

Welcome test45 Logout

Home Tools

Select Your Town

State: TELANGANA

Town: SURYAPET

Know Your Water Body

Sustainable Water Bodies

Query for Shortlisting Water Bodies

Shortlisted Water Bodies

Map Satellite Hybrid Terrain

The screenshot displays the Urban Water Body Information System interface. On the left, a sidebar titled "Select Your Town" contains a dropdown menu for "State" set to "TELANGANA" and another dropdown for "Town" set to "SURYAPET". Below this are links for "Know Your Water Body", "Sustainable Water Bodies", "Query for Shortlisting Water Bodies", and "Shortlisted Water Bodies". The main area shows a map of the Suryapet region in Telangana, India. A black rectangular box highlights the town's Area of Interest (AOI). Within this AOI, several water bodies are highlighted in light blue. The map also shows surrounding towns and villages such as LALA MARRI (RURAL), KUDAKUDA, VATTIKHAMMAM PAHAD, CHIVVEMLA, THIMMA PURAM, ATHIMMANI, DURAJ PALLE, VALLABHAPUR, KESARAM, GUMPULA, UNDRUGONDA, KASARABAD, BHEEMAVARAM, CIRCLE PET, TULJARAO PET, PAMULAPAHAD, RAJPET, ANAJIPURAM, SINGAREDDY PALEM, MOHAMMADAPURAM, and BHAKTHALAPURAM. The bottom of the page features a navigation bar with "Discussion Forum", "Send Mail", "Legend", "Contact us", and "Disclaimer".

3. Know Your Water body - Total number & size wise distribution of water bodies for the selected town

Urban Water Body Information System

Welcome test45 Logout

Select Your Town

State: TELANGANA

Town: SURYAPET

View Distribution

Water Bodies Information

Size wise Distribution of Water Bodies of SURYAPET

Area (ha)	Number of Water Bodies
1 - 2.5	10
2.5 - 5	8
5 - 10	6
10 - 50	10
> 50	5
Total	39

Map | Satellite | Hybrid | Terrain

Map showing water bodies in Suryapet (M) and surrounding areas. The map includes labels for various locations such as KUDAKUDA, CHIVVEMLA, DURAJ PALLE, KESARAM, UNDRUGONDA, and others. A red box highlights the 'View Distribution' button in the interface.

Water Spread Dynamics

Sustainable Water Bodies

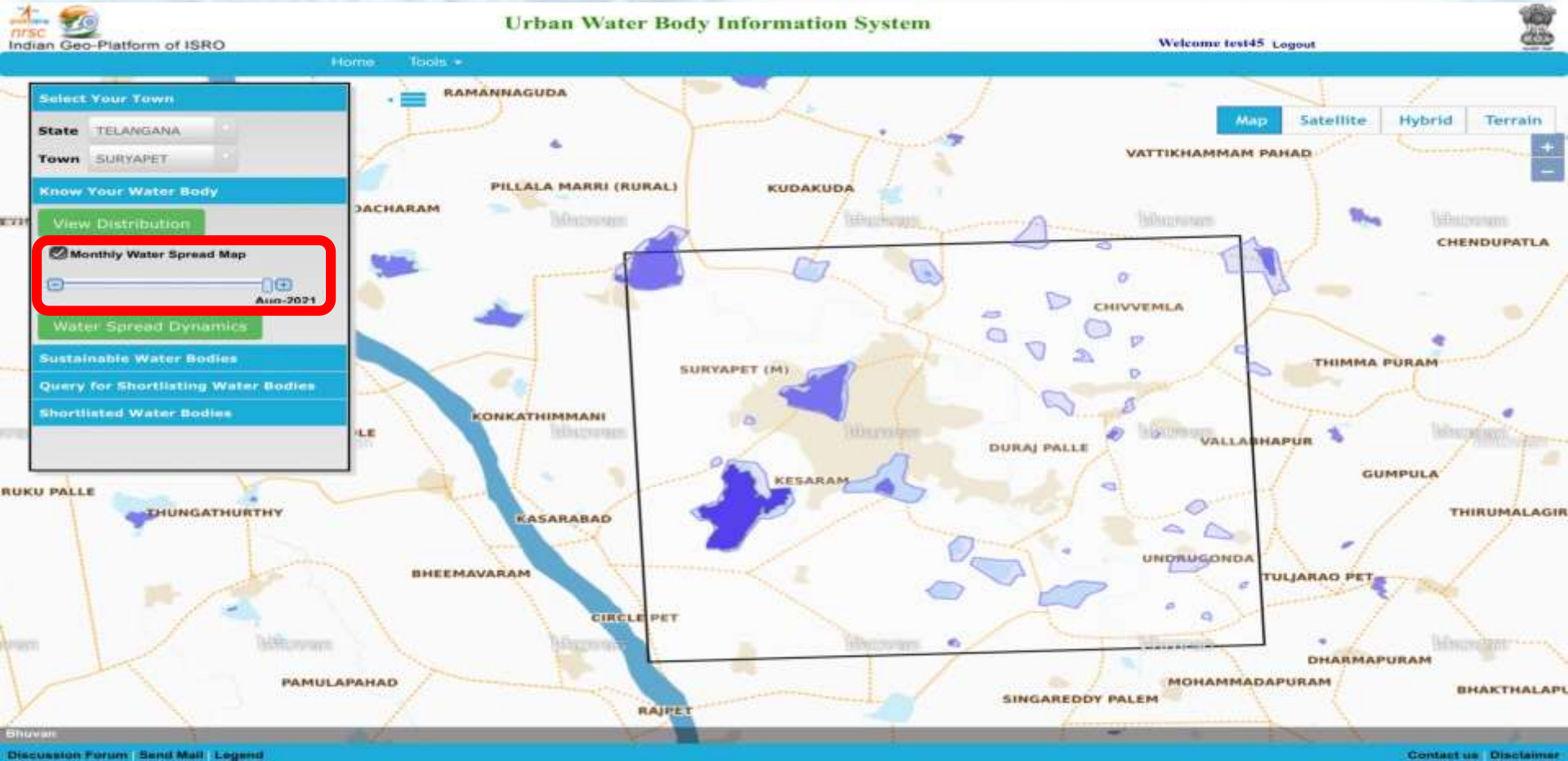
Query for Shortlisting Water Bodies

Shortlisted Water Bodies

Discussion Forum | Send Mail | Legend

Contact us | Disclaimer

4 . Know Your Water body - Mapview of monthly water spread of all water bodies



5 . Know Your Water body - Water Spread dynamics of a selected water body



Home Tools

Select Your Town

State:

Town:

Know Your Water Body

[View Distribution](#)

Monthly Water Spread Map

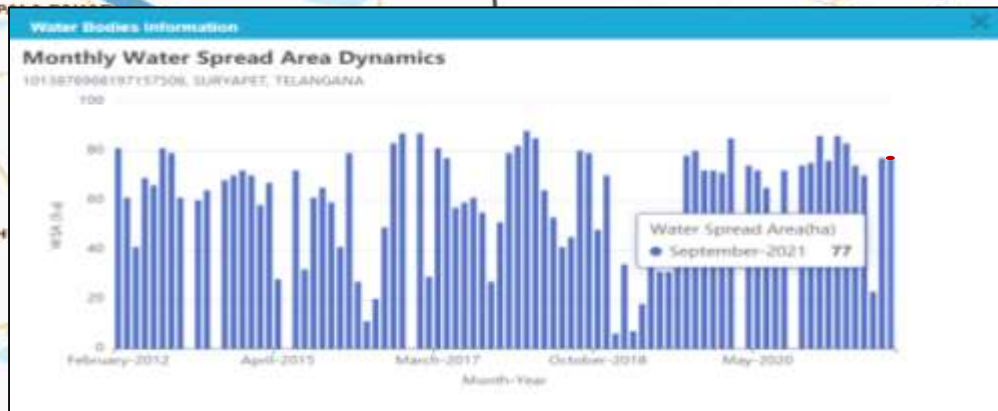
[Water Spread Dynamics](#)

Query for Shortlisting Water Bodies

Shortlisted Water Bodies

Water Body Details	
River Basin	Krishna
River Subbasin	Krishna Lower
State(s)	TELANGANA
District(s)	Suryapet
Area(ha)	106.62
WB Code	793517171023
WB Id	1013878968197167508

[View Dynamics](#)



6 . Sustainable Water bodies - Water availability in months in a year



Select Your Town

State:

Town:

Know Your Water Body

Sustainable Water Bodies

Percentage of max WSA: %

Year:

Query for shortlisting Water Bodies

Shortlisted Water Bodies

Sustainable Water Bodies Information

Sustainable Water Bodies - SURYAPET

Total number of Water Bodies	39
Number of WBs with WSA data available during Jan-May and Oct-Dec	29
Number of WBs with atleast 10% of max. WSA in 8 out of 8 mons	1
Number of WBs with atleast 10% of max. WSA in 7 out of 8 mons	5
Number of WBs with atleast 10% of max. WSA in 6 out of 8 mons	10
Number of WBs with atleast 10% of max. WSA in 5 out of 8 mons	1
Number of WBs with atleast 10% of max. WSA in 4 out of 8 mons	3
Number of WBs with atleast 10% of max. WSA in 1 out of 8 mons	2
Number of WBs having < 10% of max WSA in all 8 mons	7
Rest of WBs with data available in any one month during March-May	5
Number of WBs with atleast 10% of max. WSA available in any one of the above month	4
Remaining WBs with insufficient data	5

Water Bodies information:

7. Query Module – Short listing of water bodies based on selected criteria

Urban Water Body Information System

Welcome to

Home Tools

Select Your Town

State: TELANGANA

Town: SURYAPET

Know Your Water Body

Sustainable Water Bodies

Query for Shortlisting Water Bodies

Percentage of max WSA: 10 %

Year: 2020

Number of Months Available: 7

Lake Area(ha): > 10 ha

Proximity to Town(km): 6

Select Clear Selection

Water Bodies Shortlisted Information

Water Bodies for shortlisting - SURYAPET

Percentage WSA: 10(%)

Year: 2020

Months: 7

Proximity: 6(km)

WB-Id	Name	Area(ha)	Months	Proximity(km)	Add to List
1316040896948345845		170.25	7	2.78	<input checked="" type="checkbox"/>
1013876968197157506		106.62	7	5.73	<input checked="" type="checkbox"/>
3D2884749085833134		90.38	7	1.85	<input checked="" type="checkbox"/>
2188118463394127954		60.80	7	0.63	<input checked="" type="checkbox"/>
1172062627954753159		18.29	7	3.49	<input checked="" type="checkbox"/>

Add to List

INDLOOR CHIRUMARTHY ANAJIPURAM

Discussion Forum Send Mail Legend

8. Short listed Water Bodies – List of Selected water bodies displayed and LULC shall be prepared for these water bodies

Urban Water Body Information System

Home Tools

Subject Your Town

State: **TELANGANA**

Town: **SURYAPET**

Know Your Water Body

Sustainable Water Bodies

Quality for Assessing Water Bodies

Shortlisted Water Bodies

List of Shortlisted Water Bodies

WB-Id	Name	Area (ha)	Mons	View	Delete
1316040890948245845		170.25	7	<input type="radio"/>	<input type="radio"/>
1013870968197157506		106.62	7	<input type="radio"/>	<input type="radio"/>
302884749085833136		90.38	7	<input type="radio"/>	<input type="radio"/>
218818463394127984		60.8	7	<input type="radio"/>	<input type="radio"/>
1172062627954753159		18.29	7	<input type="radio"/>	<input type="radio"/>

Map showing water bodies (blue) and surrounding areas (yellow) in Suryapet (M). The map includes labels for various locations such as Uppala Pahad, Kankathimmani, Duraj Palle, Kesaram, and Uppala Pahad. A red box highlights the table of shortlisted water bodies.

Discussion Forum Send Mail Legend

9. Short listed Water Bodies – LULC dynamics for shortlisted water bodies

The screenshot displays the 'Urban Water Body Information System' interface. On the left, a sidebar shows the state 'TELANGANA' and town 'SURYAPET'. Below this is a 'List of Shortlisted Water Bodies' table. A red circle highlights the table and the 'LULC Details' section below it. A callout box points to the 'View' column in the table, stating 'Click on View to see the LULC of a particular water body'. Another callout box points to the 'LULC Change' section, stating 'CLICK TO SEE respective LULC' and '•Swipe option also available'. The main map area shows a satellite view of a water body with a red overlay representing the LULC. A callout box above the map reads 'LULC Pulla Reddy Cheruvu, Suryapet'. A blue circle on the map is labeled 'T 2'.

WB-id	Name	Area (ha)	Mon	View	Delete
1316040896948345845		170.25	7		
1013876968197157506		106.62	7		
302884749085833136		90.38	7		
2188118463394127984		60.8	7		
1172062627954753159		18.29	7		

LULC Details of WB-id: 2188118463394127984

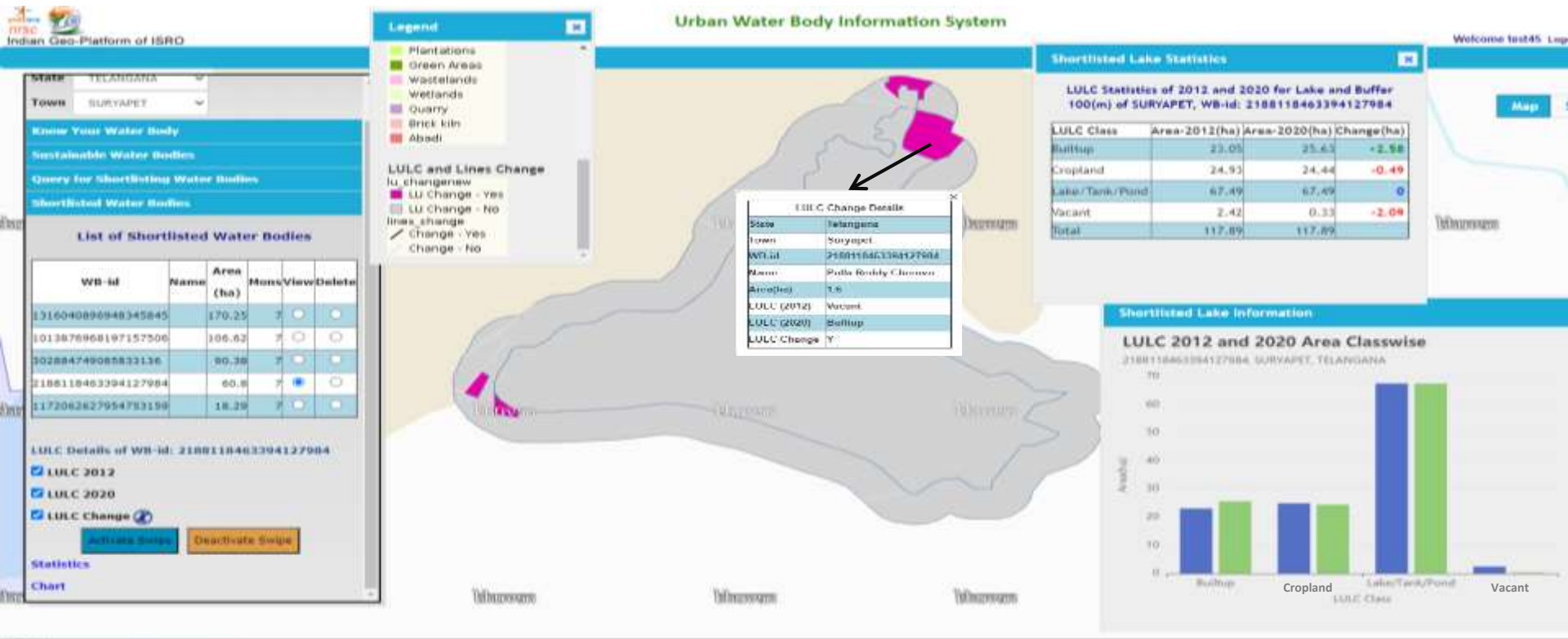
LULC 2012

LULC 2020

LULC Change

Activate Swipe Deactivate Swipe

10. Short listed Water Bodies – LULC dynamics for shortlisted water bodies (Contd.)



and graph

Urban Waterbody Information System (UWaIS)

PHASE 1 - 500 AMRUT towns –Status till July 2022

S.N	Task	No. of Cities completed	Remarks
1	Finalization of cities/towns AOI	450	
2	Integration of AOI on Bhuvan UWaIS	274	Pilot Cities + MP+UP+MH
3	Satellite data Acquisition	203	
4	Inventory of Waterbodies within AOI	20	
5	Shared Dossier to MoHUA	274	
6	Short-listing of WB received from ULB/MoHUA	9	Suryapet, Kochi, Badlapur
7	Creation of short-listed WB boundary and 100m buffer around short-listed WB	5	Badlapur
8	2 time period LULC and line feature mapping in buffer areas	5	
9	LULC Change information	5	
10	Deployment of the final version of WB maps on Bhuvan UWaIS	0	Portal not yet operational

