

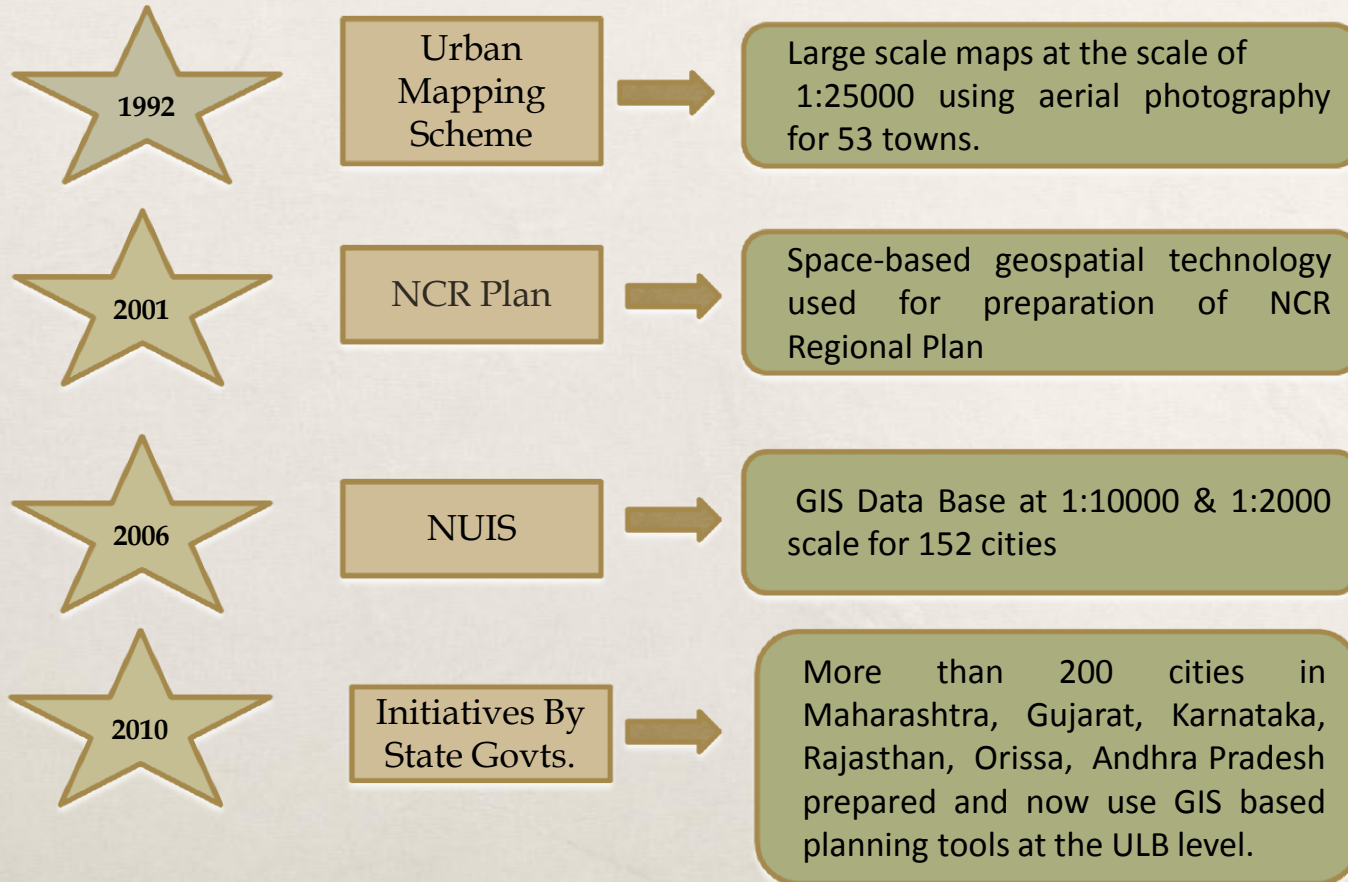


Sub-Scheme on  
**Formulation of GIS based  
Master Plans**  
for 500 AMRUT cities

Town & Country Planning Organisation  
Ministry of Housing and Urban Affairs  
Govt. of India

# LEVERAGING OF SPACE TECHNOLOGY

(Space Applications & Accrued benefits)



# Introduction

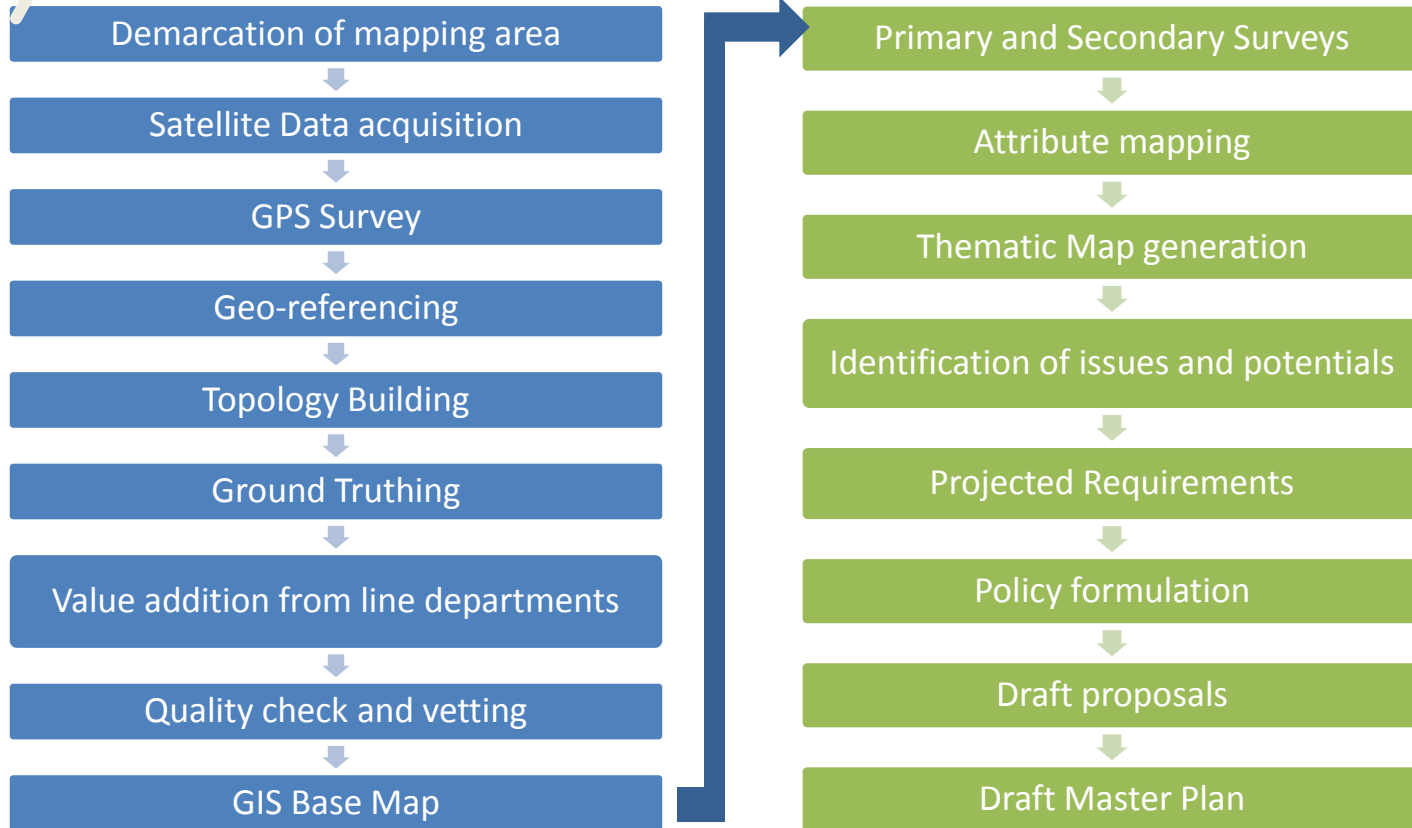
As a follow up of the National Meet on promoting use of Space Technology in Governance & Development under the Chairmanship of Hon'ble Prime Minister, the Ministry of Housing and Urban Affairs (MoHUA) has launched a Sub-scheme on formulation of GIS based Master Plans under AMRUT Mission for 500 towns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