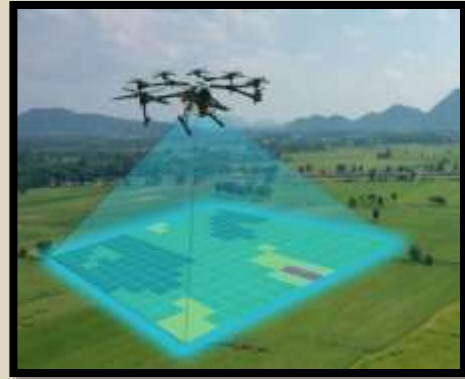
JAI HIND



Mohd. Monis Khan
Town & Country Planner
Town & Country Planning Organization
Ministry of Housing & Urban Affairs
Government of India

Creation of Geo-database

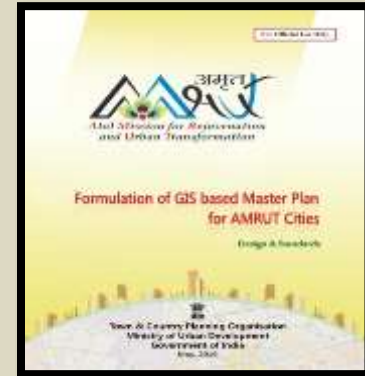
Final GIS based base maps at the functional scales and defined layers as per any of the below:



‘Application of **Drone/UAV Technology** for Formulation of GIS based Master Plan for Small and Medium Towns’ published by Ministry of Housing and Urban Affairs (MoHUA) in January, 2020



Design & Standards documents of ‘Sub-Scheme on Formulation of GIS based Master Plan for AMRUT Cities’ published by Ministry of Housing and Urban Affairs (MoHUA) in May 2016



Formulation of GIS-based Master Plan

- TCPO/MoHUA had requested the State Govts. to submit tentative number of towns to be taken up in the AMRUT 2.0 GIS Sub-Scheme.
- Accordingly, the number of cities/ towns proposed to be covered in the Sub-Scheme is 675.
- The State Town & Country Planning Departments/ State Mission Directorates of AMRUT who are the implementing agencies shall prioritize and intimate the cities to be taken up in the sub-Scheme through State Action Plan (SAP).
- Formulation of GIS based master plans of cities as per State Town & Country Planning Act, which includes sector-wise data collection & analysis, demand assessment, identification of issues, projected requirements, development strategies and draft and final master plans using the geo-database created as per Design & Standards documents.



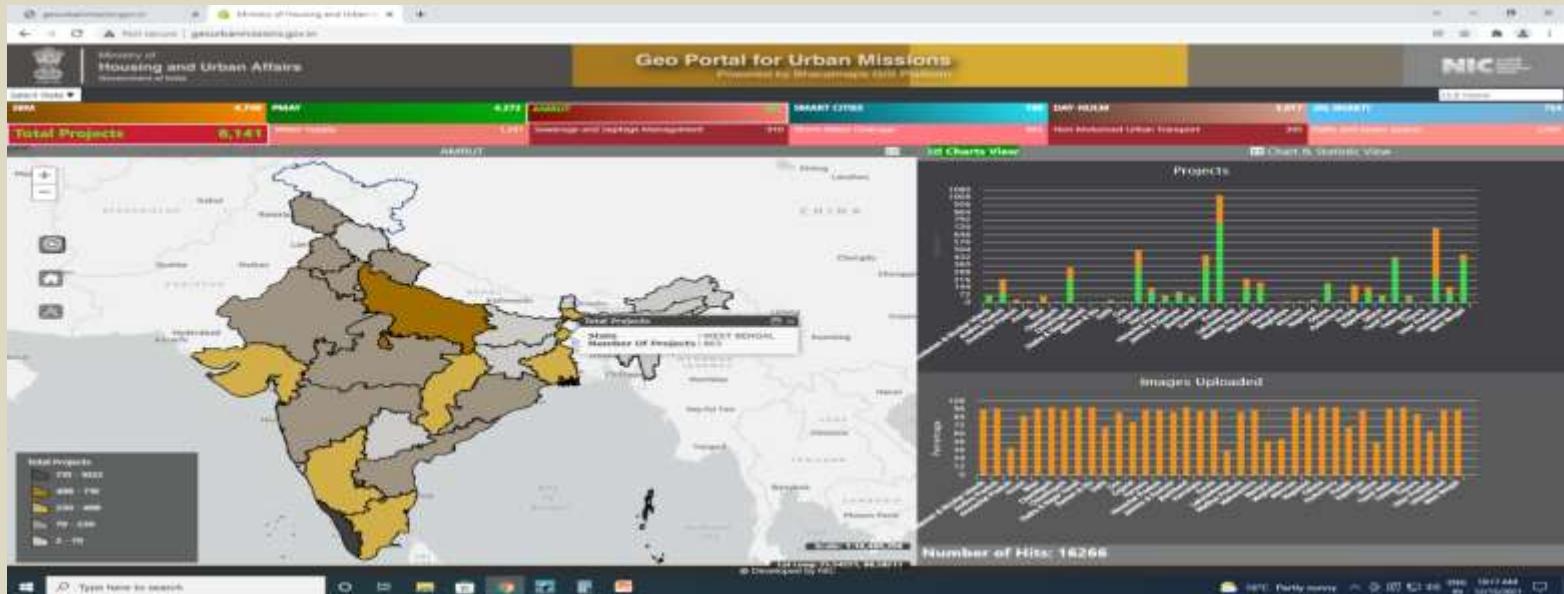
Capacity Building

- To create a cadre of professionals proficient in the use of GIS technology
- Build capacity amongst town planning, line departments and other concerned personnel at State and local levels
- 3 Tier training program –
 - Administrators
 - Planning assistants, town planners and
 - Operators/technicians/draftsmen
- The course curriculum under Sub-Scheme will be revised as per the requirements of Sub-Scheme under AMRUT 2.0.
- National and Regional Workshops to be organized
- Capacity building for uploading geo-database and Master Plan on proposed National Urban Geo Portal by NIC and Use of Mobile app for ground truthing by IIRS.



Centralised National Urban Geo Portal

The existing and proposed geo-databases and master plans of towns/cities created/formulated under various Centrals Schemes like AMRUT and AMRUT 2.0 alongside state funded Schemes/ Projects available with State Governments are to be uploaded and integrated on a **‘Centralized National Urban Geo-portal’**.



Components:- Mobile App

MOBILE BASED DATA COLLECTION



Development/Re-development of an **Integrated Mobile Application** for Vetting and Attribute Data collection and Social – Economic Survey for Master Plan Formulation

SOCIAL SURVEY



Funds Approved (Rs.)

Sr. No.	Name of State	No. of Towns	GIS	Master Plan	Capacity Building	Total
1	Andaman Nicobar Islands	1	1777600	0	200000	1977600
2	Andhra Pradesh	26	24631402.84	197500000	5500000	227631402.8
3	Arunachal Pradesh	1	1777600	7500000	200000	9477600
4	Assam	4	6,417,136.00	3,00,00,000	8,00,000	37,217,136.00
5	Bihar	24	28551241.11	180000000	4800000	213351241.1
6	Chandigarh	1	Not Demanded	7500000	200000	7,700,000.00
7	Chhattisgarh	9	14617027.04	70000000	2100000	86717027.04
8	Dadra and Nagar Haveli	Dropped				
9	Daman and Diu	1	639935	7500000	200000	8339935
10	Delhi	4	5127187.95	0	800000	5927187.95
11	Goa	1	814762.96	7500000	200000	8514762.96
12	Gujarat	31	33239855.01	235000000	7400000	275639855
13	Haryana	17	17715790.79	130000000	4100000	151815790.8
14	Himachal Pradesh	2	2511571.04	15000000	400000	17911571.04
15	Jammu & Kashmir	5	7999200.00	25000000	900000	33899200.00
16	Jharkhand	7	13817107.04	57500000	2000000	73317107.04
17	Karnataka	27	39400788.6	205000000	5700000	250100788.6
18	Kerala	9	6902564.49	56000000	1800000	64702564.49
19	Lakshadweep	Dropped				
20	Ladakh	2	26,66,400.00	1,50,00,000.00	4,00,000.00	1,80,66,400.00
21	Madhya Pradesh	34	45,820,433.00	265000000	8000000	318,820,433.00
22	Maharashtra	44	49,963,822.10	212,426,192.00	11,800,000.00	274,190,014.10
23	Manipur	1	1768712	7500000	200000	9468712
24	Meghalaya	1	1777600	7500000	200000	9477600
25	Mizoram	1	1350976	7500000	200000	9050976
26	Nagaland	2	2844160	15000000	400000	18244160
27	Odisha	6	10,665,600.00	7,50,00,000.00	1,20,00,000.00	19,365,600.00
28	Puducherry	3	4372896	22500000	600000	27472896
29	Punjab	17	3,51,78,704.00	13,25,00,000.00	40,00,000.00	17,16,78,704.00
30	Rajasthan	29	50963792	225,00,000.00	6700000	282,663,792.00
31	Sikkim	1	1333200	7080000	200000	8613200
32	Tamil Nadu	18	21508984.62	135000000	3600000	160108984.6
33	Telangana	12	18143230	92500000	2700000	113343230
34	Tripura	1	1155440	7500000	200000	8855440
35	Uttar Pradesh	59	118262572.6	472500000	14000000	604762572.6
36	Uttarakhand	7	8,578,288.00	52500000	1400000	62,478,288.00
37	West Bengal	55	68974557	420000000	11900000	50,08,74,575.86
	Total	461	648,541,451.34	3,335,926,192.00	105,000,000.00	4,089,467,661.34

**As on date
Rs. 408.94 Cr.
has been
approved to
35 States
(461 Towns)**



Funds Released to States (Rs.) (First Installment as 20% Advance)

Sr. No.	Name of State	No. of Towns	GIS	Master Plan	Capacity Building	Total
1	Andaman Nicobar Islands	1	0.00	0.00	40,000.00	40,000.00
2	Andhra Pradesh	26	4,926,280.00	39,500,000.00	1,100,000.00	45,526,280.00
3	Arunachal Pradesh	1		1,500,000.00	40,000.00	1,540,000.00
4	Assam	4		6,000,000.00	160,000.00	6,160,000.00
5	Bihar	24	5,710,240.00	36,000,000.00	960,000.00	42,670,240.00
6	Chandigarh	1		1,500,000.00	40,000.00	1,540,000.00
7	Chhattisgarh	9		14,000,000.00	420,000.00	14,420,000.00
8	Dadra and Nagar Haveli	Dropped				0.00
9	Daman and Diu	1		1,500,000.00	40,000.00	1,540,000.00
10	Delhi	4	1,025,438.00	0.00	160,000.00	1,185,438.00
11	Goa	1		1,500,000.00	40,000.00	1,540,000.00
12	Gujarat	31	6,647,971.20	47,000,000.00	1,480,000.00	55,127,971.20
13	Haryana	17	3,543,158.16	26,000,000.00	820,000.00	30,363,158.16
14	Himachal Pradesh	2		3,000,000.00	80,000.00	3,080,000.00
15	Jammu & Kashmir	5		5,000,000.00	180,000.00	5,180,000.00
16	Jharkhand	7	2,763,422.00	11,500,000.00	400,000.00	14,663,422.00
17	Karnataka	27	7,880,158.00	41,000,000.00	1,140,000.00	50,020,158.00
18	Kerala	9		11,200,000.00	360,000.00	11,560,000.00
19	Lakshadweep	Dropped		3,000,000.00	80,000.00	3,080,000.00
20	Ladakh	2				0.00
21	Madhya Pradesh	34		53,000,000.00	1,600,000.00	54,600,000.00
22	Maharashtra	44	4,166,048.00	56,000,000.00	1,680,000.00	61,846,048.00
23	Manipur	1		1,500,000.00	80,000.00	1,580,000.00
24	Meghalaya	1	355,520.00	1,500,000.00	40,000.00	1,895,520.00
25	Mizoram	1		1,500,000.00	80,000.00	1,580,000.00
26	Nagaland	2	568,832.00	3,000,000.00	80,000.00	3,648,832.00
27	Odisha	6	2,710,416.00	1,500,000.00	360,000.00	4,570,416.00
28	Pondicherry	3		4,500,000.00	120,000.00	4,620,000.00
29	Punjab	17	355,520.00	26,500,000.00	800,000.00	27,655,520.00
30	Rajasthan	29	10,192,758.00	45,000,000.00	1,340,000.00	56,532,758.00
31	Sikkim	1		1,500,000.00	80,000.00	1,580,000.00
32	Tamil Nadu	18		27,000,000.00	720,000.00	27,720,000.00
33	Telangana	12		18,500,000.00	540,000.00	19,040,000.00
34	Tripura	1	231,088.00	1,500,000.00	40,000.00	1,771,088.00
35	Uttar Pradesh	59		94,500,000.00	2,800,000.00	97,300,000.00
36	Uttarakhand	7		10,500,000.00	280,000.00	10,780,000.00
37	West Bengal	55		83,500,000.00	2,320,000.00	85,820,000.00
	Total	461	51,076,849.36	680,200,000.00	20,500,000.00	751,776,849.36

**As on date
Rs. 75.18
Cr. has
been
released to
35 States
(461
Towns) as
First
Installment**



Funds Released to States (Rs.) (Second Installment as 40% Advance)

Sr. No.	Name of State	No. of Towns	GIS	Master Plan	Capacity Building	Total
1	Andaman Nicobar Islands	1		0.00	80,000.00	80,000.00
2	Andhra Pradesh	26	9,852,561.14	79,000,000.00	2,200,000.00	91,052,561.14
3	Arunachal Pradesh	1		3,000,000.00	80,000.00	3,080,000.00
4	Assam	4		10,187,400.00	320,000.00	10,507,400.00
5	Chhattisgarh	9		14,591,427.91	840,000.00	15,431,427.91
6	Haryana	17	14,919,475.40	52,000,000.00	1,400,000.00	68,319,475.40
7	Himachal Pradesh	2		6,000,000.00	160,000.00	6,160,000.00
8	Jharkhand	7	5,367,248.43	13,769,613.00	800,000.00	19,936,861.43
9	Kerala	9		22,400,000.00	720,000.00	23,120,000.00
10	Ladakh	2		3,348,085.00	160,000.00	3,508,085.00
11	Madhya Pradesh	34		66,965,550.00	3,200,000.00	70,165,550.00
12	Maharashtra	44	2560187.76	21956064.50	1659247.94	26,175,500.00
13	Manipur	1		3,000,000.00	40,000.00	3,040,000.00
14	Meghalaya	1	711,040.00	3,000,000.00	80,000.00	3,791,040.00
15	Mizoram	1		2,852,400.00	40,000.00	2,892,400.00
16	Nagaland	2	977,332.00	5,347,200.00	160,000.00	6,484,532.00
17	Pondicherry	3		9,000,000.00	240,000.00	9,240,000.00
18	Odisha	9	1,809,102.00	3,000,000.00	360,000.00	5,169,102.00
19	Punjab	17	711040	27,578,195.00	840,000.00	29,129,235.00
20	Rajasthan	29	20,385,516.00	12,000,000.00	2,680,000.00	35,065,516.00
21	Sikkim	1		2,748,000.00	40,000.00	2,788,000.00
22	Tripura	1	462,176.00	3,000,000.00	80,000.00	3,542,176.00
23	Uttar Pradesh	59		89,016,351.46	5,540,000.13	94,556,351.59
24	Uttarakhand	7		10,229,567.00	560,000.00	14,766,619.54
	Total	287	57,755,678.73	463,989,853.87	22,279,248.07	544,024,780.67

**As on date
Rs. 54.40
Cr. has been
released to
24 States
(287 Towns)
as Second
Installment**



Funds Released to States (Third Installment as 20% Advance)

Sl. No.	Name of State	Towns	GIS	MP	CB	TOTAL	Rs. (Cr.)	Release Date
01	Arunachal Pradesh	01	0	15,00,000.00	40,000.00	15,40,000.00	0.15	04.10.19
02	Himachal Pradesh	02	0	3,00,000.00	80,000.00	3,080,000.00	0.31	08.03.22
03	Kerala	09	0	16,160,000.00	360,000.00	16,520,000.00	1.65	31.05.21
04	Manipur	01	0	1,500,000.00	40,000.00	1,540,000.00	1.54	16.03.22
05	Mizoram	01	0	14,50,800.00	40,000.00	14,90,800.00	0.14	29.07.20
06	Nagaland	02	515,388.00	2,782,400.00	80,000.00	3,377,788.00	0.33	31.08.21
07	Punjab	16	0	16,417,796.20	760,000.00	17,177,796.20	1.71	31.08.21
08	Rajasthan	24	10,192,758	6,000,000.00	1,340,000.00	17,532,758.00	1.75	19.05.22
09	Sikkim	01	0	1,416,000.00	40,000.00	1,456,000.00	0.15	27.09.22
	TOTAL	57	10,708,146.40	48,810,996.20	2,740,000.00	62,259,142.60	6.37	

As on date Rs. 6.37 Cr. has been released to 09 States (57 Towns) as Third Installment

Funds Released to States (Fourth Installment as 20% Advance)

Sl. No.	Name of State	Towns	GIS	MP	CB	TOTAL	Rs. (Cr.)	Release Date
01	Arunachal Pradesh	01	0	15,00,000.00	40,000.00	15,40,000.00	0.15	28.09.22
	TOTAL	01	0	15,00,000.00	40,000.00	15,40,000.00	0.15	

As on date Rs. 0.15 Cr. has been released to 01 States (01 Town) as Fourth Installment



Funds Released to NRSC for Geo Database Creation (First Installment and 2nd Installment)

Sl No.	Name of Town	Towns in AMRUT	Geodatabase Creation		Release Date	Geodatabase Creation		Release Date	Geodatabase Creation
			1st Inst. (Rs.)	Rs. In Lakhs		2 nd Inst. (Rs.)	Rs. In Lakhs		Total Released
1	Andaman Nicobar Is	1	355520	3.55	18.10.17	465,221.55	4.65	11.06.21	909,530.90
2	Arunachal Pradesh	1	400000	4.00	19.06.17	436,119.03	4.36	11.06.21	919,354.05
3	Assam	4	8,31,916.8	8.31	11.05.18	1,974,865.95	19.74	11.06.21	3,183,693.71
4	Chhattisgarh	9	2923405	29.23	11.05.19	3,825,470.33	38.25	11.06.21	7,478,981.17
5	Daman & Diu	1	127987	127.98	25.09.18	133,813.38	1.33	11.06.21	268,720.58
6	Goa	1	162953	1.62	19.06.17	213,234.30	2.13	11.06.21	416,883.89
7	Himachal Pradesh	2	502314.2	5.02	19.06.17	657,311.54	6.57	11.06.21	1,285,075.99
8	Jammu & Kashmir	3	1599840	15.99	11.05.18	2,093,497.04	20.93	11.06.21	4,092,889.06
9	Kerala	9	1380512	13.80	18.10.17	1,806,492.94	18.06	11.06.21	3,531,782.02
10	Ladakh	2	533280	5.33	11.05.18	697,832.35	6.97	11.06.21	1,364,296.35
11	Madhya Pradesh	34	9894866	98.94	19.06.17	11,513,680.29	115.13	11.06.21	23,605,975.87
12	Manipur	1	266640	2.66	19.06.17	519,885.09	5.19	11.06.21	885,747.18
13	Mizoram	1	2,70,195.2	2.70	19.06.17	353,568.38	3.53	11.06.21	691,243.28
14	Punjab	16	6680221	66.80	11.05.18	8,741,513.17	87.41	11.06.21	17,090,085.73
15	Pondicherry	3	874579	8.74	19.06.17	1,144,445.05	11.44	11.06.21	2,237,445.82
16	Sikkim	1	266640	2.66	19.06.17	360,141.34	3.60	11.06.21	701,721.87
17	Tamil Nadu	18	4301797	43.01	11.05.18	6,096,734.94	60.96	11.06.21	11,562,117.46
18	Telangana	12	3914171	39.14	19.06.17	4,561,510.45	45.61	11.06.21	9,346,262.41
19	Uttar Pradesh	59	23652515	236.52	18.10.17	31,015,054.86	310.15	11.06.21	60,492,460.69
20	Uttrakhand	6	1169920	11.69	11.05.18	2,602,118.83	26.02	11.06.21	4,268,663.30
21	West bengal	55	13261632	132.61	11.05.18	18,400,475.30	184.00	11.06.21	35,173,909.49
	Total	239	73619768	736.19		97,612,986.11	976.12		171,232,752.81
	Grand Total		73619768	736.19		97,612,986.11	976.12		1712.32 Lakhs

As on date Rs. 17.12 Cr. has been released to NRSC for 21 States (239 Towns)

Utilisation Certificate Received

Received

Sr. No.	Name of State	Total Released	Total UC Amount	% of UC Received
1	Rajasthan	109131032.4	109131033	100.00
2	Meghalaya	5686560	5686560	100.00
3	Mizoram	5963200	5963200	100.00
4	Sikkim	4368000	4368000	100.00
5	Andhra Pradesh	136578841.1	136578841	100.00
6	Telangana	19040000	19039000	99.99
7	Puducherry	13860000	13620000	98.27
8	Madhya Pradesh	124765550	121654662	97.51
9	Odisha	9739518	9361700	96.12
10	Gujarat	55127971.2	52800000	95.78
11	Uttar Pradesh	191856351.6	167152747	87.12
12	Kerala	51200000	44097956	86.13
13	NRSC	171232752.8	146232752.8	85.40
14	Assam	16667400	14197171	85.18
15	West Bengal	85820000	72400000	84.36
16	Haryana	98682633.56	82554000	83.66
17	Maharashtra	88021548.2	70513746	80.11
18	Arunachal Pradesh	7740000	6160000	79.59
19	Tamil Nadu	27720000	21238581	76.62
20	Uttarakhand	21569567	16381814	75.95
21	Nagaland	13511152	10133364	75.00
22	Manipur	6160000	4580000	74.35
23	Jammu & Kashmir	5180000	3534258	68.23
24	Punjab	73962551.2	48747200	65.91
25	Himachal Pradesh	12320000	7810200	63.39
26	Jharkhand	34600283.43	16835000	48.66
27	Chhattisgarh	29851427.91	13992975	46.88
28	Ladakh	6588085	2954948	44.85
29	Andman & Nicobar	120000	40000	33.33
30	Tripura	5313264	1771088	33.33
31	Karnataka	50020158	5564216	11.12
32	Goa	1540000	124697	8.10

UC Not Received

Sr. No	Name of State/UT	Total Release (Rs Cr.)	Date of Release
1	Bihar	4.26	18/10/17
2	Delhi	0.11	23/02/18
3	Chandigarh	0.15	07/09/18
4	Daman and Diu	0.15	25/09/18



Geo Database Creation

Satellite Data acquired

State (towns)	Through NRSC		State Initiatives/out sourcing
33 States (451 towns)	1. Andaman & Nicobar Islands (1) 2. Arunachal Pradesh (1) 3. Ladakh (02) 4. Himachal Pradesh (2) 5. Kerala (9) 6. Madhya Pradesh (34) 7. Manipur (1) 8. Mizoram (1) 9. Puducherry (3) 10. Sikkim (1) 11. Telengana (12) 12. Uttar Pradesh (59)	13. Goa (1) 14. Assam (04) 15. Chhattisgarh (09) 16. Jammu & Kashmir (03) 17. Punjab (16) 18. Tamil Nadu (18) 19. Uttarakhand (06) 20. West Bengal (55)	1. Rajasthan (29) 2. Bihar (24) 3. Jharkhand (05) 4. Meghalaya (01) 5. Andhra Pradesh (26) 6. Gujarat (31) 7. Nagaland (02) 8. Karnataka (26) 9. Haryana (17) 10. Maharashtra (44) 11. Chandigarh (1) 12. Tripura (1) 13. Odisha (6)
	20 States (238 towns)		13 States (213 towns)

Geo Database Creation

Satellite Data not acquired

Through NRSC		
Sl. No	Name of States	No. of Towns
1	Daman and Diu	1
2	Uttar Pradesh	01
	Total	02

State Initiatives/out sourcing		
Sl. No	Name of States	No. of Towns
1	Jharkhand	2
2	Karnataka	1
3	Odisha	9
4	Tripura	1
	Total	13



Geo Database Creation

Data Processing

State (towns)	Through NRSC		State Initiatives/out sourcing
32 States (450 towns)	1. Andaman & Nicobar Islands (1) 2. Arunachal Pradesh (1) 3. Ladakh (02) 4. Himachal Pradesh (2) 5. Kerala (9) 6. Madhya Pradesh (34) 7. Manipur (1) 8. Mizoram (1) 9. Puducherry (3) 10. Sikkim (1) 11. Telengana (12) 12. Uttar Pradesh (59)	13. Goa (1) 14. Assam (04) 15. Chhattisgarh (09) 16. Jammu & Kashmir (03) 17. Punjab (16) 18. Tamil Nadu (18) 19. Uttarakhand (06) 20. West Bengal (55)	1. Rajasthan (29) 2. Bihar (24) 3. Jharkhand (05) 4. Meghalaya (01) 5. Andhra Pradesh (26) 6. Gujarat (31) 7. Nagaland (02) 8. Karnataka (26) 9. Haryana (17) 10. Maharashtra (44) 11. Chandigarh (1) 12. Odisha (6)
	20 States (238 towns)		12 States (212 towns)



Geo Database Creation

Data Not Processed

Through NRSC		
Sl. No	Name of States	No. of Towns
1	Daman and Diu	1
2	Uttar Pradesh	1
	Total	02

State Initiatives/out sourcing		
Sl. No	Name of States	No. of Towns
1	Delhi	4
3	Jharkhand	2
4	Odisha	9
	Total	15



Geo Database Creation

Thematic Map Creation

State (towns)	Through NRSC		State Initiatives/out sourcing
31 States (449 towns)	1. Andaman & Nicobar Islands (1) 2. Arunachal Pradesh (1) 3. Ladakh (02) 4. Himachal Pradesh (2) 5. Kerala (9) 6. Madhya Pradesh (34) 7. Manipur (1) 8. Mizoram (1) 9. Puducherry (3) 10. Sikkim (1) 11. Telengana (12) 12. Uttar Pradesh (59)	13. Goa (1) 14. Assam (04) 15. Chhattisgarh (09) 16. Jammu & Kashmir (03) 17. Punjab (16) 18. Tamil Nadu (18) 19. Uttarakhand (06) 20. West Bengal (55)	1. Rajasthan (29) 2. Bihar (24) 3. Jharkhand (05) 4. Meghalaya (01) 5. Andhra Pradesh (26) 6. Gujarat (31) 7. Nagaland (02) 8. Karnataka (26) 9. Haryana (17) 10. Maharashtra (44) 11. Odisha (6)
	20 States (238 towns)		11 States (211 towns)

Geo Database Creation

Thematic Map Not Created

Through NRSC		
Sl. No	Name of States	No. of Towns
1	Daman and Diu	1
2	Uttar Pradesh	1
	Total	2

State Initiatives/out sourcing		
Sl. No	Name of States	No. of Towns
1	Delhi	4
2	Jharkhand	1
3	Karnataka	18
4	Odisha	9
5	Tripura	1
6	Nagaland	2
	Total	35



Draft Geo Database Creation

Created

State (towns)	Through NRSC	State Initiatives/out sourcing
32 States (450 towns)	1. A & N Islands (1)	1. Andhra Pradesh (26)
	2. Arunachal Pradesh (1)	2. Bihar (24)
	3. Assam (04)	3. Gujarat (31)
	4. Chhattisgarh (09)	4. Haryana (17)
	5. Goa (1)	5. Jharkhand (05)
	6. Himachal Pradesh (2)	6. Karnataka (26)
	7. J & K (03)	7. Maharashtra (44)
	8. Kerala (9)	8. Meghalaya (01)
	9. Ladakh (02)	9. Nagaland (02)
	10. Madhya Pradesh (34)	10. Odisha (6)
	11. Manipur (1)	11. Punjab (01)
	12. Mizoram (1)	12. Rajasthan (29)
	13. Punjab (16)	
	14. Puducherry (3)	
	15. Sikkim (1)	
	16. Tamil Nadu (18)	
	17. Telengana (12)	
	18. Uttar Pradesh (59)	
	19. Uttarakhand (06)	
	20. West Bengal (55)	
	20 States (238) towns	12 States (212 towns)

Yet to be Created

State (towns)	Through NRSC	State Initiatives/out sourcing
7 States (19 towns)	1. Daman & Diu (1)	1. Chandigarh (1)
		2. Delhi (4)
		3. Jharkhand (2)
		4. Tripura (1)
		5. Uttarakhand (1)
	01 UT (01) towns	5 States (09 towns)



Geo Database Creation

Vetting of Geo database

Vetted

Yet to be Vetted

State (towns)	Through NRSC	State Initiatives/out sourcing
30 States (433 towns)	1. A & N Islands (1)	1. Andhra Pradesh (26)
	2. Arunachal Pradesh (1)	2. Rajasthan (29)
	3. Assam (04)	3. Haryana (17)
	4. Chhattisgarh (09)	4. Bihar (24)
	5. Himachal Pradesh (2)	5. Jharkhand (05)
	6. J & K (01)	6. Gujarat (31)
	7. Kerala (9)	7. Meghalaya (01)
	8. Ladakh (02)	8. Karnataka (22)
	9. Madhya Pradesh (34)	9. Nagaland (02)
	10. Manipur (1)	10. Maharashtra (44)
	11. Punjab (16)	11. Punjab (01)
	12. Puducherry (3)	12. Odisha (01)
	13. Sikkim (1)	
	14. Tamil Nadu (18)	
	15. Telengana (09)	
	16. Uttar Pradesh (59)	
	17. Uttarakhand (06)	
	18. West Bengal (54)	
		18 States (230) towns	12 States (203) towns

State (towns)	Through NRSC	State Initiatives/out sourcing
09 States (16 towns)	1. Goa (1)	1. Jharkhand (1)
	2. Jammu & Kashmir (2)	2. Karnataka (5)
	3. Mizoram (1)	
	4. Ladakh (1)	
	5. Telangana (03)	
	6. Uttarakhand (01)	
	7. West Bengal (01)	
	7 States (10) towns	2 States (06) towns



Geo Database Creation

Final Maps Delivered

State (Towns)	Through NRSC		State Initiatives/out sourcing
28 State (351 Towns)	<ol style="list-style-type: none">1. Arunachal Pradesh (1)2. Madhya Pradesh (34)3. Sikkim(1)4. Himachal Pradesh (02)5. Kerala (09)6. Puducherry (03)7. Assam (04)8. Tamil Nadu (18)9. Telangana (09)	<ol style="list-style-type: none">10. Uttara Pradesh (55)11. A & N Islands (01)12. Chhattisgarh (07)13. Manipur (01)14. Punjab (12)15. Uttarakhand (05)16. Ladakh (02)17. West Bengal (06)18. J & K (01)19. Mizoram (01)	<ol style="list-style-type: none">1. Rajasthan (29)2. Jharkhand (05)3. Bihar (24)4. Andhra Pradesh (26)5. Gujarat (31)6. Nagaland (02)7. Maharashtra (41)8. Odisha (01)9. Haryana (17)

Geo Database Creation

Delivered

Final Maps Delivered

Yet to be Delivered

State (towns)	Through NRSC	State Initiatives/out sourcing
28 States (396 towns)	1. A & N Islands (1)	1. Rajasthan (29)
	2. Arunachal Pradesh (1)	2. Jharkhand (05)
	3. Assam (04)	3. Bihar (24)
	4. Chhattisgarh (09)	4. Andhra Pradesh (26)
	5. Himachal Pradesh (2)	5. Gujarat (31)
	6. J & K (01)	6. Nagaland (02)
	7. Kerala (9)	7. Maharashtra (44)
	8. Ladakh (02)	8. Haryana (17)
	9. Madhya Pradesh (34)	9. Meghalaya (01)
	10. Manipur (1)	
	11. Mizoram (1)	
	12. Puducherry (3)	
	13. Punjab (15)	
	14. Sikkim (1)	
	15. Tamil Nadu (18)	
	16. Telengana (9)	
	17. Uttar Pradesh (57)	
	18. Uttarakhand (06)	
	19. West Bengal (43)	
19 States (217) towns		9 States (179 towns)

State (towns)	Through NRSC	State Initiatives/out sourcing
08 States (60 towns)	1. Ladhakh (01)	1. Karnataka (21)
	2. Punjab (03)	2. Punjab (01)
	3. Uttar Pradesh (02)	
	4. West Bengal (18)	
	4 States (24) towns	4 States (36 towns)



Master Plan Formulation

Socio-Economic Data Collected

S.No	State	No. of Towns
1	Andhra Pradesh	26
2	Arunachal Pradesh	1
3	Assam	04
4	Chhattisgarh	9
5	Gujarat	31
6	Haryana	17
7	Himachal Pradesh	2
8	Jharkhand	5
9	Jammu & Kashmir	2
10	Karnataka	18
11	Kerala	9
12	Ladakh	2
13	Madhya Pradesh	34
14	Maharashtra	44
15	Manipur	1