# Components

The objective is to **develop common digital geo-referenced base maps and land use maps using Geographical Information System (GIS)** in each AMRUT city to formulate Master Plans. The major components are:

- **Generation of Base Map & Thematic Maps and Urban 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 and sector-wise data analysis. The implementing agency is State Mission Director/ULBs.
- **Capacity Building:** The training is at 3 levels, Implementing agency State Mission Directors
  - **Administrators level** –three days duration.
  - **Planning level** –two weeks duration.
  - **Operators and Technicians level** –four weeks duration

# Methodology






































# AMRUT Geo spatial Layers

SI No.	Spatial Layers	Source for Spatial data generation	Classification based on Use & Attributes	
			Classes (69)	Sub Classes (475)
<b>I</b>	<b>Base layers</b>	Very High Resolution satellite data	5	46
	1. Road			
	2. Rail			
	3. Bridges			
	4. Flyovers			
	5. Water bodies			
<b>II</b>	<b>Urban Land Use/Land cover</b>	Very High Resolution satellite data	28	220
<b>III</b>	<b>Building Footprints</b>	Very High Resolution satellite data	22	144
<b>IV</b>	<b>Utilities</b>	Urban Local Bodies		
	1. Water Supply Network			
	2. Storm Water Drainage Network			
	3. Sewerage Network			
	4. Power Supply Network			
	5. Gas Distribution Network			
<b>V</b>	<b>Hypsography</b>	Topographic Survey; existing DEMs or contour maps.		
	1. Digital Elevation Model (DEM) Type : Digital Terrain Model (DTM)			
	2. Contour			
	3. Ground Control Points			

## AMRUT Geo spatial Layers

SI No.	Spatial Layers	Source for Spatial data generation	Classification based on Use & Attributes	
			Classes	Sub Classes
VI	<b>Cadastral Layer</b>	Urban Local Bodies /State Revenue Department	1	-
VII	<b>Boundaries</b>			
	1. Administrative boundaries	State Revenue Department	1	7
	2. Planning boundaries	Urban Local Bodies	1	8
	3. Municipal boundaries	Urban Local Bodies	1	4
	4. Other Boundaries: Enumeration Block (EB), Urban Framework Survey (UFS) & Mining Area	EB from Registrar General of India (RGI), UFS from National Sample Survey Organisation (NSSO) & Mining area boundary from concerned State Departments.	1	3
VIII	<b>Hazard Prone Areas</b>	Information from NRSC, ISRO, GSI, NDMA, Other State & Central Government Depts.	1	3

## Example: Road Geospatial Data Content

S.No	CODE	CLASS	SUB-CLASS	GEOMETRY	SYMBOL
<b>1</b>	<b>01-01</b>	<b>Road</b>	<i>National Highway</i>	Polygon / Line	 
	<b>01-02</b>		<i>State Highway</i>	Polygon / Line	 
	<b>01-03</b>		<i>Major District Road</i>	Polygon / Line	 
	<b>01-04</b>		<i>Other District Road</i>	Polygon / Line	 
	<b>01-05</b>		<i>Expressway</i>	Polygon / Line	 
	<b>01-06</b>		<i>Bypass</i>	Polygon / Line	 
	<b>01-07</b>		<i>Ring Road</i>	Polygon / Line	 
	<b>01-08</b>		<i>Service Road</i>	Polygon / Line	 
	<b>01-09</b>		<i>Major City Road<sup>#</sup></i>	Polygon / Line	 
	<b>01-10</b>		<i>Minor City Road<sup>#</sup></i>	Polygon / Line	 
	<b>01-11</b>		<i>Other Public Road</i>	Polygon / Line	 
	<b>01-12</b>		<i>Other Private Road</i>	Polygon / Line	 
	<b>01-13</b>		<i>BRTS</i>	Polygon / Line	 
	<b>01-14</b>		<i>Cycle Track</i>	Polygon / Line	 
	<b>01-15</b>		<i>Village road</i>	Polygon / Line	 
	<b>01-16</b>		<i>Foot path</i>	Line	
	<b>01-17</b>		<i>Cart track</i>	Line	
	<b>01-18</b>		<i>Ropeway</i>	Line	
	<b>01-19</b>		<i>Carriageway*</i>	Line	
	<b>01-20</b>		<i>Right of way*</i>	Line	

<sup>#</sup>Roads having width of 10.5m/11m and more will be called Major City Road and less than 10.5m/11m as Minor City Road (for information, the road widths mentioned are as per IRC standards)

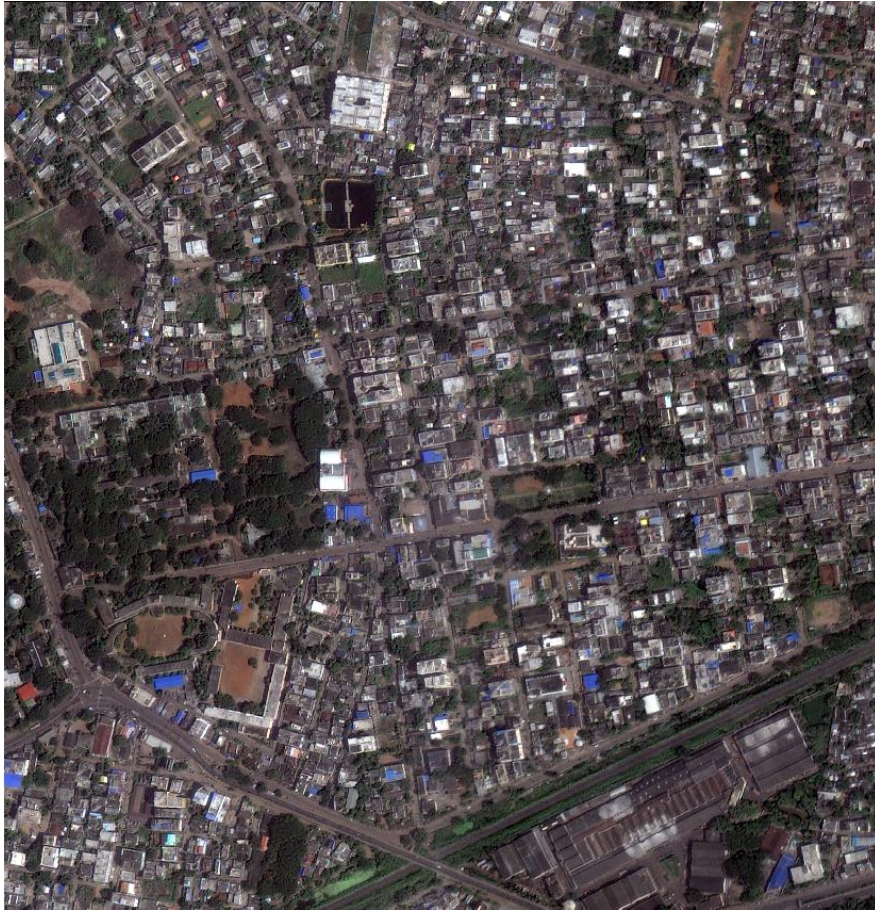
\*Source for Carriageway and Right of way: Revenue records.