S.No	State	No. of Towns
16	Meghalaya	1
17	Mizoram	1
18	Nagaland	2
19	Odisha	1
20	Puducherry	3
21	Punjab	17
22	Rajasthan	28
23	Sikkim	1
24	Tamil Nadu	18
25	Telangana	12
26	Tripura	1
27	Uttar Pradesh	59
28	Uttarakhand	6
29	West Bengal	25
	TOTAL	380



Master Plan Formulation

Socio-Economic Data Not Collected

Sl. No	Name of States	No. of Towns
1	Bihar	24
2	Chandigarh	1
3	Daman and Diu	1
4	Goa	1
5	Jammu & Kashmir	4
6	Jharkhand	1
7	Karnataka	21
8	Odisha	1
9	Punjab	1
10	Tamil Nadu	15

Sl. No	Name of States	No. of Towns
11	Uttarakhand	6
12	West Bengal	50
	Total	126



Master Plan Formulation

Socio-Economic Data Analyzed

S.No	State	No. of Towns
1	Andhra Pradesh	26
2	Arunachal Pradesh	1
3	A & N Islands	
4	Assam	4
5	Chhattisgarh	9
6	Gujarat	31
7	Haryana	17
8	Himachal Pradesh	2
9	Jharkhand	5
10	Kerala	9
11	Ladakh	1
12	Madhya Pradesh	24

S.No	State	No. of Towns
15	Meghalaya	1
16	Mizoram	1
17	Nagaland	2
18	Puducherry	3
19	Punjab	17
20	Rajasthan	4
21	Sikkim	1
22	Tamil Nadu	18
23	Telangana	12
24	Tripura	1
25	Uttar Pradesh	59
26	Uttarakhand	6
27	West Bengal	19
	TOTAL	353



Master Plan Formulation

Socio-Economic Data Not Analyzed

Sl. No	Name of States	No. of Towns
1	Assam	4
2	Bihar	24
3	Chandigarh	1
4	Daman and Diu	1
5	Goa	1
6	Jammu & Kashmir	5
7	Jharkhand	1
8	Karnataka	27
9	Maharashtra	36
10	Meghalaya	1

Sl. No	Name of States	No. of Towns
11	Odisha	1
12	Pondicherry	1
13	Punjab	1
14	Sikkim	1
15	Tamil Nadu	15
16	Uttarakhand	6
17	Nagaland	2
18	West Bengal	55
19	Chhattisgarh	4
	Total	185



Geo Database Creation Status of Draft Master Plan

Formulated

Yet to be Formulated

Sl. No	Name of States	No. of Towns
1	Andhra Pradesh	22
2	Arunachal Pradesh	1
3	Assam	3
4	Gujarat	31
5	Haryana	16
6	Himachal Pradesh	2
7	Jharkhand	5
8	Kerala	9
9	Ladakh	1
10	Madhya Pradesh	30
11	Maharashtra	44
12	Manipur	1
13	Meghalaya	1
14	Mizoram	1
15	Nagaland	2
16	Puducherry	2
17	Punjab	16
18	Rajasthan	23
19	Tamil Nadu	2
20	Tamil Nadu	02

Sl. No	Name of States	No. of Towns
20	Telangana	2
21	Uttarakhand	3
22	Uttar Pradesh	59
23	West Bengal	07
Total	23	283

Sl. No	Name of States	No. of Towns
1	Andhra Pradesh	7
2	Assam	1
3	Bihar	24
4	Chandigarh	1
5	Chhattisgarh	9
6	Daman and Diu	1
7	Goa	1
8	Jammu & Kashmir	3
9	Jharkhand	2
10	Karnataka	27
11	Sikkim	1
12	Madhya Pradesh	5
13	Odisha	1
14	Pondicherry	1
15	Punjab	1

Sl. No	Name of States	No. of Towns
16	Rajasthan	02
17	Tamil Nadu	16
18	Telangana	10
19	Tripura	1
20	Uttarakhand	4
21	West Bengal	48
Total	21	178

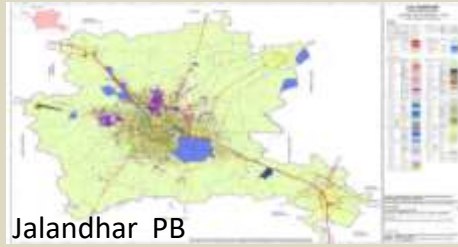
DRAFT MASTER PLANS PREPARED 283 cities



SAS Nagar, PB



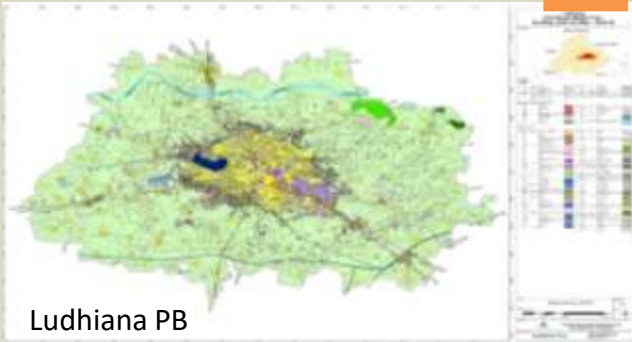
Jalandhar, PB



Ludhiana, PB

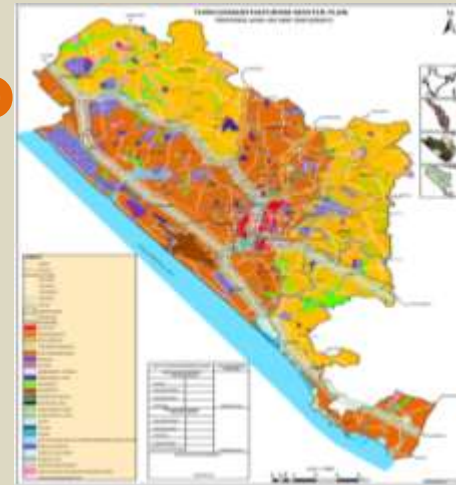
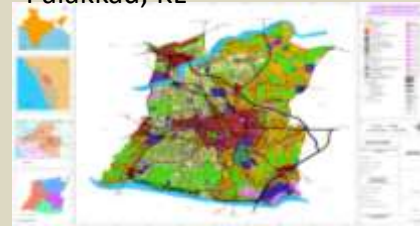


Ferozpur, PB

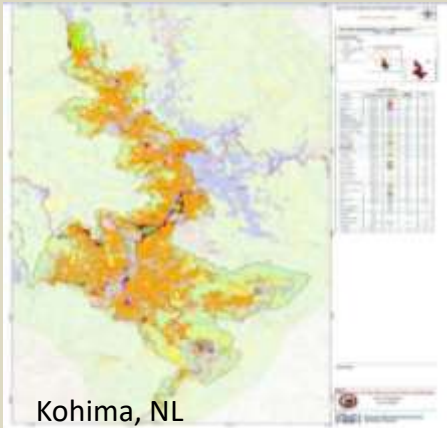


Tawang, AR

Palakkad, KL



Thiruvananthapuram, KL



Kohima, NL



Dimapur, NL



Aizawl, MZ



Kochi, KL

Geo Database Creation

Status of Final Master Plan

Formulated

Sl. No	Name of States	No. of Towns
1	Andhra Pradesh	10
2	Arunachal Pradesh	1
3	Gujarat	31
4	Jharkhand	5
5	Madhya Pradesh	30
6	Maharashtra	44
7	Puducherry	2
8	Rajasthan	23
9	Telangana	2
Total	09	148

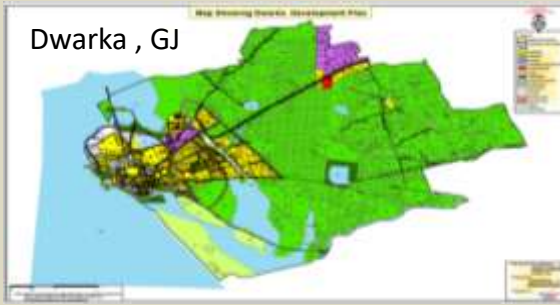
Yet to be Formulated

Sl. No	Name of States	No. of Towns
1	Andhra Pradesh	12
2	Haryana	16
3	Himachal Pradesh	2
4	Kerala	9
5	Ladakh	1
6	Manipur	1
7	Meghalaya	1
8	Nagaland	2
9	Punjab	16
10	Sikkim	1
11	Uttar Pradesh	59
12	Tamilnadu	02
Total	12	125

Ahmedabad, GJ



Dwarka , GJ

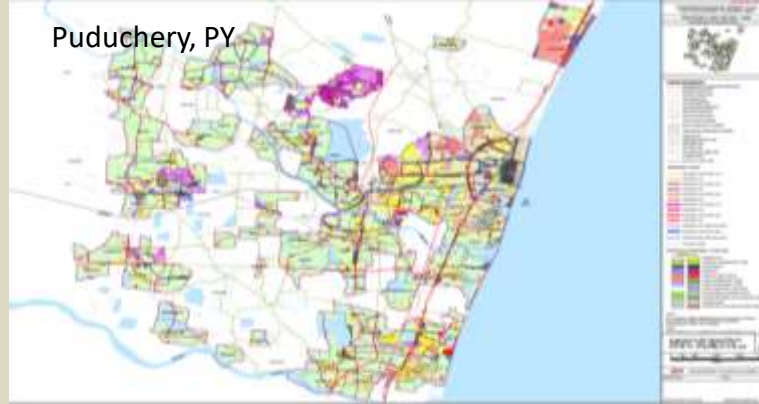


Gandhinagar,
GJ



**FINAL MASTER
PLANS PREPARED
148 cities**

Puduchery, PY



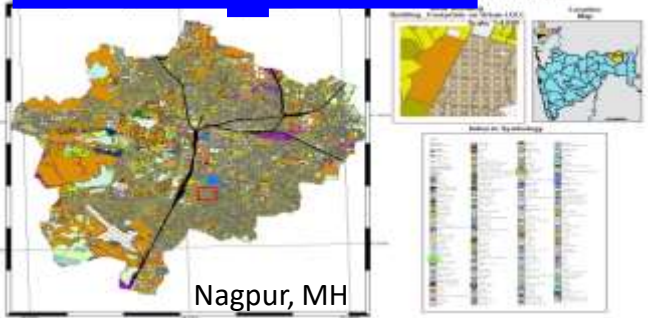
Nadiad,
GJ



Hazaribag, JH



Urban Landuse and Landcover of Nagpur City,
Maharashtra, India



Nagpur, MH



Chas, JH



Dhanbad, JH

Capacity Building under Sub-scheme as on date

Level of training/ trainees	No. of Training Programme	No. of officials trained
Training for decision makers (3 Days)	10	211
Training for Middle level officers (Two Weeks)	17	383
Operators & Technicians (Four Weeks)	6	124
Training at National Centre of Geo Informatics (NCoG), Gandhi Nagar (5 Days)	9	153
Vetting and Attribute Data Collection	22	1079
Total	64	1950
Conference/National Meets	5	451
State Level Workshops	4	205
Total	9	656
Grand Total	73	2606

Capacity Building under AMRUT Sub-scheme as on date

Sl. No.	Institute	Training	No. of Training Programmes Conducted	No. of Officials Trained
1	Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG), Gandhinagar	5 Days Training on NCoG GIS Platform	07	114
2	North Eastern Space Application Centre (NESAC), Shillong	3 Days Training programme for Decision Makers	03	45
		2 Weeks Training Programme for Middle Level Officials	03	54
		4 Weeks Training Programme for Junior Level Officials	01	30
		1 Week Training Programm for Assam State (Middle)	01	17
3	Indian Institute of Surveying and Mapping (IIS&M), Sol, Hyderabad	3 Days Training Programme for Decision Makers	02	48
		2 Weeks Training Programme for Middle Level Officials	03	50
		4 Weeks Training Programme for Junior Level Officials	02	35
4	Indian Institute of Remote Sensing, ISRO, Dehradun	3 Days Training Programme for Decision Makers	02	75
		2 Weeks Training Programme for Middle Level Officials	03	108

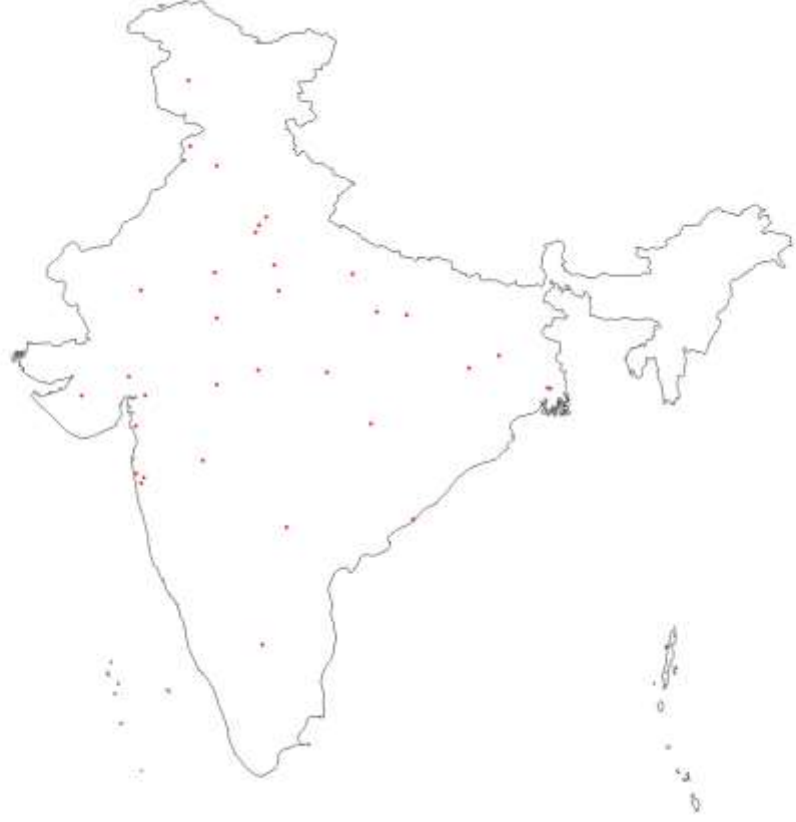
Total Participants Trained																	
SI No.	State	IIRS				IISM				NESAC				KSR SAC Planner	NCOG	Vetting	Total
		Admin Level	Planners Level	Operators Level	Total	Admin Level	Planners Level	Operators Level	Total	Admin Level	Planners Level	Operators Level	Total				
1	Andaman & Nicobar	0	0	0	0	10	0	0	10	2	0	0	2	0	0		12
2	Andhra Pradesh	4	10	10	24	0	0	0	0	1	7	10	18	0	6		48
3	Arunachal Pradesh	0	1	0	1	1	0	0	1	0	3	5	8	0	2		12
4	Assam	0	0	0	0	0	0	0	0	2	1	4	7	0	0	30	7
5	Bihar	2	0	0	2	0	0	0	0	0	0	0	0	0	2		4
6	Chandigarh	0	0	0	0	3	0	0	3	0	3	0	3	0	3		9
7	Chattisgarh	0	7	0	7	0	16	1	17	0	0	0	0	0	5	67	29
8	Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
9	Delhi	0	0	0	0	3	0	0	3	0	0	0	0	0	0		3
10	Goa	9	0	0	9	2	1	0	3	0	0	0	0	0	0		12
11	Gujarat	1	3	0	4	0	0	0	0	0	0	0	0	0	4		8
12	Haryana	0	0	0	0	0	0	0	0	1	0	0	1	0	0		1
13	Himachal Pradesh	0	0	0	0	3	0	0	3	0	2	0	2	0	7	28	40
14	Jammu & Kashmir	1	0	0	1	0	3	0	3	0	0	0	0	0	5		9
15	Jharkhand	0	5	4	9	0	0	0	0	0	0	0	0	0	4		13
16	Karnataka	2	0	0	2	0	4	9	13	3	0	0	3	0	4		22
17	Kerala	7	0	0	7	3	0	0	3	7	5	0	12	0	6	50	78
18	Madhya Pradesh	0	0	0	0	0	0	0	0	0	4	0	4	0	10	100	114
19	Maharashtra	0	30	0	30	0	3	0	3	1	0	0	1	0	4		38
20	Manipur	0	0	0	0	0	0	0	0	13	5	0	18	0	0		18