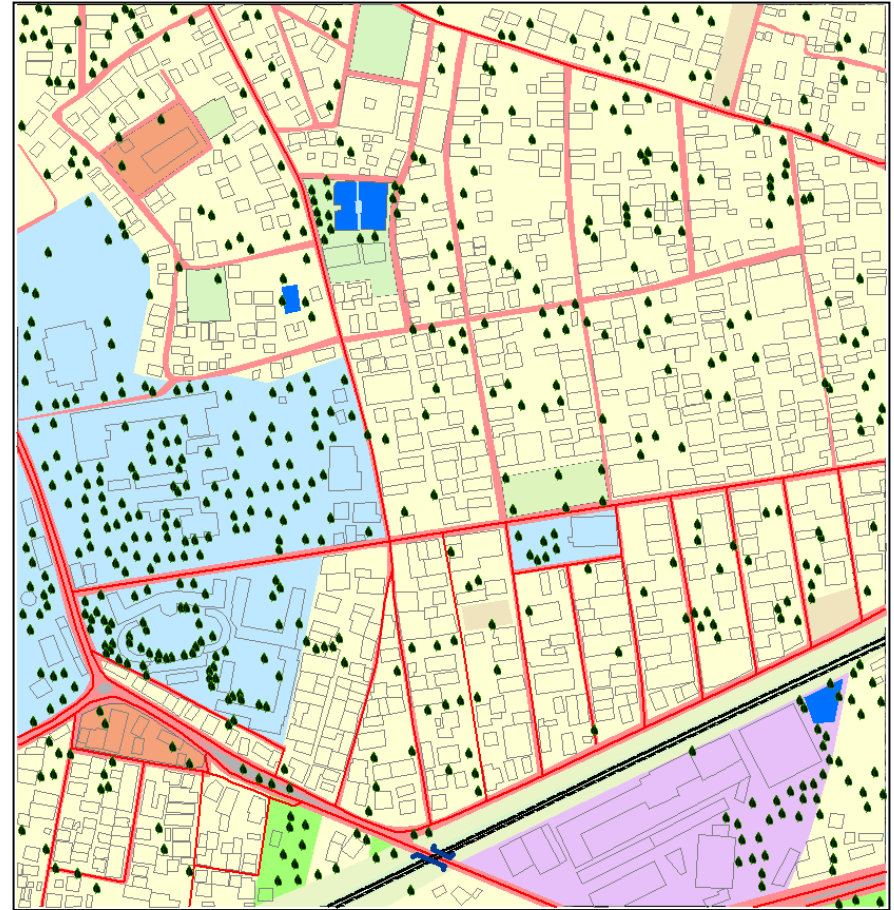
## Example: Road GIS Structure

Attribute Name	Attribute Field Name	Attribute Field Type	Attribute Field Width	Description/Value
Road Id	Rd_ID	Alphanumeric	15	Unique Id
Code	Code	Alphanumeric	10	Code as given in Table 6
Sub-Class	Sub_Class	Text	20	Sub Class as given in Table 6
Length in km.	Length_km.	Double	10 Up to 4 decimals	Length (in km.)
Ward Number	Ward_No	Alphanumeric	10	Ward Number
Road Name	Rd_Name	Text	30	Specific Name of the feature, if any
Road Construction Material	Cons_Mat	Text	10	Concrete/Asphalt/WBM/Any Other
Carriage Width (in mt.)	CW_Width	Double	10 Up to 4 decimals	Carriage Width in metres
Right of Way Width (in mt.)	ROW_Width	Double	10 Up to 4 decimals	Right of Way Width in metres
Maintained By	Maintain	Text	15	Municipal body/NHAI/R & B Dept./Other
Foot Path	FP	Text	3	Yes/No
Foot path width (in mt. in case Yes)	FP_Width	Double	10 Up to 2 decimals	Footpath Width in metres
Foot Path Construction material	FP_Cons_Ma	Text	15	Shabad/Tiles/Concrete/Other Stone

# Eluru Town (A.P) (1kmx 1km grid) overview along with the extracted layers.

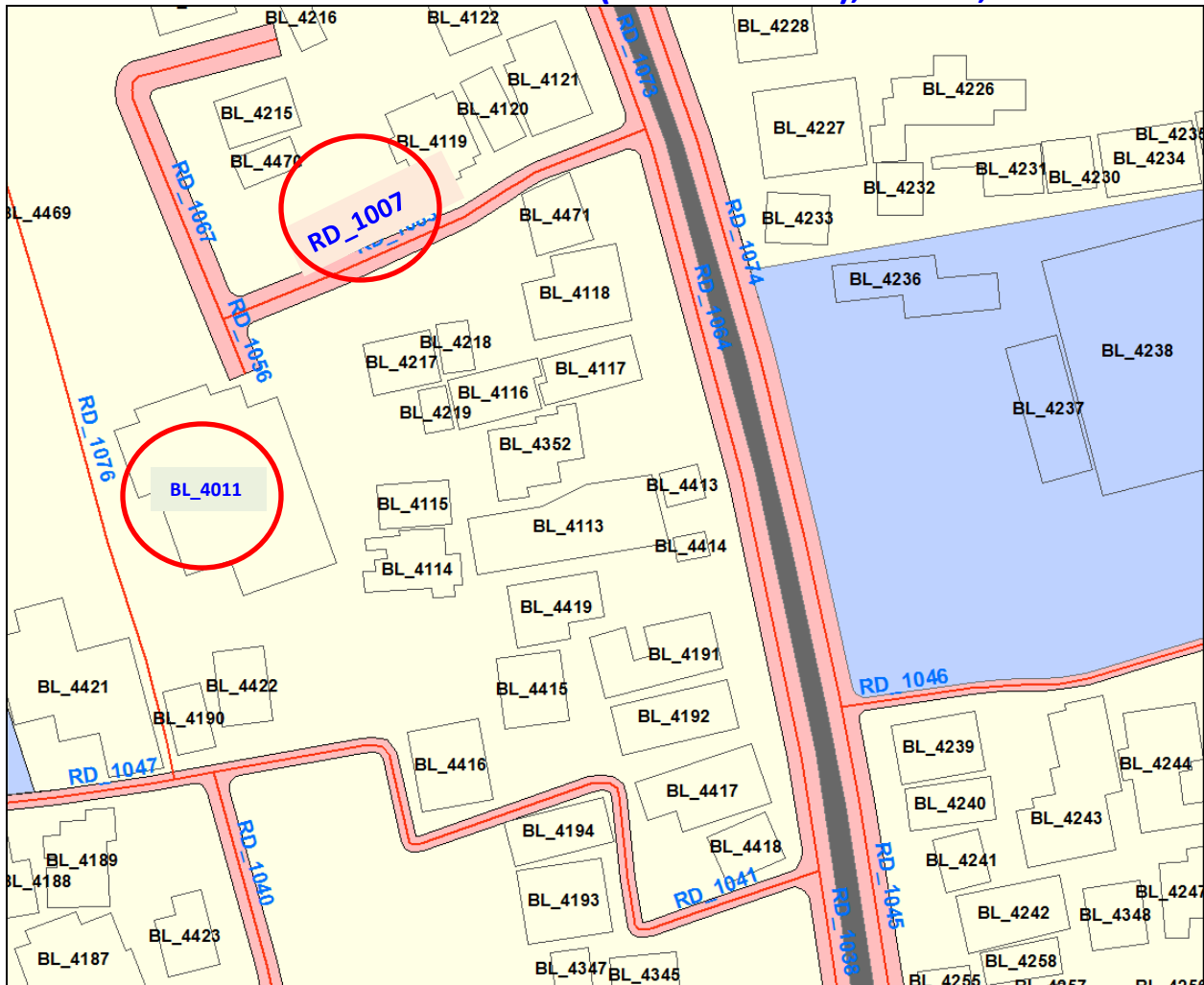


Eluru (C2C) satellite Imagery



Eluru Database(As per AMRUT standards)

# SAMPLE FIELD MAP (500m x 500m), KOCHI, KERALA



# EXCEL SHEET FOR FIELD DATA COLLECTION

## Road layer

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OBJECTID	Rd_ID	Code	Sub_Class	Length_km	Ward_No	Rd_Name	Cons_Mat	CW_Width	ROW_Width	Maintain	FP	FP_Width	FP_Cons_Ma
2	1	RD_1000	01-09	Major Road	0.00				0.000	0.000			0.00	
3	2	RD_1001	01-09	Major Road	0.00				0.000	0.000			0.00	
4	3	RD_1002	01-10	Minor Road	0.00				0.000	0.000			0.00	
5	4	RD_1003	01-10	Minor Road	0.00				0.000	0.000			0.00	
6	5	RD_1004	01-10	Minor Road	0.00				0.000	0.000			0.00	
7	6	RD_1005	01-10	Minor Road	0.00				0.000	0.000			0.00	
8	7	RD_1006	01-10	Minor Road	0.00				0.000	0.000			0.00	
9	8	RD_1007	01-10	Minor Road	0.00				0.000	0.000			0.00	
10	9	RD_1008	01-09	Major Road	0.00				0.000	0.000			0.00	
11	10	RD_1009	01-10	Minor Road	0.00				0.000	0.000			0.00	
12	11	RD_1010	01-10	Minor Road	0.00				0.000	0.000			0.00	
13	12	RD_1011	01-10	Minor Road	0.00				0.000	0.000			0.00	
14	13	RD_1012	01-10	Minor Road	0.00				0.000	0.000			0.00	
15	14	RD_1013	01-10	Minor Road	0.00				0.000	0.000			0.00	
16	15	RD_1014	01-09	Major Road	0.00				0.000	0.000			0.00	
17	16	RD_1015	01-10	Minor Road	0.00				0.000	0.000			0.00	
18	17	RD_1016	01-09	Major Road	0.00				0.000	0.000			0.00	
19	18	RD_1017	01-10	Minor Road	0.00				0.000	0.000			0.00	
20	19	RD_1018	01-10	Minor Road	0.00				0.000	0.000			0.00	
21	20	RD_1019	01-10	Minor Road	0.00				0.000	0.000			0.00	
22	21	RD_1020	01-09	Major Road	0.00				0.000	0.000			0.00	
23	22	RD_1021	01-10	Minor Road	0.00				0.000	0.000			0.00	
24	23	RD_1022	01-10	Minor Road	0.00				0.000	0.000			0.00	
25	24	RD_1023	01-10	Minor Road	0.00				0.000	0.000			0.00	
26	25	RD_1024	01-10	Minor Road	0.00				0.000	0.000			0.00	
27	26	RD_1025	01-10	Minor Road	0.00				0.000	0.000			0.00	
28	27	RD_1026	01-09	Major Road	0.00				0.000	0.000			0.00	
29	28	RD_1027	01-10	Minor Road	0.00				0.000	0.000			0.00	
30	29	RD_1028	01-10	Minor Road	0.00				0.000	0.000			0.00	
31	30	RD_1029	01-10	Minor Road	0.00				0.000	0.000			0.00	
32	31	RD_1030	01-10	Minor Road	0.00				0.000	0.000			0.00	
33	32	RD_1031	01-09	Major Road	0.00				0.000	0.000			0.00	

# EXCEL SHEET FOR FIELD DATA COLLECTION

## Building layer

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	OBJECTID	Unique_Id	Code	Class	Sub_Class	Ward_No	Rd_ID	Rd_Name	Locality	Colony	No_floors	Cons_type	Area	Descr
2	1	BL_4001									0		0.00	
3	2	BL_4002									0		0.00	
4	3	BL_4003									0		0.00	
5	4	BL_4004									0		0.00	
6	5	BL_4005									0		0.00	
7	6	BL_4006									0		0.00	
8	7	BL_4007									0		0.00	
9	8	BL_4008									0		0.00	
10	9	BL_4009									0		0.00	
11	10	BL_4010									0		0.00	
12	11	BL_4011									0		0.00	
13	12	BL_4012									0		0.00	
14	13	BL_4013									0		0.00	
15	14	BL_4014									0		0.00	
16	15	BL_4015									0		0.00	
17	16	BL_4016									0		0.00	
18	17	BL_4017									0		0.00	
19	18	BL_4018									0		0.00	
20	19	BL_4019									0		0.00	
21	20	BL_4020									0		0.00	
22	21	BL_4021									0		0.00	
23	22	BL_4022									0		0.00	
24	23	BL_4023									0		0.00	
25	24	BL_4024									0		0.00	
26	25	BL_4025									0		0.00	
27	26	BL_4026									0		0.00	
28	27	BL_4027									0		0.00	
29	28	BL_4028									0		0.00	
30	29	BL_4029									0		0.00	
31	30	BL_4030									0		0.00	
32	31	BL_4031									0		0.00	
33	32	BL_4032									0		0.00	
34	33	BL_4033									0		0.00	
35	34	BL_4034									0		0.00	

No.	Component	Cost (₹Crores)
1.	Geospatial data creation at 1:4000 scale for 500 AMRUT towns	115.90
2.	Plan Formulation using Geospatial database	388.25
3.	Capacity Building	10.85
<b>Grand Total</b>		<b>515.00</b>

## 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

Approved State Action Plans (SAP) received: **34 States/UTs(458 towns)**, out of that funds have been released to **34 States/UTs (458 towns)**.