Total Participants Trained

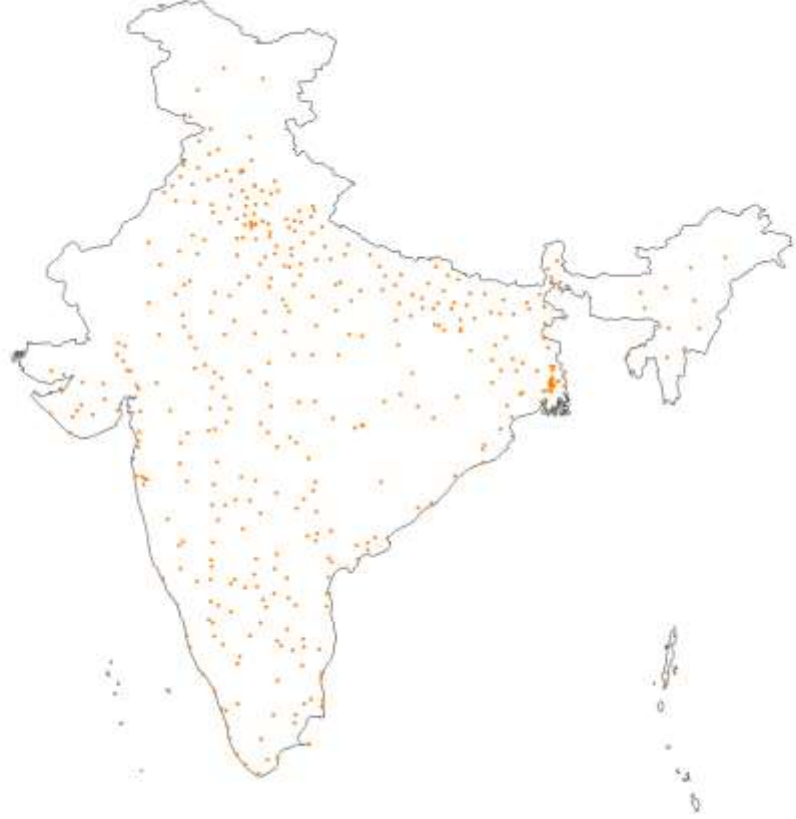
Sl No.	State	IIRS				IISM				NESAC				KSR SAC Planners	BISAG	Vetting	Total
		Admin Level	Planners Level	Operators Level	Total	Admin Level	Planners Level	Operators Level	Total	Admin Level	Planners Level	Operators Level	Total				
20	Manipur	0	0	0	0	0	0	0	0	13	3	0	16	0	0		16
21	Meghalaya	0	0	0	0	0	0	0	0	4	0	4	8	0	0		8
22	Mizoram	0	0	0	0	0	0	0	0	3	0	0	3	0	0	40	3
23	Nagaland	0	0	0	0	0	0	0	0	0	5	2	7	0	0		7
24	Odisha	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
25	Puducherry	17	0	0	17	2	0	0	2	0	0	0	0	0	2	20	41
26	Punjab	0	23	3	26	5	6	4	15	3	0	0	3	0	0	48	92
27	Rajasthan	1	6	0	7	3	7	6	16	1	6	5	12	0	6		41
28	Sikkim	0	0	0	0	0	0	2	2	0	2	0	2	0	2		6
29	Tamil Nadu	0	0	0	0	8	7	6	21	1	0	0	1	0	5	42	27
30	Telangana	0	5	0	5	0	0	0	0	0	0	0	0	0	4		9
31	Tripura	2	0	0	2	0	1	0	1	1	0	0	1	0	0		4
32	Uttar Pradesh	10	0	0	10	0	0	0	0	0	2	0	2	0	8	113	133
33	Uttarakhand	12	4	0	16	5	2	0	7	0	0	0	0	0	1	50	24
34	West Bengal	0	12	4	16	0	0	7	7	2	9	0	11	14	14		62
35	TCPO			0				0				0	0		10		10
	Institute wise Total	75	108	21		48	50	35		45	30	30			114	198	
	Grant Total	204				133				105					114	595	1189



METRO cities-40



CLASS-I cities-418



Other Than Class-I cities-3



Towns in Mission/Sub Scheme

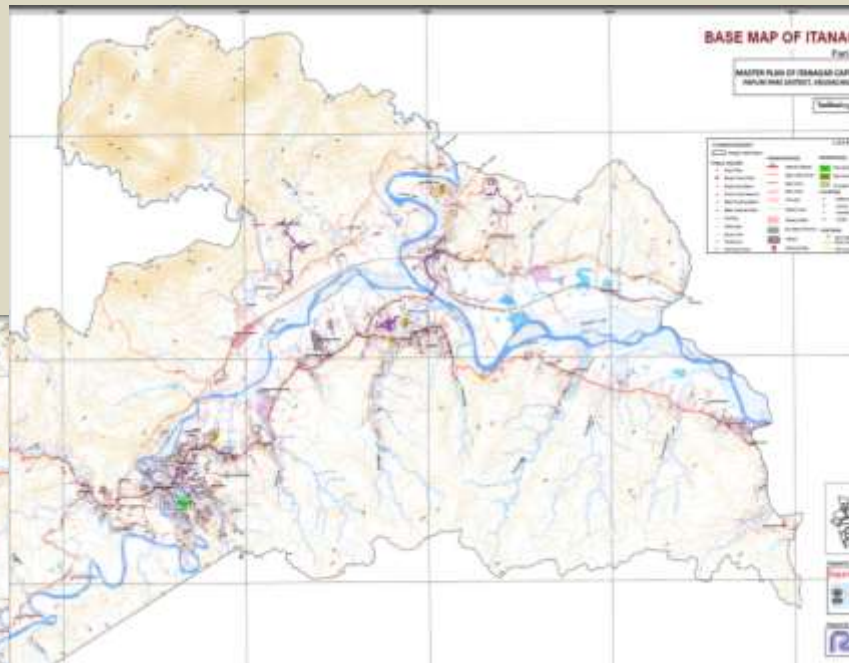
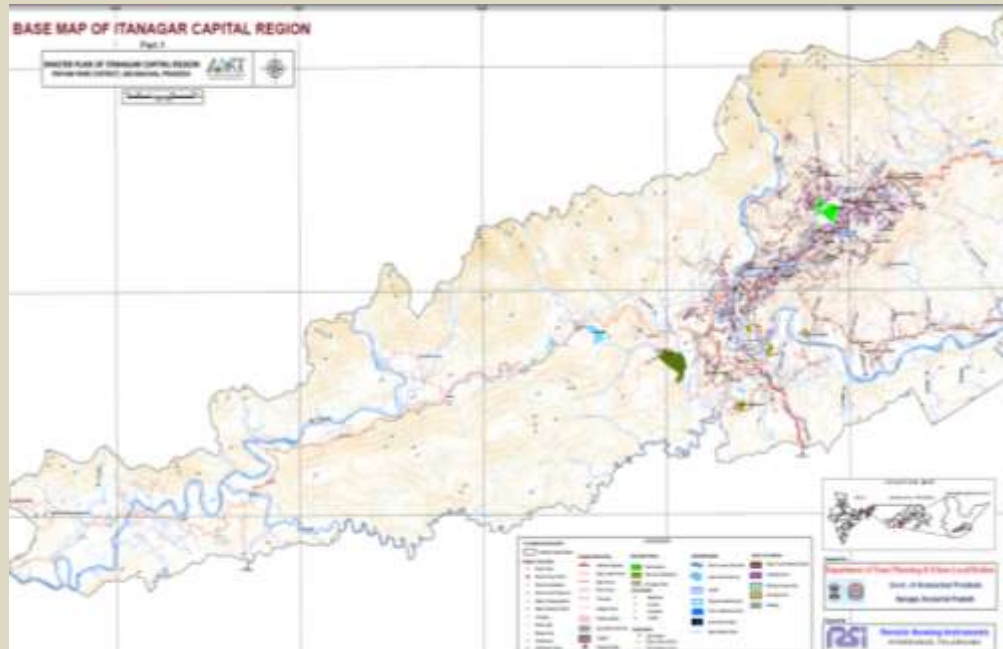
State/UT	No. of Towns in AMRUT MISSION				No. of Towns in Sub-Scheme (On Board)			
	Metro	Class I	Others	Under AMRUT	Metro	Class I	Others	Under Sub Scheme
Andaman Nicobar Islan		1		1	1			1
Andhra Pradesh	2	29	2	33	2	24		26
Arunachal Pradesh			1	1	1			1
Assam		4		4	4			4
Bihar	1	25	1	27	24			24
Chandigarh		1		1	1			1
Chhattisgarh	1	8		9	1	8		9
Dadar & Nagar Haveli			1	1		D		
Daman & Diu			1	1				
Delhi		4		4	4			4
Goa			1	1	1			1
Gujarat	4	26	1	31	4	26	1	31
Haryana	1	19		20	1	18		19
Himachal Pradesh		1	1	2	2			2
Jammu & Kashmir	1	3	1	5	1	4		5
Jharkhand	2	5		7	2	5		7
Karnataka	1	25	1	27	1	26		27
Kerala		7	2	9	9			9

State/UT	No. of Towns in AMRUT MISSION				No. of Towns in Sub-Scheme (On Board)			
	Metro	Class I	Others	Under AMRUT	Metro	Class I	Others	Under Sub Scheme
Lakshdweep			1	1		D		0
Madhya Pradesh	4	28	2	34	4	30		34
Maharashtra	10	33	1	44	4	32		36
Manipur		1		1		1		1
Meghalaya		1		1		1		1
Mizoram		1		1		1		1
Nagaland		1	1	2		1	1	2
Odisha		9		9		9		9
Pondicherry		3		3		3		3
Punjab	2	14		16	2	14		16
Rajasthan	3	25	1	29	3	26		29
Sikkim		1		1		1		1
Tamil Nadu	3	29	1	33		18		18
Telangana	1	10	1	12	1	11		12
Tripura		1		1		1		1
Uttar Pradesh	6	54	1	61	6	54		60
Uttrakhand		6	1	7		7		7
West Bengal	2	57	1	60	2	53		55
Total	44	432	24	500	34	421	2	458

BASE MAP OF ITANAGAR CAPITAL REGION

Part I

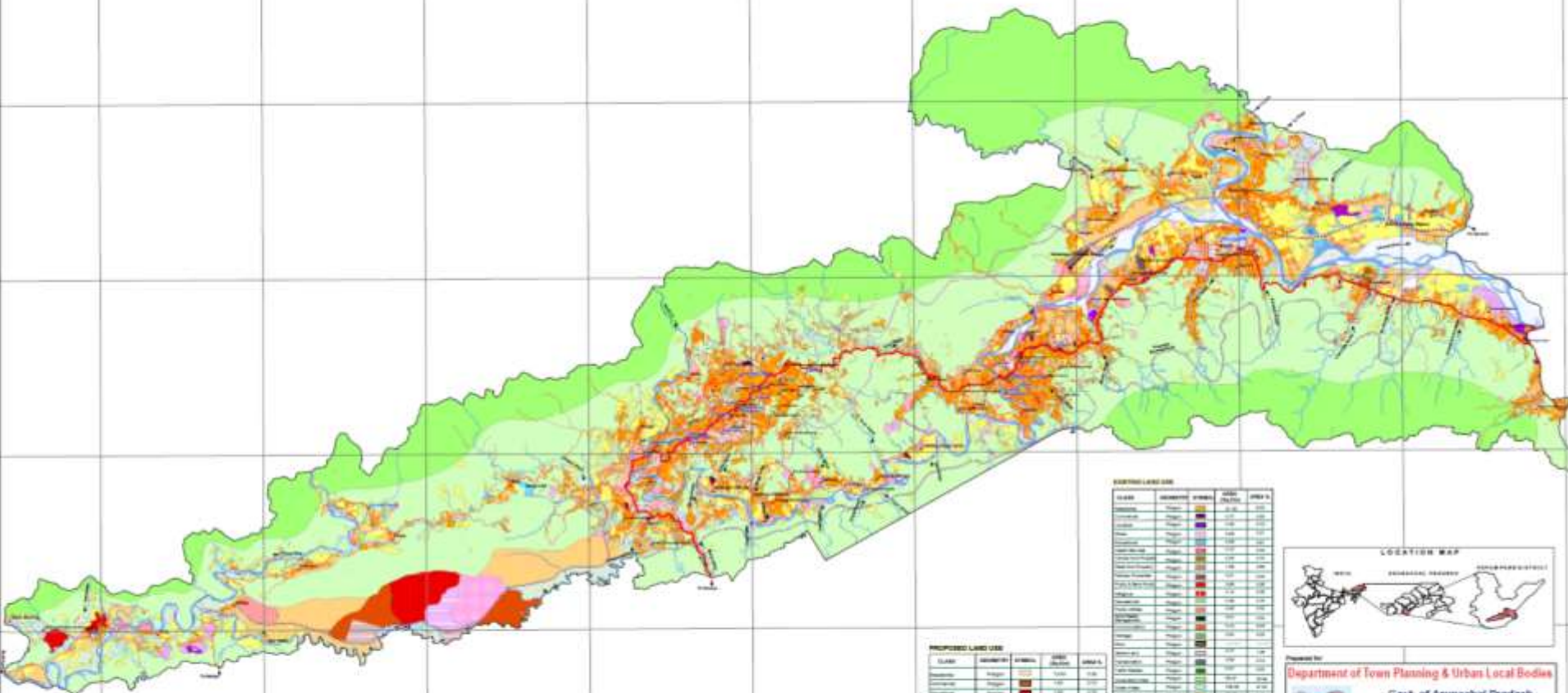
MASTER PLAN OF ITANAGAR CAPITAL REGION
FOR THE YEAR 2021-2031



PROPOSED LAND USE / LAND COVER MAP OF ITANAGAR CAPITAL REGION



Scale: 1:50,000

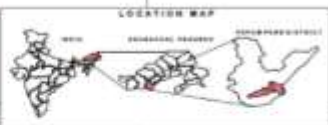


PROPOSED LAND USE

CLASS	SYMBOL	AREA (HA)	AREA (%)
Residential	[Symbol]	1000	1.0
Commercial	[Symbol]	500	0.5
Industrial	[Symbol]	200	0.2
Public Use	[Symbol]	100	0.1
Open Space	[Symbol]	100	0.1
Water	[Symbol]	100	0.1
Forest	[Symbol]	100	0.1
Agriculture	[Symbol]	100	0.1
Barren Land	[Symbol]	100	0.1
Waste Land	[Symbol]	100	0.1
Other	[Symbol]	100	0.1

EXISTING LAND USE

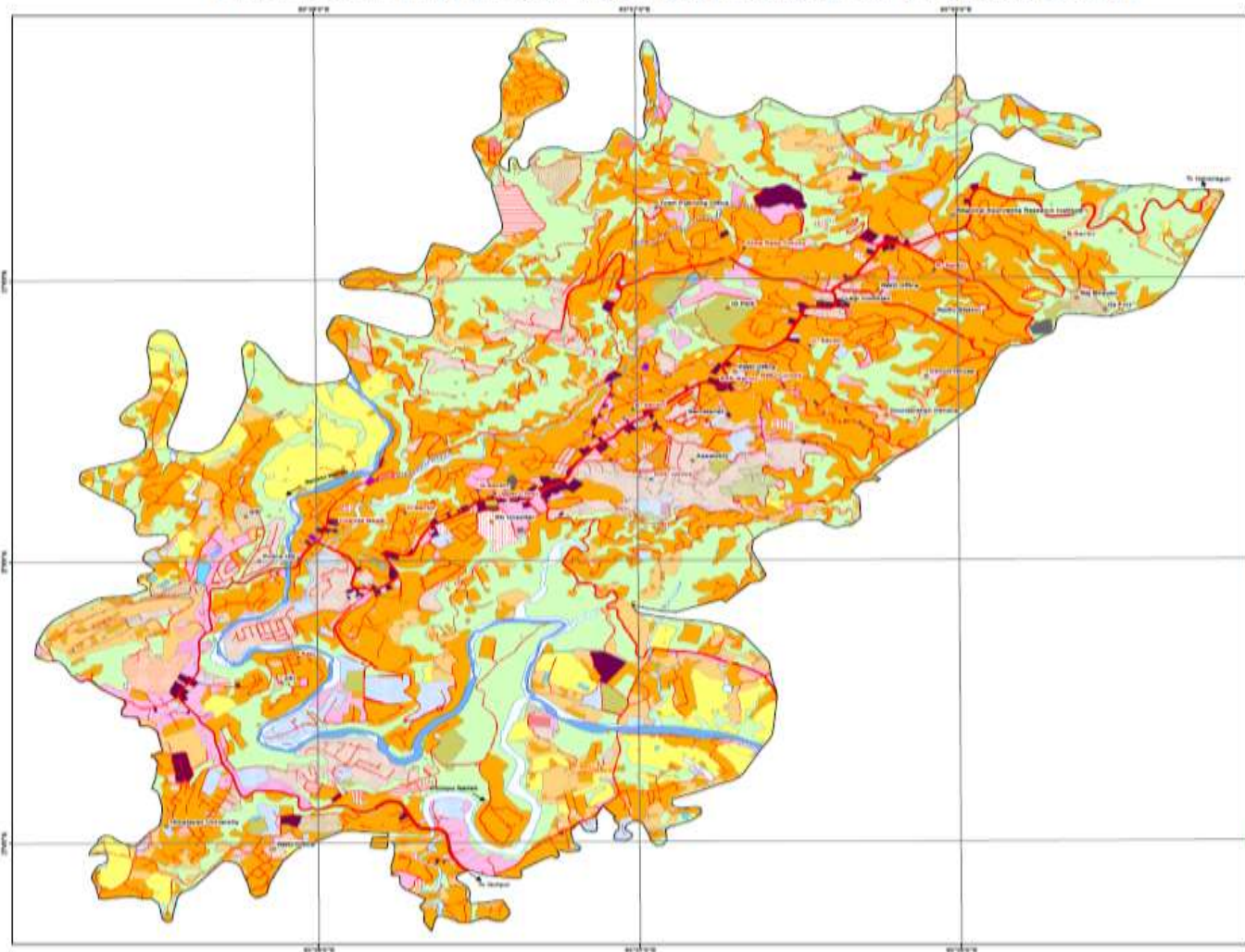
CLASS	SYMBOL	AREA (HA)	AREA (%)
Residential	[Symbol]	1000	1.0
Commercial	[Symbol]	500	0.5
Industrial	[Symbol]	200	0.2
Public Use	[Symbol]	100	0.1
Open Space	[Symbol]	100	0.1
Water	[Symbol]	100	0.1
Forest	[Symbol]	100	0.1
Agriculture	[Symbol]	100	0.1
Barren Land	[Symbol]	100	0.1
Waste Land	[Symbol]	100	0.1
Other	[Symbol]	100	0.1