**1. Funds approved: Rs.390.97 cr.**

**2. Total Funds released : Rs.87.73 cr.**

**A. Funds released: Rs. 78.33 cr.**  
(1<sup>ST</sup> installment 20%)

**B. Funds released: Rs. 9.40 cr.**  
(2<sup>nd</sup> installment 40% )

**C. Funds released to NRSC: Rs. 7.36 cr.**

**3. UCs Received: Rs. 8.84 cr.**

2 UTs are opt out from the Sub- Scheme (Dadra & Nagar Haveli and Lakshadweep)

# Physical Progress

## 1. Geo-database Creation

Steps	Aol Demarcated	Satellite data Acquired	Data Processed	Thematic Map Created	Draft Maps	Geo database vetted	Final Maps Delivered
States	27	25	18	13	11	4	3
Towns	334	243	184	117	112	94	45

## 2. Master Plan Formulation

Steps	RFP Floated	Contract awarded	Socio-Economic Data Collected	Socio Economic Data Analyzed	Draft Master Plan
States	20	15	6	5	3
Towns	227	104	49	47	11

## 3. Capacity Building

### [Training Calendar](#) @

Institute	NESAC	BISAG	IISM	IIRS	TOTAL
States	16	21	17	9	30
Officials	105	110	133	74	<b>443</b>

NESAC, Shillong

IISM, Hyderabad

IIRS, Dehradun

BISAG, Gujarat



## ACCOMPLISHMENTS

- National Meet of the SMDs/State Nodal Officers was held on 13.05.2016, 20.10.2016 & 22.09.2017 with a total participation of 218 officers to discuss modalities of implementation of the Scheme.
- A National Monitoring & Review Committee meeting under the Chairmanship of CP,TCPO was held on 06.11.17 and 12<sup>th</sup> January 2018.

# ACCOMPLISHMENTS

- State Action Plan Template (SAP) prepared and circulated amongst States.
- Design & Standards has been finalized and uploaded on AMRUT Website.
- Model Request for Proposal (RFP) Template for procurement of consultancy services for formulation of GIS-based master plans finalized and circulated to SMDs.
- Memorandum of Understanding (MoU) for creation of geo-spatial database between MoUD and NRSC has been signed for states agreeing to create geo-spatial database through NRSC.
- The State Nodal Agency/Officer has been identified by 34 States/UTs.



# Thank You

**Town & Country Planning Organization**  
Government of India  
Ministry of Housing & Urban Affairs  
E- Block, Vikas Bhawan,  
I.P. Estate, New Delhi-110002

cp.tcpo@yahoo.com, cp-tcpo-mud@nic.in

# Funds Approved (Rs. Lakh)

Sr. No.	Name of State	No.of Towns	Geodatabase creation			Master Plan		Capacity Building	Total
			In-house	Outsourcing	NRSC	In-house	Outsourcing		
1	Andaman Nicobar Is	1			17.78		0.00	2.00	19.78
2	Andhra Pradesh	26		246.31			1975.00	55.00	2276.31
3	Arunachal Pradesh	1			17.78		75.00	2.00	94.78
4	Assam	4			41.60		300.00	8.00	349.60
5	Bihar	24		285.51			1800.00	48.00	2133.51
6	Chandigarh	1			12.44		75.00	2.00	89.44
7	Chhattisgarh	9			146.17		700.00	21.00	867.17
8	Delhi	4		51.27			0.00	8.00	59.27
9	Goa	1			8.15		75.00	2.00	85.15
10	Gujarat	31		332.39			2350.00	74.00	3064.96
11	Haryana	19		177.15			1450.00	41.00	1513.56
12	Himachal Pradesh	2			25.12		150.00	4.00	179.12
13	Jammu & Kashmir	5			106.66		400.00	13.00	519.66
14	Jharkhand	7		138.17			575.00	20.00	733.17
15	Karnataka	27		394.01			2050.00	57.00	2501.01
16	Kerala	9			69.03	560.00		18.00	647.03

Cont...

# Funds Approved (Rs. Lakhs)

Sr. No.	Name of State	No.of Towns	Geo-database creation			Master Plan		Capacity Building	Total
			In-house	Outsourcing	NRSC	In-house	Outsourcing		
17	Madhya Pradesh	34			472.90	2650.00		80.00	3202.90
18	Maharashtra	36		208.30			2800.00	84.00	3092.30
19	Manipur	1			13.33		75.00	2.00	90.33
20	Manipur	1			13.33		75.00	2.00	90.33
21	Meghalaya	1		17.78			75.00	2.00	94.78
22	Mizoram	1			13.51		75.00	2.00	90.51
23	Nagaland	2	28.44				150.00	4.00	182.44
24	Odisha	9		135.52			75.00	18.00	228.52
25	Pondicherry	3			43.73		225.00	6.00	274.73
26	Punjab	16			334.01		1250.00	38.00	1622.01
27	Rajasthan	29		509.64			300.00	67.00	876.64
28	Sikkim	1			13.33		75.00	2.00	90.33
29	Tamil Nadu	18			215.09		1350.00	36.00	1601.09
30	Telangana	12			181.43		925.00	27.00	1133.43
31	Tripura	1		11.55			75.00	2.00	88.55
32	Uttar Pradesh	60			1182.63		4725.00	140.00	6047.63



# Funds Approved (Rs. Lakhs)

Sr. No.	Name of State	No. of Towns	Geo-database creation			Master Plan		Capacity Building	Total
			In-house	Outsourcing	NRSC	In-house	Outsourcing		
33	Uttarakhand	7			58.50		525.00	14.00	597.50
34	West Bengal	55			663.08		4175.00	116.00	4954.08
	<b>Total</b>	458	28.44	<b>2514.00</b>	3636.24	3210.00	2875.00	1017.00	39097.30
	Total Rs. In Crores		0.28	<b>25.14</b>	36.36	32.10	287.75	10.17	390.97
	<b>Grand Total</b>		<b>61.78</b>			<b>319.85</b>		<b>10.17</b>	<b>390.97</b>



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

Sl. No.	Name of State	Towns	GIS	MP	CB	TOTAL	Rs. (Cr.)	Release Date
1	Andhra Pradesh	26	4926281	39500000	1100000	45526281	4.55	19.06.17
2	Arunachal Pradesh	1	NRSC	1500000	40000	1540000	0.15	19.06.17
3	Goa	1	NRSC	1500000	40000	1540000	0.15	19.06.17
4	Himachal Pradesh	2	NRSC	3000000	80000	3080000	0.31	19.06.17
5	Jharkhand	7	2763421	11500000	400000	14663421	1.47	19.06.17
6	Karnataka	27	7880158	41000000	0	48880158	4.89	19.06.17
7	Madhya Pradesh	34	NRSC	53000000	1600000	54600000	5.46	19.06.17
8	Manipur	1	NRSC	1500000	80000	1580000	0.16	19.06.17
9	Meghalaya	1	355520	1500000	40000	1895520	0.19	19.06.17
10	Mizoram	1	NRSC	1500000	80000	1580000	0.16	19.06.17
11	Nagaland	2	568832	3000000	80000	3648832	0.36	19.06.17
12	Pondicherry	3	NRSC	4500000	120000	4620000	0.46	19.06.17
13	Rajasthan	29	10192758	6000000	1340000	17532758	1.75	19.06.17
14	Sikkim	1	NRSC	1500000	80000	1580000	0.16	19.06.17
15	Telangana	12	NRSC	18500000	540000	19040000	1.90	19.06.17
16	A & N Islands	1	NRSC	0	40000	40000	0.00	18.10.17
17	Bihar	24	5710240	36000000	960000	42670240	4.27	18.10.17
18	Chandigarh	1	NRSC	1500000	40000	1540000	4.55	18.10.17

Cont...

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

Sl. No.	Name of State	Towns	GIS	MP	CB	TOTAL	Rs. (Cr.)	Release Date
19	Kerala	9	NRSC	11200000	360000	11560000	1.16	18.10.17
20	Uttar Pradesh	60	NRSC	94500000	2800000	97300000	9.73	18.10.17
21	Assam	4	NRSC	6,000,000.00	160000	6160000	0.62	23.02.18
22	Chhattisgarh	9	NRSC	14,000,000.00	420000	14420000	1.44	23.02.18
23	Delhi (NCT)	4	1,025,438.00	0	160000	1185438	0.12	23.02.18
24	J & k	5	NRSC	8,000,000.00	260000	8260000	0.83	23.02.18
25	Punjab	16	NRSC	25,000,000.00	760000	25760000	2.58	23.02.18
26	Tamil Nadu	18	NRSC	27,000,000.00	720000	27720000	2.77	23.02.18
27	Maharashtra	36	4166048.738	56000000	1680000	61846048.74	6.18	22.03.18
28	Odisha	9	2710416.964	1500000	360000	4570416.964	0.46	22.03.18
29	Uttarakhand	7	NRSC	10500000	280000	10780000	1.08	22.03.18
30	West Bengal	55	NRSC	83500000	2320000	85820000	8.58	22.03.18
31	Tripura	1	2,31,088.00	15,00,000.00	40,000.00	17,71,088.00	0.17	22.06.18





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

Sl. No.	Name of State	Towns	GIS	MP	CB	TOTAL	Rs. (Cr.)	Release Date
32	Gujarat	31	66,47,971.00	4,70,00,000.00	14,80,000.00	5,51,27,971.00	5.51	07.09.18
33	Haryana	19	35,43,158.16	2,60,00,000.00	8,20,000.00	3,03,63,158.16	3.03	07.09.18
34	Daman & Diu	01	NRSC	15,00,000.00	40,000.00	16,67,987.00	0.16	25.09.18
	<b>TOTAL</b>	<b>458</b>	<b>5,07,21,329.16</b>	<b>63,97,00,000.00</b>	<b>1,93,20,000.00</b>	<b>78,33,61,096.16</b>	<b>78.33</b>	

**As on date Rs. 78.33 Cr. has been released to 34 States (458 Towns)  
as First Installment**



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

Sl. No.	Name of State	Towns	GIS	MP	CB	TOTAL	Rs. (Cr.)	Release Date
01	Arunachal Pradesh	01	0	30,00,000.00	00	30,00,000.00	0.30	25.09.18
02	Andhra Pradesh	26	98,52,561.14	7,90,00,000.00	22,00,000.00	9,10,52,561.14	9.10	05.10.18
	TOTAL	27	98,52,561.14	8,20,00,000.00	22,00,000.00	9,40,52,561.14	9.40	

**As on date Rs. 9.40 Cr. has been released to 02 States (27 Towns) as  
Second Installment**



# Funds Released to NRSC for Geo Database Creation (First

SI No.	Name of Town	Towns in AMRUT	Geodatabase Creation		Rs. In Lakhs	Release Date	Release Date - Part II
			1st Inst. (Rs.)	1st Inst. (Rs.) Part II			
1	Arunachal Pradesh	1	400000		4	19.06.17	
2	Goa	1	162953		1.62953	19.06.17	
3	Himachal Pradesh	2	502314.2		5.02314	19.06.17	
4	Madhya Pradesh	34	9894866		98.9487	19.06.17	
5	Manipur	1	266640		2.6664	19.06.17	
6	Mizoram	1	270195.2		2.70195	19.06.17	
7	Pondicherry	3	874579		8.74579	19.06.17	
8	Sikkim	1	266640		2.6664	19.06.17	
9	Telangana	12	3914171		39.1417	19.06.17	
10	Andaman Nicobar Is	1	248864	106656	3.5552	18.10.17	11.05.18
11	Chandigarh	1	174205	74659	2.48864	18.10.17	11.05.18
12	Kerala	9	966359	414154	13.8051	18.10.17	11.05.18
13	Uttar Pradesh	60	16556760	7095754	236.525	18.10.17	11.05.18
14	Assam	4	831916.8		8.31917	11.05.18	
15	Tamil Nadu	18	4301797		43.018	11.05.18	
16	Chattisgarh	9	2923405		29.2341	11.05.18	
17	Punjab	16	6680221		66.8022	11.05.18	
18	Jammu & Kashmir	5	2133120		21.3312	11.05.18	
19	West bengal	55	13261632		132.616		
20	Uttrakhand	7	1169920		11.6992	11.05.18	
21	Daman & Diu	1	1,27,987.00		127.98	25.09.18	
	Total	241	65800558	7691223	734.92		
	<b>Grand Total</b>		<b>73619768</b>		<b>736.19</b>		

**As on date Rs. 7.36 Cr. has been released to NRSC for 21 States (241 Towns)**



# Utilisation Certificate

## Received

Sl. No.	Name of State/Institute	Amount (Rs. )
1	Andhra Pradesh	4,55,26,280.00
2	Arunachal Pradesh	15,40,000.00
3	Goa	1,24,697.00
4	Himachal Pradesh	17,28,571.00
5	Jharkhand	53,65,000.00
6	Karnataka	55,64,216.00
7	Kerala	18,52,000.00
8	Mizoram	15,80,000.00
9	Nagaland	6,48,832.00
10	Punjab	16,87,000.00
11	Rajasthan	1,75,32,758.00
12	Sikkim	8,40,854.00
13	NRSC	44,56,523.00
	<b>Total</b>	<b>8,84,46,731.00</b>

## Yet to be Received

Sr. No.	Name of State
1	Andaman Nicobar Islands
2	Assam
3	Bihar
4	Chandigarh
5	Chhattisgarh
6	Daman and Diu
7	Delhi
8	Gujarat
9	Haryana
10	Jammu & Kashmir
11	Madhya Pradesh
12	Maharashtra
13	Manipur
14	Meghalaya
15	Odisha
16	Pondicherry
17	Tamil Nadu
18	Telangana
19	Tripura
20	Uttar Pradesh
21	Uttarakhand
22	West Bengal



# Geo Database Creation

Process	State (towns)	Through NRSC	State Initiatives/out sourcing
<b>Demarcation of Mapping Area (AOI)</b>	27 States (334 towns)	<ol style="list-style-type: none"> <li>1. Andaman &amp; Nicobar Islands (1)</li> <li>2. Arunachal Pradesh (1)</li> <li>3. Chandigarh (1)</li> <li>4. Himachal Pradesh (2)</li> <li>5. Kerala (9)</li> <li>6. Madhya Pradesh (34)</li> <li>7. Manipur (1)</li> <li>8. Mizoram (1)</li> <li>9. Puducherry (5)</li> <li>10. Sikkim (1)</li> <li>11. Telengana (12)</li> <li>12. Uttar Pradesh (61)</li> <li>13. Goa (1)</li> <li>14. Assam (04)</li> <li>15. Chhattisgarh (08)</li> <li>16. Jammu &amp; Kashmir (05)</li> <li>17. Punjab (16)</li> <li>18. Tamilnadu (17)</li> <li>19. Uttarakhand (06)</li> <li>20. West Bengal (23)</li> </ol>	<ol style="list-style-type: none"> <li>1. Meghalaya (1)</li> <li>2. Rajasthan (29)</li> <li>3. Bihar (24)</li> <li>4. Jharkhand (7)</li> <li>5. Nagaland (2)</li> <li>6. Andhra Pradesh (26)</li> <li>7. Maharashtra (36)</li> </ol>
		<b>20 States (209 towns)</b>	<b>7 States (125 towns)</b>