Prepared by
Department of Town Planning & Urban Local Bodies
Govt. of Arunachal Pradesh
Itanagar, Arunachal Pradesh

Prepared by
RSI Remote Sensing Instruments
HYDERABAD, TELANGANA

PROPOSED LAND USE/LAND COVER MAP OF ITANAGAR CITY



MASTER PLAN OF ITANAGAR CAPITAL REGION PAPUM PARE DISTRICT, ARUNACHAL PRADESH

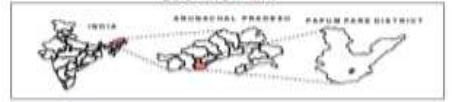


LEGEND

EXISTING LAND USE				
CLASS	SYMBOL	SYMBOL	AREA (SQ.KM)	AREA %
Residential	Poligon	[Yellow]	0.152	30.852
Commercial	Poligon	[Purple]	0.221	1.255
Industrial	Poligon	[Dark Purple]	0.008	0.021
Mixed	Poligon	[Pink]	0.080	0.041
Educational	Poligon	[Blue]	0.490	0.048
Health Services	Poligon	[Red/White Stripes]	0.081	0.047
Health Care Property	Poligon	[Green/White Stripes]	0.127	0.050
State Govt Property	Poligon	[Brown]	1.245	0.108
Public & Semi Public	Poligon	[Red]	1.151	0.036
Religious	Poligon	[Red/White Stripes]	0.246	0.263
Recreational	Poligon	[Green]	0.210	1.109
Public Utilities	Poligon	[Red]	0.041	0.124
Administrative	Poligon	[Orange]	0.046	0.019
Heritage	Poligon	[Green]	0.003	0.019
Water Land	Poligon	[Pink]	0.242	1.413
Transportation	Poligon	[Grey]	0.014	0.019
Traffic Related	Poligon	[Green]	0.003	0.009
Urban Area	Poligon	[Yellow]	4.951	27.475
Agricultural Land	Poligon	[Yellow]	0.049	0.003
Water Land	Poligon	[Pink]	0.064	0.074
Special Land Use	Poligon	[Green]	-----	-----
Environmental Area	Poligon	[Green]	-----	-----
Culture	Poligon	[Green]	-----	-----
Water Bodies	Poligon	[Blue]	0.003	0.010
Soil	Poligon	[Red]	0.000	0.000
National Highway	Line	[Red/White Stripes]	-----	-----
Planning Boundary	Poligon	[Black]	17.100	100

PROPOSED LAND USE				
CLASS	SYMBOL	SYMBOL	AREA (SQ.KM)	AREA %
Residential	Poligon	[Yellow]	1.001	0.007
Water Body Buffer Area	Poligon	[Blue]	0.004	0.001
Road	Poligon	[Purple]	0.003	0.006
Drainage Channels	Line	[Blue]	-----	-----

LOCATION MAP



Prepared for
Department of Town Planning & Urban Local Bodies
 Govt. of Arunachal Pradesh
 Itanagar, Arunachal Pradesh

Prepared by
RSI Remote Sensing Instruments
 HYDERABAD, TELANGANA

PROPOSED LAND USE/LAND COVER MAP OF ITANAGAR CITY

MASTER PLAN OF ITANAGAR CAPITAL REGION
PAPUM PARE DISTRICT, ARUNACHAL PRADESH

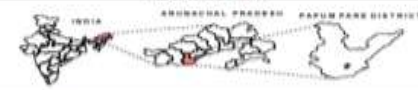


LEGEND

EXISTING LAND USE				
CLASS	GEOMETRY	SYMBOL	AREA (Sq. Km)	AREA %
Residential	Polygon	[Yellow]	0.152	0.262
Commercial	Polygon	[Orange]	0.221	1.293
Industrial	Polygon	[Purple]	0.008	0.021
Mixed	Polygon	[Light Green]	0.486	2.941
Educational	Polygon	[Light Blue]	0.440	2.599
Health Services	Polygon	[Light Purple]	0.081	0.507
Industrial Area	Polygon	[Light Green]	0.127	0.803
State Bank Premises	Polygon	[Light Green]	1.242	8.109
Public & Semi Public	Polygon	[Light Green]	1.163	8.030
Religious	Polygon	[Light Green]	0.240	1.522
Recreational	Polygon	[Light Green]	0.110	1.109
Public Utilities	Polygon	[Light Green]	0.021	0.123
Government	Polygon	[Light Green]	0.004	0.019
Forests	Polygon	[Light Green]	0.020	0.019
Water Land	Polygon	[Light Green]	0.242	1.413
Transportation	Polygon	[Light Green]	0.014	0.029
Traffic Islands	Polygon	[Light Green]	0.028	0.049
Open Area	Polygon	[Light Green]	4.421	27.477
Agricultural Land	Polygon	[Light Green]	0.887	5.089
Waste Lands	Polygon	[Light Green]	0.004	0.024
Special Land Use	Polygon	[Light Green]	.....	.....
Environment Areas	Polygon	[Light Green]	.....	.....
Others	Polygon	[Light Green]	.....	.....
Water Bodies	Polygon	[Light Blue]	0.020	0.110
Road	Polygon	[Light Green]	0.000	0.000
National Highway	Line	[Red]	.....	.....
Planning Boundary	Polygon	[Light Green]	17.108	100

PROPOSED LAND USE				
CLASS	GEOMETRY	SYMBOL	AREA (Sq. Km)	AREA %
Residential	Polygon	[Yellow]	1.021	5.967
Water Body Buffer Area	Polygon	[Light Blue]	0.004	0.024
Road	Polygon	[Light Green]	0.000	0.000
Planning Boundary	Line	[Light Green]	.....	.....

LOCATION MAP



Prepared for

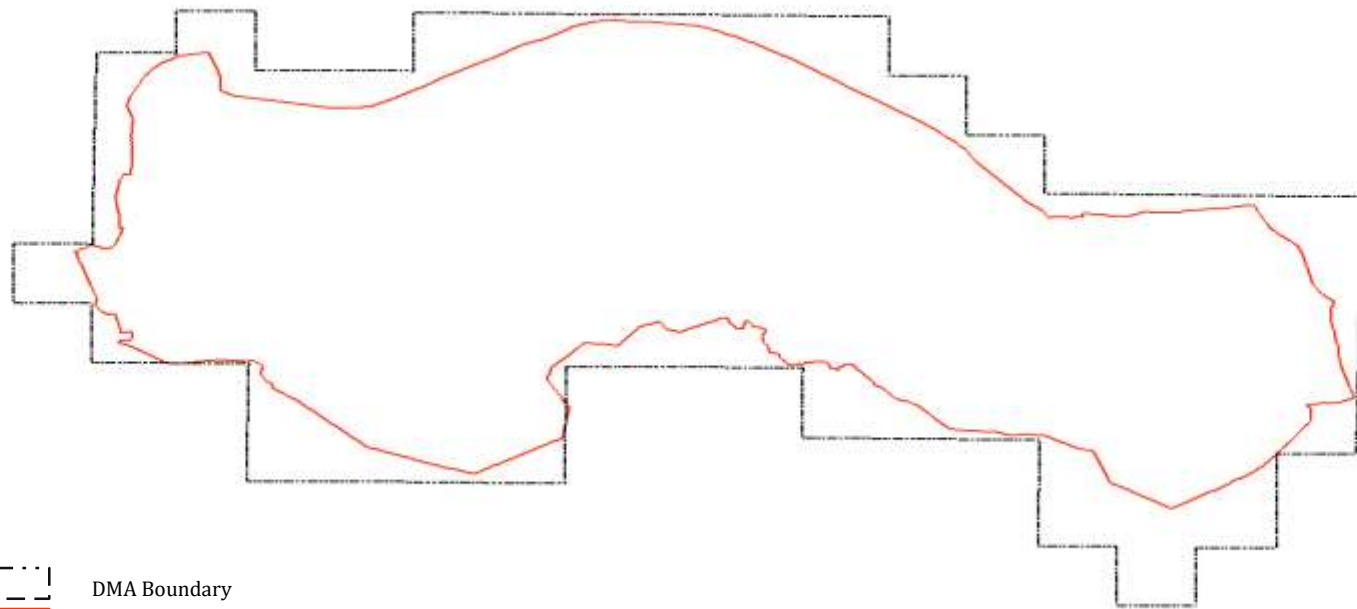
Department of Town Planning & Urban Local Bodies
Govt. of Arunachal Pradesh
Itanagar, Arunachal Pradesh



Prepared By

RSI Remote Sensing Instruments
HYDERABAD, TELANGANA



Demarcation of Mapping Area



 DMA Boundary
 AMRUT Boundary

**MIRA BHAYANDAR
MAHARASHTRA**

Satellite Image Acquisition



**MIRA BHAYANDAR
MAHARASHTRA**

GPS Survey



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Feature Extraction

AMRUT GIS SUB-SCHEME CENTRE , NRSC



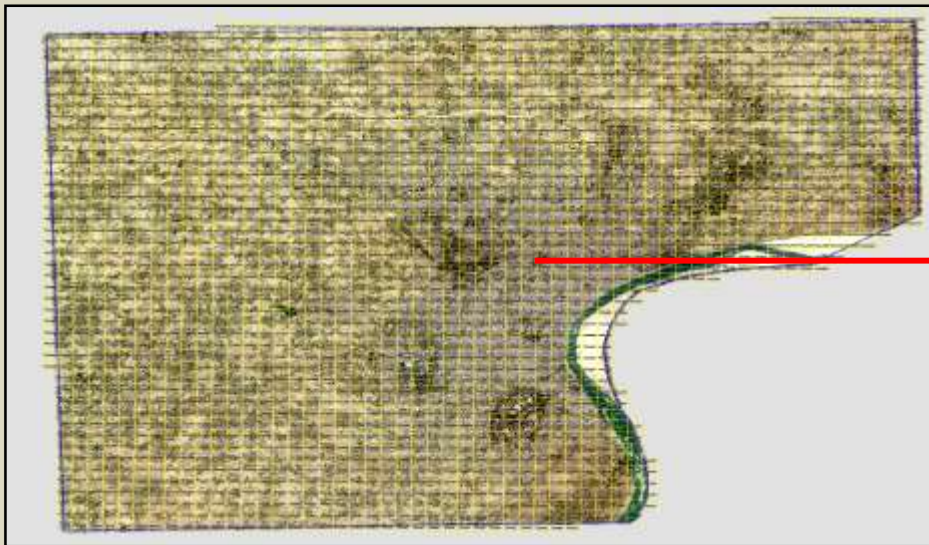
VISIT OF SECRETARY , MOHUA



VISIT OF JS (MD-AMRUT) , MOHUA

DRAFT BASE MAP

1. VARANASI CITY INDEX MAP



Area: 503 sq.km

No. of Grids: 2112

BUILDINGS GIS DATA STRUCTURE FIELDS IN EXCEL

2. FIELD MAP - VAR 957 (500m x 500m)



OBJECTID *	SHAPE *	Bldg_ID	Code	Class	Sub_Class	Ward_No	Rd_ID	Rd_Name	Locality	Colony	No_floors	Cons_type	Area	Descr
289698	Polygon	BL_289698	<Null>	<Null>	House	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>
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289718	Polygon	BL_289718	<Null>	<Null>	House	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>
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Trainings on Vetting & Attribute Data Collection



Madhya Pradesh



Chattisgarh



Uttar Pradesh



Mizoram



Puducherry



Kerala



Punjab



Telangana



Himachal Pradesh



Uttarakhand



West Bengal



Tamil Nadu



Assam



Kargil (Ladakh)