# Geo Database Creation

Process	State (towns)	Through NRSC	State Initiatives/out sourcing
<b>Satellite Data acquired</b>	25 States (243 towns)	1. Arunachal Pradesh (01)	1. Rajasthan (29)
		2. Kerala (09)	2. Bihar (24)
		3. Madhya Pradesh (32)	3. Jharkhand (06)
		4. Manipur (01)	4. Meghalaya (01)
		5. Sikkim (01)	5. Andhra Pradesh(26)
		6. Telangana (11)	6. Maharashtra (36)
		7. Himachal Pradesh (02)	7. Nagaland (02)
		8. Mizoram (01)	
		9. Puducherry (05)	
		10. Uttar Pradesh (36)	
		11. A & N Islands (01)	
		12. Chandigarh (01)	
		13. Chhattisgarh (03)	
		14. Jammu & Kashmir (03)	
		15. Punjab (02)	
		16. Tamilnadu (07)	
		17. West Bengal (01)	
		18. Uttarakhand (02)	
			<b>18 States (119 towns)</b>



# Geo Database Creation

## Data Processing

State (towns)	Through NRSC	State Initiatives/out sourcing
<b>18 States (184 towns)</b>	<ol style="list-style-type: none"><li>1. Kerala (09)</li><li>2. Madhya Pradesh (20)</li><li>3. Sikkim (01)</li><li>4. Manipur (01)</li><li>5. Telangana (06)</li><li>6. Arunachal Pradesh (01)</li><li>7. Himachal Pradesh (01)</li><li>8. Puducherry (03)</li><li>9. Uttar Pradesh (14)</li><li>10. Mizoram (01)</li><li>11. Tamilnadu (4)</li><li>12. West Bengal (1)</li></ol>	<ol style="list-style-type: none"><li>1. Rajasthan (29)</li><li>2. Bihar (24)</li><li>3. Jharkhand (05)</li><li>4. Andhra Pradesh (26)</li><li>5. Maharashtra (36)</li><li>6. Nagaland (2)</li></ol>
	<b>12 States (62 towns)</b>	<b>6 States (122 towns)</b>

# Geo Database Creation

## Thematic Map Creation

<b>State (towns)</b>	<b>Through NRSC</b>	<b>State Initiatives/out sourcing</b>
<b>13 States (117 towns)</b>	<ol style="list-style-type: none"><li>1. Kerala (05)</li><li>2. Madhya Pradesh (08)</li><li>3. Sikkim (01)</li><li>4. Manipur (01)</li><li>5. Telangana (02)</li><li>6. Arunachal Pradesh (01)</li><li>7. Puducherry (02)</li><li>8. Himachal Pradesh (1)</li></ol>	<ol style="list-style-type: none"><li>1. Rajasthan (29)</li><li>2. Bihar (24)</li><li>3. Jharkhand (05)</li><li>4. Maharashtra (36)</li><li>5. Nagaland (2)</li></ol>
	<b>8 States (21 towns)</b>	<b>5 States (96 towns)</b>





# Geo Database Creation

## Generation of Draft Maps

State (towns)	Through NRSC	State Initiatives/out sourcing
<b>11 States (112 towns)</b>	<ol style="list-style-type: none"><li>1. Kerala (05)</li><li>2. Madhya Pradesh (07)</li><li>3. Sikkim (01)</li><li>4. Manipur (01)</li><li>5. Arunachal Pradesh (01)</li><li>6. Puducherry (02)</li><li>7. Himachal pradesh (1)</li></ol>	<ol style="list-style-type: none"><li>1. Rajasthan (29)</li><li>2. Bihar (24)</li><li>3. Jharkhand (05)</li><li>4. Maharashtra (36)</li></ol>
	<b>7 States (18 towns)</b>	<b>4 States (94 towns)</b>



# Geo Database Creation

## Vetting of Geo database

State (towns)	Through NRSC	State Initiatives/out sourcing
<b>4 States (94 towns)</b>		<ol style="list-style-type: none"><li>1. Rajasthan (29)</li><li>2. Bihar (24)</li><li>3. Jharkhand (05)</li><li>4. Maharashtra (36)</li></ol>
		<b>4 States (94 towns)</b>



# Geo Database Creation

## Final Maps Delivered

<b>State (Towns)</b>	<b>Through NRSC</b>	<b>State Initiatives/out sourcing</b>
<b>3 State (45 Towns)</b>		<ol style="list-style-type: none"><li>1. Maharashtra (13)</li><li>2. Rajasthan (29)</li><li>3. Jharkhand (03)</li></ol>
		<b>3 States (45 Towns)</b>



# Master Plan Formulation

## Advt./ E.O.I. Issued

**13 States  
(171 towns)**

1. Sikkim (1)
2. Arunachal Pradesh (1)
3. Himachal Pradesh (2)
4. Mizoram (1)
5. Manipur (1)
6. Karnataka (4)
7. Bihar (13)
8. Punjab (16)
9. Tamilnadu (18)
10. Maharashtra (36)
11. Uttar Pradesh (60)
12. Tripura (1)
13. Haryana (17)



# Master Plan Formulation

## Floating of RFP

<b>20 States (227 towns)</b>	<ol style="list-style-type: none"><li>1. Sikkim (1)</li><li>2. Arunachal Pradesh (1)</li><li>3. Himachal Pradesh (2)</li><li>4. Mizoram (1)</li><li>5. Karnataka (13)</li><li>6. Bihar (13)</li><li>7. Jharkhand (6)</li><li>8. Nagaland (2)</li><li>9. Andhra Pradesh (23)</li><li>10. Punjab (16)</li><li>11. Tamilnadu (18)</li><li>12. Maharashtra (36)</li><li>13. Chhattisgarh (09)</li><li>14. Assam (04)</li><li>15. Uttarakhand (1)</li></ol>	<ol style="list-style-type: none"><li>16. Tripura (1)</li><li>17. Puducherry (3)</li><li>18. Uttar Pradesh (60)</li><li>19. Haryana (17)</li><li>20. Goa (1)</li></ol>
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# Master Plan Formulation

## Award of Contract

<b>15 States (104 towns)</b>	<ol style="list-style-type: none"><li>1. Arunachal Pradesh (1)</li><li>2. Himachal Pradesh (2)</li><li>3. Jharkhand (7)</li><li>4. Sikkim (1)</li><li>5. Mizoram (1)</li><li>6. Tamilnadu (8)</li><li>7. Maharashtra (36)</li><li>8. Punjab (12)</li><li>9. Andhra Pradesh (6)</li><li>10. Uttarakhand (1)</li><li>11. Puducherry (2)</li></ol>	<ol style="list-style-type: none"><li>12. Nagaland (2)</li><li>13. Bihar (1)</li><li>14. Haryana (17)</li><li>15. Goa (1)</li></ol>
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## Socio-Economic Data Collected

**6 States  
(49 towns)**

1. Jharkhand (6)
2. Madhya Pradesh (34)
3. Rajasthan (4)
4. Kerala (02)
5. Arunachal Pradesh (01)
6. Puducherry (2)



## Socio-Economic Data Analyzed

5 States  
(47 towns)

1. Jharkhand (6)
2. Madhya Pradesh (34)
3. Rajasthan (4)
4. Arunachal Pradesh (01)
5. Puducherry (2)





## Draft Master Plan Report Submitted

<b>3 States (11 towns)</b>	<ol style="list-style-type: none"><li>1. Rajasthan (4)</li><li>2. Puducherry (2)</li><li>3. Jharkhand (5)</li></ol>
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## Capacity Building under AMRUT Sub-scheme as on date