Value addition from line departments

WATER NETWORK LINE



**MIRA BHAYANDAR
MAHARASHTRA**

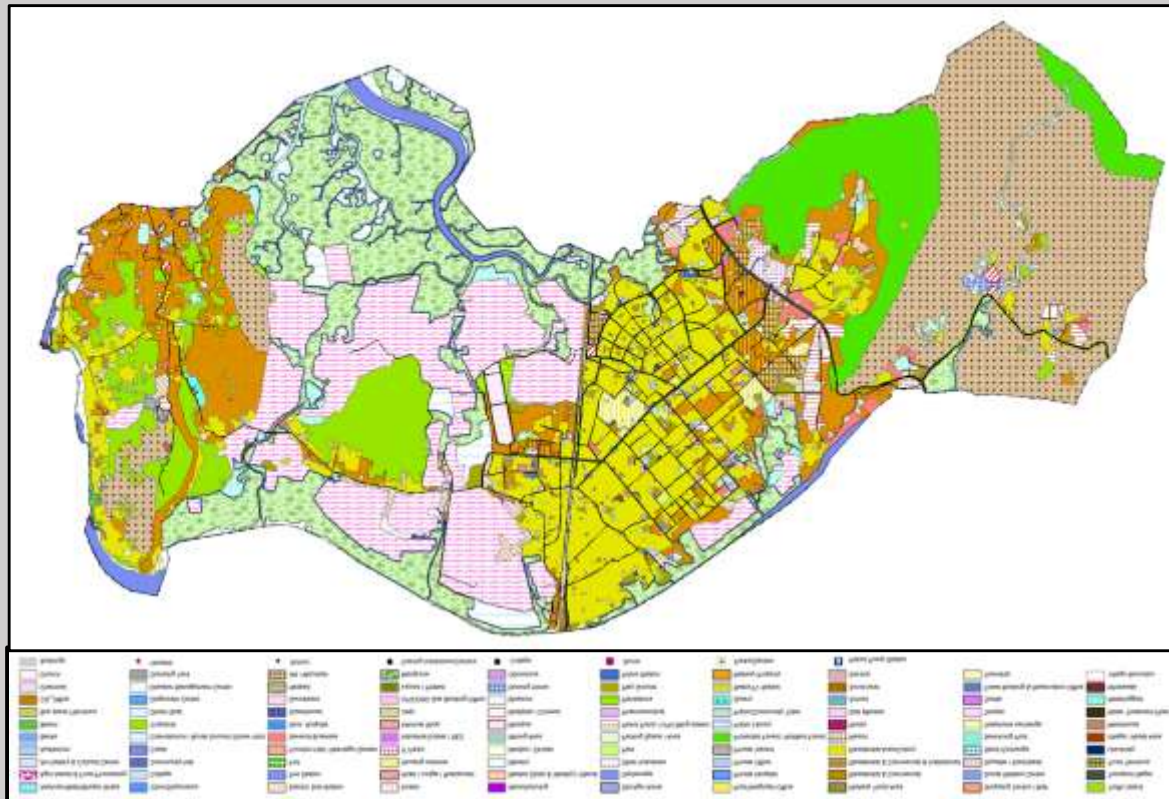
Value addition from line departments

SEWERAGE NETWORK LINE AND POINT



**ICHALKARANJI
MAHARASHTRA**

Final GIS Base Map



**MIRA BHAYANDAR
MAHARASHTRA**



Thematic map Generation Demographic

Puducherry Planning Authority

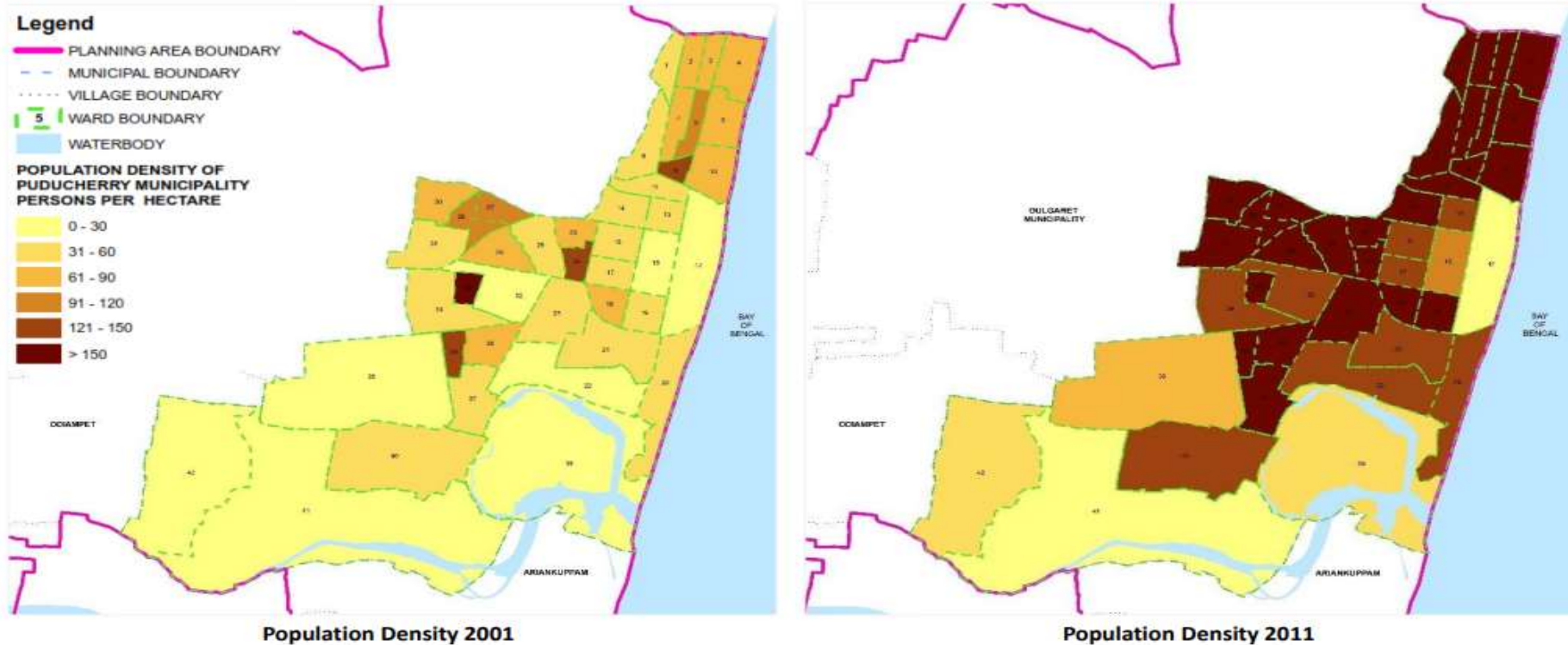
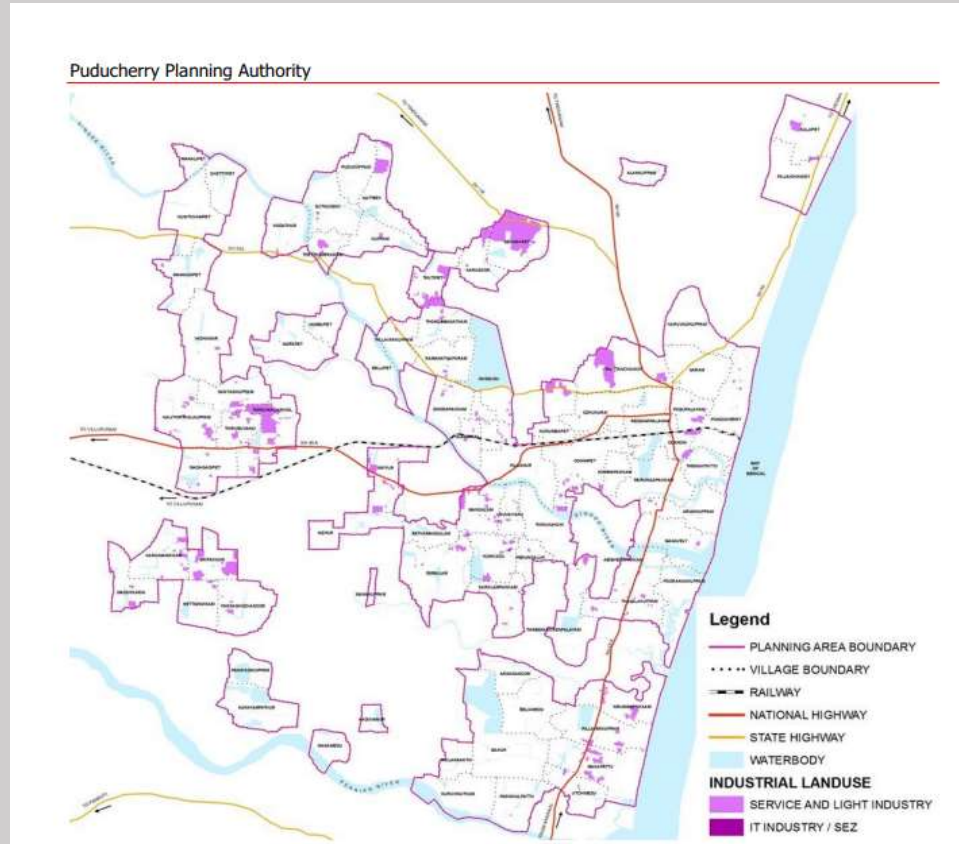


Figure 2.3 Population Density Map of Puducherry Municipality, 2001 & 2011

Thematic map Generation

Industries



Thematic map Generation

Transport

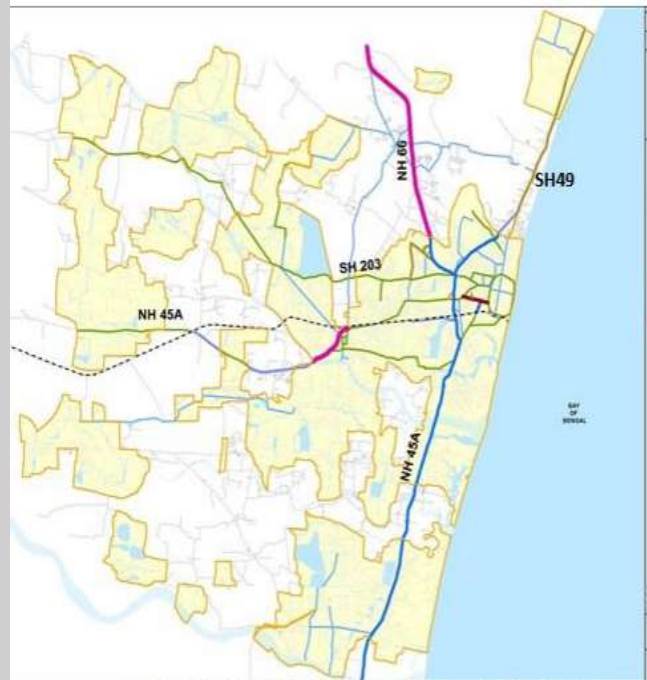


Figure 5.2 Major Road Network Map of Puducherry Planning Area.

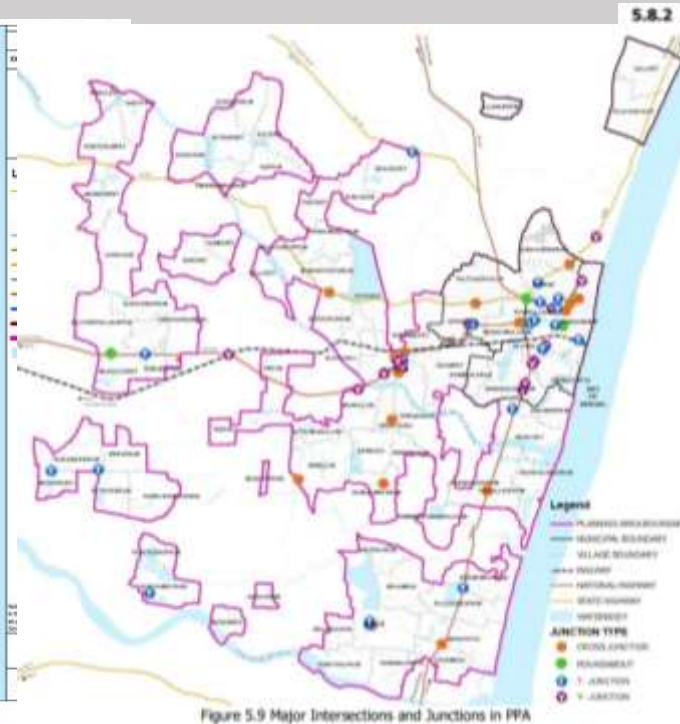


Figure 5.9 Major Intersections and Junctions in PPA

5.8.2 ROAD PROPOSALS FOR PPA

Proposals:



Thematic map Generation

Water & Sewerage

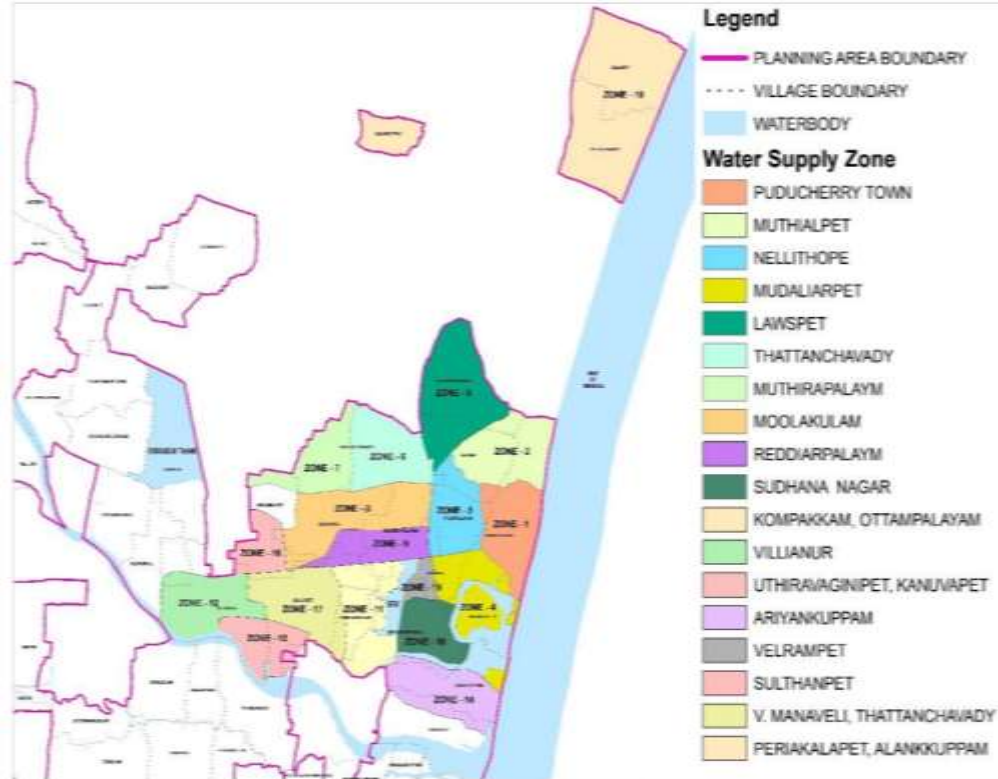


Figure 7.2 Water Supply Zones in Urban Areas of Puducherry Region

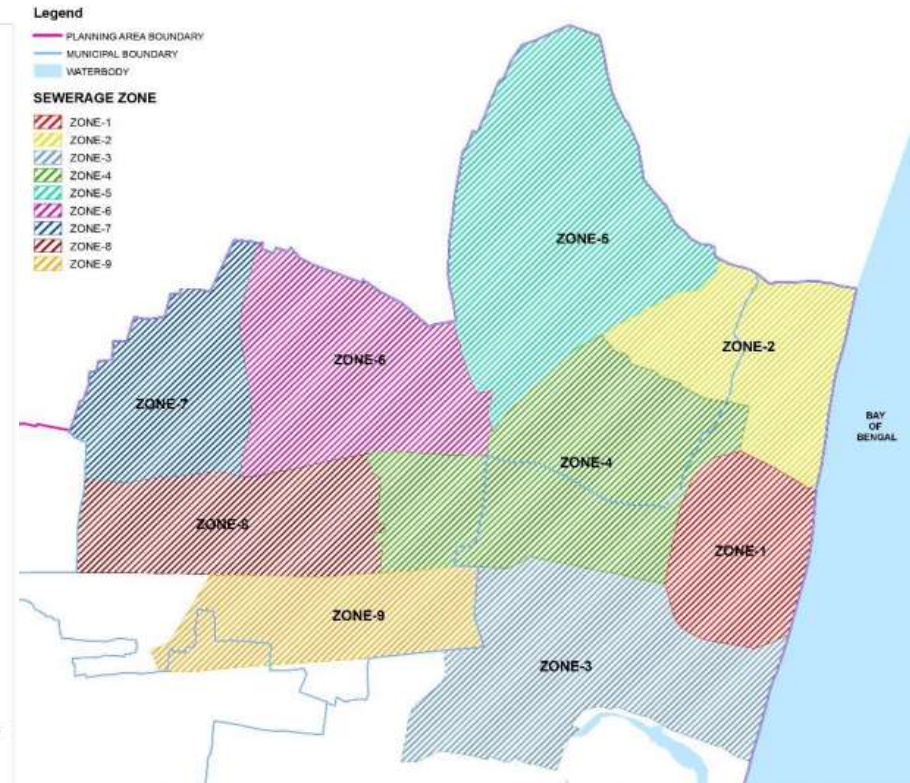


Figure 7.5 Map showing extent of 9 zones proposed by PWD for Sewerage System

Thematic map Generation

Education & Health

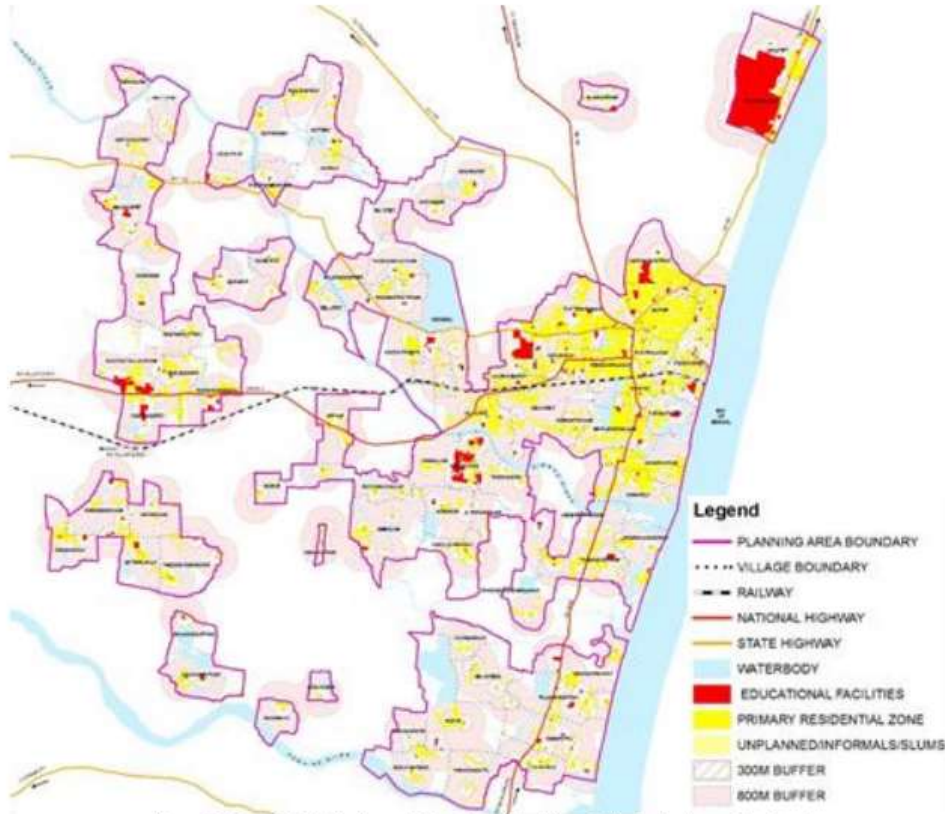


Figure 7.9 Spatial Distribution of Educational Facilities in the Puducherry Planning Area