Level of training/ trainees	No. of Training Programme	No. of officials trained
Training for decision makers	6	126
Training for Middle level officers	6	121
Operators & Technicians	4	86
Mixed training for decision makers, middle level officers and operators at National Centre of Geo Informatics (NCoG), Gandhi Nagar	6	110
<b>Total</b>	<b>22</b>	<b>443</b>

# 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	06	110
2	North Eastern Space Application Centre (NESAC), Shillong	3 Days Training programme for Decision Makers	03	43
		2 Weeks Training Programme for Middle Level Officials	03	62
3	Indian Institute of Surveying and Mapping (IIS&M), Sol, Hyderabad	3 Days Training Programme for Decision Makers	03	66
		2 Weeks Training Programme for Middle Level Officials	04	67
4	Indian Institute of Remote Sensing, ISRO, Dehradun	2 Weeks Training Programme for Middle Level Officials	02	74
<b>Total</b>			<b>22</b>	<b>443</b>

# Officials Trained at NESAC Shillong

No	States/ Uts	Tier I			Tier II		Tier III	Total
		Batch I (18-20 Jan.18)	Batch II (19-21 Feb. 18)	Batch III (29-31 May.18)	Batch I (16-27 Apr.18)	Batch II (14-25 May.18)	Batch I (06 – 31 Aug. 2018)	
1	Andhra Pradesh	2					10	12
2	Arunachal Pradesh		1			3	5	9
3	Assam				1		4	5
4	Bihar		2					2
5	Chandigarh				3			3
6	Himachal Pradesh		1		2			3
7	Kerala		3		5			8
8	Madhya Pradesh		6	1				7
9	Manipur	1				3		4
10	Meghalaya	6		7			4	17
11	Mizoram		4					4
12	Nagaland	3			5		2	10
13	Rajasthan	1	2		4	2	5	14
14	Sikkim		1			2		3
15	Telangana		1					1
16	Uttar Pradesh			1				1
	<b>Total</b>	<b>13</b>	<b>21</b>	<b>9</b>	<b>20</b>	<b>10</b>	<b>30</b>	<b>103</b>

# Officials Trained at BISAG Gandhinagar

No	States/ Uts	One Week Program for Officials - Batches						Total
		8-12 Jan.18	5-9 Feb 18	(19-23 Mar.18)	2-6 Apr.18	23-27 Apr.18	2-6 Jul. 18	
1	Andhra Pradesh	6						6
2	Arunachal Pradesh		2					2
3	Bihar			2				2
4	Chandigarh			1				1
5	Chattisgarh				5			5
6	Gujarat						4	4
7	Himachal Pradesh	7			0			7
8	Jammu & Kashmir				5			5
9	Jharkhand		4					4
10	Karnataka			4				4
11	Kerala			4				4
12	Madhya Pradesh		6			3	1	10
13	Maharashtra				4			4
14	Puducherry	2						2
15	Rajasthan			3			3	6
16	Sikkim		2					2
17	Tamil Nadu		5					5
18	Telangana	4						4
19	Uttar Pradesh	1	5			2		8
20	Uttarakhand					1		1
21	West Bengal			5		3	6	14
	<b>Total</b>	<b>20</b>	<b>24</b>	<b>19</b>	<b>14</b>	<b>9</b>	<b>14</b>	<b>100</b>

# Officials Trained at IISM Hyderabad

No	States/ Uts	Tier I		Tier II			Tier III		Total
		Batch I (24-26 Apr.18)	Batch II (28-30 May 18)	Batch I (16-27 Apr.18)	Batch II (1-11 May 2018)	Batch III (11-22 Jun.18)	Batch I(02-27 Jul.18)	Batch II (03-28 Sept.18)	
1	Andhra Pradesh	10							10
2	Arunachal Pradesh		1						1
3	Chandigarh		2						2
4	Chattisgarh	1			9	7		1	18
5	Delhi		3						3
6	Goa		2			1			3
7	Himachal Pradesh		1						1
8	Jammu & Kashmir	2			3				5
9	Karnataka					4	9		13
10	Kerala		3						3
11	Maharashtra					3			3
12	Punjab	2	5	4		2	2	2	17
13	Rajasthan		3		7		3	3	16
14	Tamil Nadu					7	3	2	12
15	Telangana	8						3	11
16	Tripura					1			1
17	Uttarakhand		5			2			7
18	West bengal							7	7



# Officials Trained at IIRS Dehradun

No	States/ Uts	Tier II	Tier I	Total
		Batch I (9-20 Jul.18)	Batch I (12-14 Sept.18)	
1	Andhra Pradesh	6	4	10
2	Chattisgarh	1		1
3	Gujarat	3		3
4	Jharkhand	5	1	6
5	Punjab	11	15	26
6	Rajasthan	3		3
7	Telangana	5		5
8	Uttarakhand	4	4	8
9	West Bengal	3	5	8
10	Haryana		1	1
11	Kerala		1	1
12	Madhya Pradesh		1	1
13	Sikkim		1	1
	<b>Total</b>	<b>41</b>	<b>33</b>	<b>74</b>



# Capacity Building Calendar under Sub-Scheme

Levels of Training	NESAC (ISRO)	IISM (SoI)	IIRS (ISRO)	BISAG
Tier -1 Decision Makers (3 Days)	29-31 May, 2018		04-06 Sept, 2018	2-6 July, 2018 6-10 Aug, 2018 24-28 Sept, 2018 8-12 Oct, 2018 26-30 Nov, 2018 17-21 Dec, 2018
		28-30 May, 2018	31 Oct - 02 Nov, 2018	
Tier -2 Middle Officers (2 Weeks)			09-20 July, 2018	
		11-22 June, 2018	08-18 Oct 2018	
Tier-3 Junior (Operators) (4 Weeks)		02-27 July, 2018	03-28 Dec 2018	
	06-31 Aug, 2018	03-28 Sept, 2018		





# Status of Consultancy Evaluation and Review Committee (CERC)/ Monitoring and Review Committee (MRC)

Fund already released			Fund already released		
Sr. No.	Name of State/UT	CERC Status		Name of State/UT	CERC Status
1	Arunachal Pradesh	Done	17	Madhya Pradesh	Done
2	Goa	Done	18	Assam	Done
3	Jharkhand	Done	19	Punjab	Done
4	Nagaland	Done	20	Tamil Nadu	Done
5	Sikkim	Done	21	Chhattisgarh	Done
6	Mizoram	Done	22	Uttrakhand	Done
7	Manipur	Done	23	West Bengal	Done
8	Telangana	Done	24	Meghalaya	Done
9	Himachal Pradesh	Done	25	J &K	Done
10	Bihar	Done	26	NCT Delhi	Done
11	Kerala	Done	27	Haryana	Done
12	Karnataka	Done	28	Uttar Pradesh	Done
13	Puducherry	Done	29	Tripura	Done
14	Andhra Pradesh	Done	1	Maharashtra	Not Done
15	Rajasthan	Done	2	Odisha	Not Done
16	Chandigarh	Done	3	A & N Islands	Not Done

# 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
<b>Total</b>	<b>44</b>	<b>432</b>	<b>24</b>	<b>500</b>	<b>34</b>	<b>421</b>	<b>2</b>	<b>457</b>