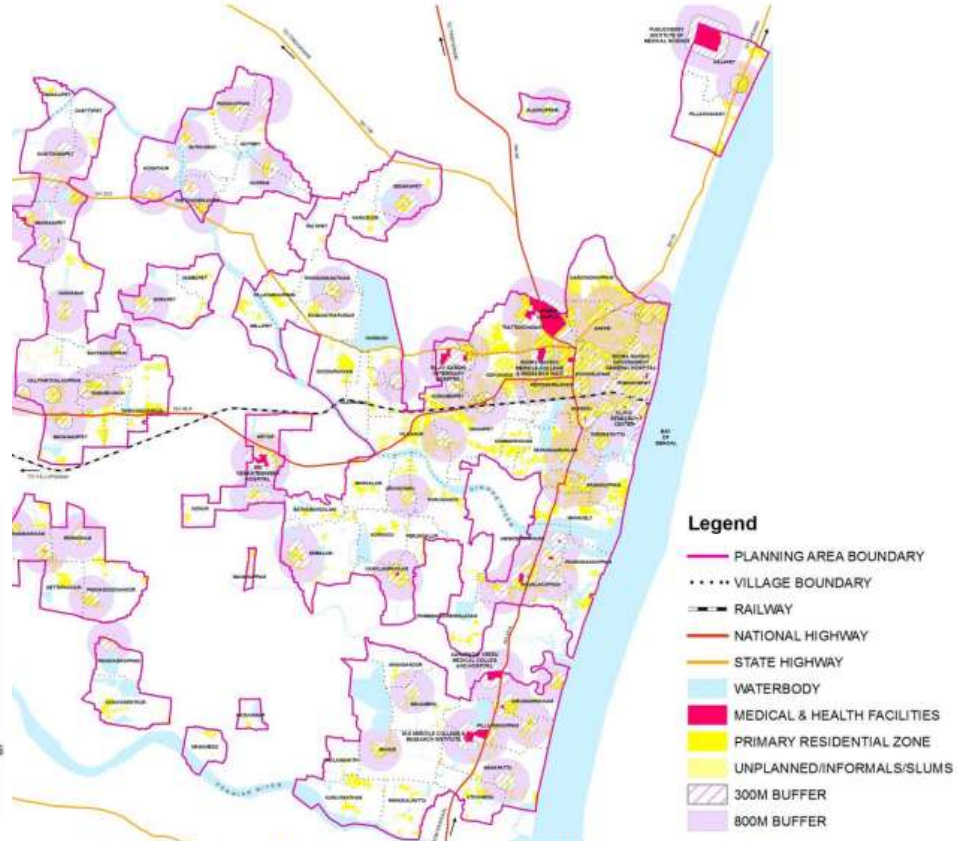
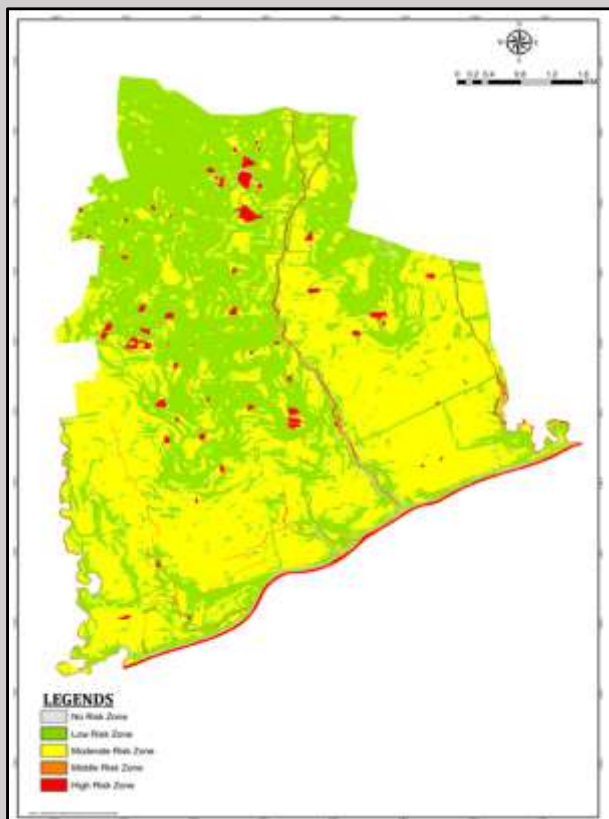


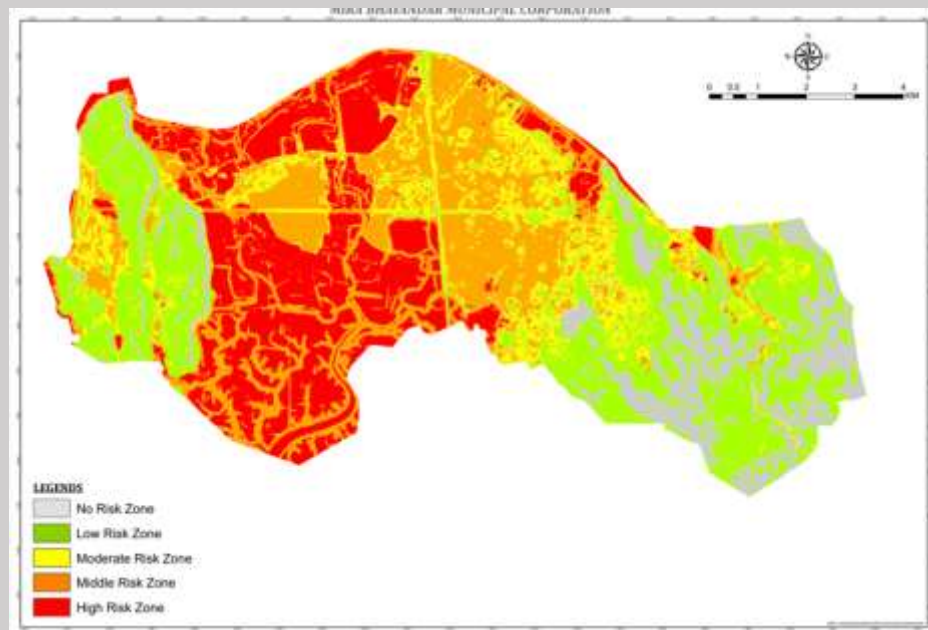
Figure 7.10 Spatial Distribution of Healthcare facilities in the Puducherry Planning Area

Thematic map Generation

Hazard Prone Map

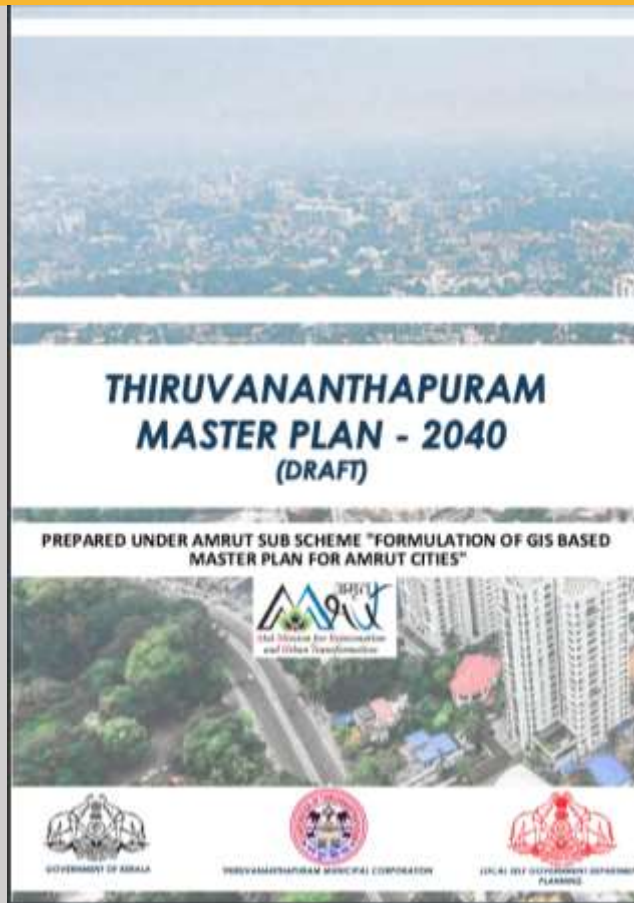


ICHALKARANJI, MAHARASHTRA



MIRA BHAYANDAR, MAHARASHTRA

Draft Master Plan



Final Master Plan

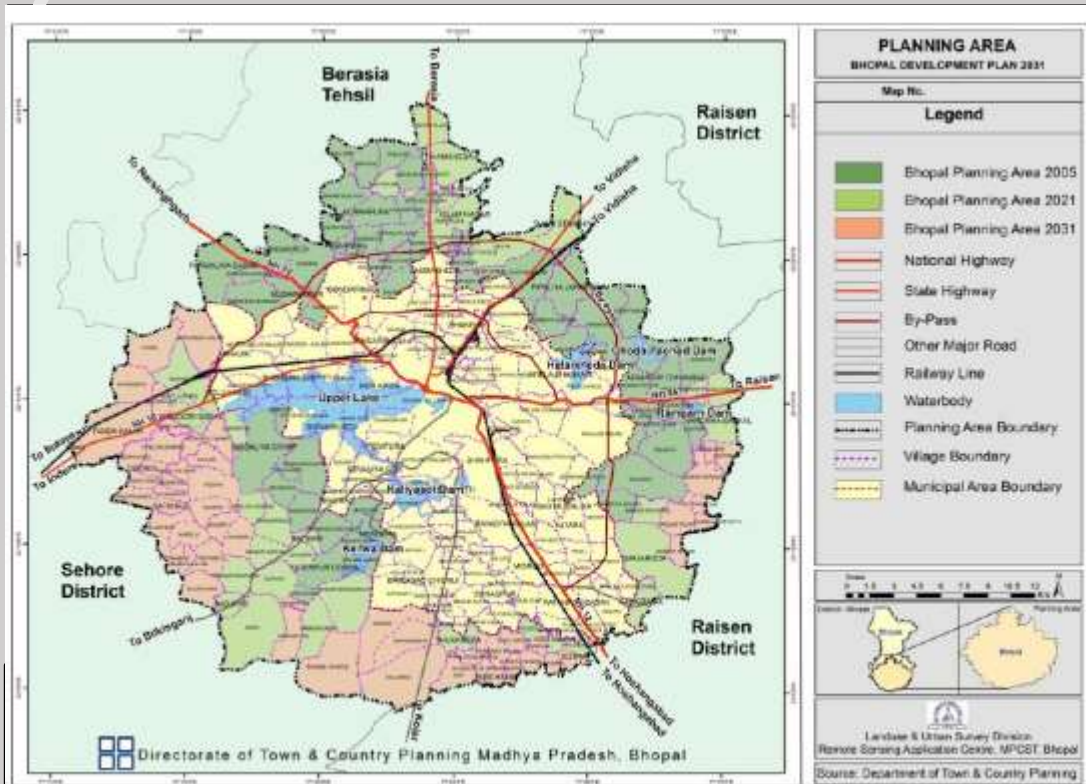


Figure 4-1: Planning Area of Bhopal



**BHOPAL
MADHYA PRADESH,**

GUJARAT:

- Master Plans are prepared by the Development Authority and sanctioned by the State Government under the Gujarat Town Planning and Urban Development Act – 1976 and implemented through Town Planning (TP) Scheme mechanism which provides for the well planned road network and physical & social infrastructure.
- The State Govt. has formulated Development Plans for all the 31 AMRUT towns which have been notified. The development permissions are granted strictly as per Development Control Regulations (DCRs).
- The State has mentioned that there is a **shortage of qualified manpower** which affect the implementation of Development Plan Proposals.
- There are 'No' major deviation reported in the final Master/ Development Plan. If required in public interest, the proposals of Development Plan is varied after undertaking procedure prescribed in the Statute.
- The Urban Development is guided through 'Comprehensive General Development Control Regulation (CGDCR-2017)'.



JHARKHAND:

There are **07** AMRUT towns covered from the State of Jharkhand in Sub-scheme.

- At present, out of 07 towns, final Master Plans have been formulated for 05 Towns.
- The State Govt. uses Zonal Development Plans, Local Area Plans (LAP) and Town Planning (TP) Schemes to implement Master Plan.
- The Zonal Development Plans for the 05 final Master Plans towns are under preparation.
- The State Govt. uses Online Building Approval System (OBPAS) where the concerned officers use/ refer Master Plans for providing necessary approvals/ permissions, Plot/ building use permission to its citizens according to the State Govt.'s Building Bye-laws.
- **The State Govt. has informed that they face a special challenge in preparation of base map with land title/ deed records due to the 'Land Tenancy Act, Jharkhand' whose resolution is very critical for implementation development schemes.**



MAHARASHTRA:

- There are **44** towns under the Sub-Scheme and final Master Plans for all the cities have been prepared very recently. Their implementation is still in process.
- As the accuracy level is very high, ULBs have started using GIS data created under Sub-Scheme for transport, Sewerage, Water Supply and other services related works. **Thus analyzing 'Gap Analysis' to provide infrastructure has become more convenient.**
- The State recognizes that asset mapping, identifying locations of industrial areas and encroachments from heritage sites etc. have become very handy and thus help in planned distribution of economic sectors across the city.



IMPACT ANALYSIS OF SUB-SCHEME – CHANGING PLANNING SCENARIO IN INDIA:

MADHYA PRADESH:

- The State has 34 towns under the Sub-Scheme; out of which Master Plan for 29 cities has been completed. Out of 29 towns, 09 have been approved by the State Government.
- The development in Madhya Pradesh is primarily guided by Master Plans, Zoning Regulations, Development Control Regulations (DCRs), Madhya Pradesh Bhumi Vikas Niyam 2012 and Municipal Building Bye-laws.
- The Development Authorities are responsible for formulation and implementation of Master Plans as per Madhya Pradesh Town and Country Planning Act – 1973 and in all conditions where Development Authorities are not in place; the responsibility is vested on Municipalities under 73rd & 74th CAA.
- Detailed Zonal Development Plans/ Local Area Plans are prepared by Municipalities, Town Development Schemes (TDS), Land banking through Transferrable Development Rights (TDR) etc. The State Housing Board, Public Works Department and Public Health Engineering Department are important nodal agencies which are responsible to cater Housing, Public infrastructure and Services requirements of the City.
- Urban development is according to the Master Plan and Madhya Pradesh Bhumi Vikas Niyam -2012.
- The State supports 'Mixed Use' to promote trade and commerce. There are separate/ special DCR available for environmentally sensitive areas.
- **'No specific budget for implementation of Master Plan', lack of technical expertise, deficiency of staff for supervision, limited coordination within parastatal/ line departments, Municipalities devoid of staff & technical expertise, lack of public awareness etc. are prime issues at grass root level which effect Planning.**



IMPACT ANALYSIS OF SUB-SCHEME – CHANGING PLANNING SCENARIO IN INDIA:

TELANGANA:

- There are **12** AMRUT towns in Telangana State under the AMRUT GIS Sub-Scheme, and the State Govt. is revising their existing Master Plans for 10 towns.
- The Master Plans for GHMC and GWMC are recently approved and are being implemented by issuing land/ building development approvals as per conformity of Master Plan and as per requirements on case to case basis e.g. improvement of the lakes, road junctions and other Infrastructure works.
- The State Govt. implements Master Plans through zoning regulations and by issuing Building/ land use permissions which are in compliance to Master Plans.
- The State Govt. also uses Transferrable Development Rights (TDR) mechanism for infrastructure development e.g. road widening projects.
- The housing, trade and commerce and heritage sites/projects are being developed as per Master Plan and in accordance to Environmental laws.
- **The State Govt. has informed that deviations from original Master Plans are common.**
- **Conformity to Master Plan in residential zones is very high. however it's very compromised in commercial and industrial zones due to lack of awareness of Master Plan in public, limited capacity, resources and lack of coordination for enforcement.**



PUDUCHERRY:

- The UT Govt. of Puducherry has **03** towns under the Sub-Scheme; out of which final Master Plan for 02 cities has been prepared.
- Due to un-availability of any Development Authority, the Puducherry Planning Authority has forwarded the 'Comprehensive Development Plan for Puducherry Planning Area-2036' to all the Stake Holder Departments for implementation and execution of identified projects as per the phasing schedule.
- The Puducherry Planning Authority issues building permission as per Building Bye-laws, Zoning Regulations, 2012 and as per the recommendations of the CDP-2036.
- The Planning Authority issues building permission after obtaining NOC from the concerned local bodies.

