Sub-scheme on Formulation of GIS based Master Plan for AMRUT Cities
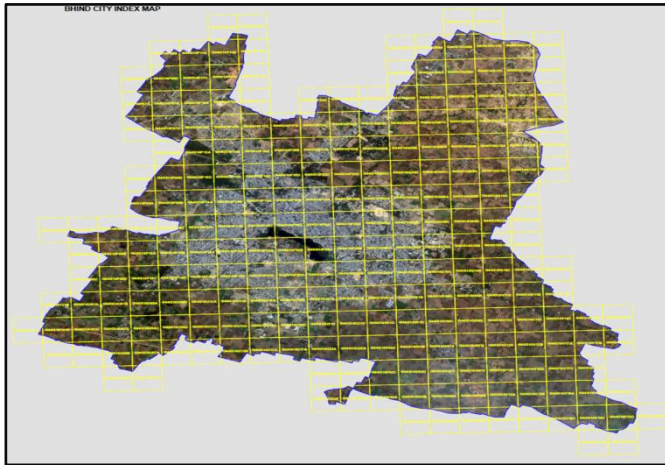
Training Report on Vetting and Attribute Data Collectionat Bhopal, Madhya Pradesh
(09th& 10th January, 2019)

नगरएवंग्रामनियोजनसंगठन/Town and Country Planning Organisation
भारतसरकार /Government of India
आवासन औरशहरीकार्य मंत्रालय /Ministry of Housing and Urban Affairs

1.0   Introduction

Sub-scheme on Formulation of GIS based Master Plan for 500 AMRUT Cities is one of the important reforms under AMRUT Mission, which has been approved in October 2015 as a 100% centrally funded sub-scheme. 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 enable them to make more informed strategic decisions. 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

2.0   Progress

There are 34 States/UTs with 458 towns are on board under the Sub-Scheme. A total of Rs.392.07 Crores have been sanctioned and Rs. 88.03 Crore has been released.The financial progress till date is as follows:

Funds approved	392.07 Cr
Funds released to States in first installment (20%)	70.97 Cr
Funds released to States in Second installment (40%)	9.70 Cr
Funds released to NRSC	7.36 Cr
Total fund released	88.03 Cr
Utilization Certificate Received	19.28 Cr

The Geo-database creation is one of the important components of the Sub-Scheme. Here National Remote Sensing Centre (NRSC), ISRO, Hyderabad is the major stakeholder in Geo-database creation. NRSC is creating the Geo-database for 242 cities (21 States/UTs) and rest of the States are creating the Geo-database through the in-house/consultants. Till date, the draft base maps have been prepared for 123 cities and final maps delivered for 79 cities.

Under the component of Master Plan formulation, Kerala and Madhya Pradesh are formulating Master Plan in-house,while remaining other States/UTs are formulating through

Consultants. Till date, the Draft Masters Plan has been prepared for 12 Cities and 3 Cities have submitted the final Master Plan.

Under the Capacity Building component there are 3 levels of training programs is being conducted at NESAC, BISAG, IISM and at IIRS for the State Government officials. Under this component, till date 489 officials have been trained from 30 States/UTs.

Once the draft geo-database is delivered to states, the attributes have to be collected and vetting of draft map has to be done through ground survey. In this connection, TCPO is providing training on the request of State Governments. As on date, two training programmes have been organized.

3.0 Sub-Scheme in Madhya Pradesh:-

Government of Madhya Pradesh has 34 towns under the Sub-Scheme, The list of AMRUT town is at Annexure-I and location is shown in the map below.

3.1 Progress

Under the Sub-Scheme, Rs. 32.47 Crore has been approved for 34towns in Madhya Pradesh (Rs. 4.72 Crore is allocated to NRSC for Geo-database creation and Rs.27.30 Crore is

allocated to State Government for Master Plan formulation and Capacity Building). The first instalment of Rs. 5.46cr to State Government and Rs. 0.99 Crore to NRSC 20% as advance has been released on 19/06/2017. The details of funds allocated and released is as under:

Sl. No	Particulars	Amount in Rs. Crore
1	Total Funds Approved under Sub-Scheme	32.47
2	Funds allocated for State Govt. (MP and CB)	27.30
3	Funds allocated to NRSC (Geo-database creation)	4.72
4	Funds Released to State Govt. as IstInstalment (20%)	5.46
5	Funds released to NRSC	0.99

NRSC has delivered the draft geo database of eight AMRUT towns for vetting and attribute data collection, which is in process at State level. The State Govt. has also collected the socio economic data for 34 towns, which is required for formulation of GIS based Master Plan.

4.0 Training on Vetting and Attribute Data Collection:-

The Governmentof Madhya Pradeshthrough email had requested TCPO to impart training on vetting and attribute data collection in the Geo-database created by NRSC during 09 & 10 January 2019 at Bhopal, Madhya Pradesh. Accordingly, a team comprising of Sh. Mohd. Monis Khan, Town & Country Planner and Sh. Arvind Kaushik, Assistant TCP, TCPO had visited Bhopal, Madhya Pradesh and imparted the trainingat RCVP Naronha Academy of Administration, Bhopal, Madhya Pradesh.

In the training program more 100 officers/officials from the State Government have participated comprising of Director, Addl. Director, Joint Directors, Deputy Directors, Asst. Directors, Planning Assistants, Planning Draftsmens and Surveyors. The schedule of Training programme is at Annexure II. The details of the training program conducted are as follows:

4.1 Day-1:-Briefing about Sub Scheme, Design & Standards and Vetting Procedures

The training programme has started from the registration of the participants. The inaugural session was presided by Secretary, Urban Development &Housing ,Govt, of Madhya Pradesh. In his inaugural speech, the Director, Directorate of Town and Country Planning said that Madhya Pradesh have 34 towns under Sub-scheme of AMRUT and received the base maps for 08 from NRSC, Hyderabad and the survey work is going on at the ULBs. The Department has signed a MoU with the MPCOST for the formulation of GIS Master Plan.
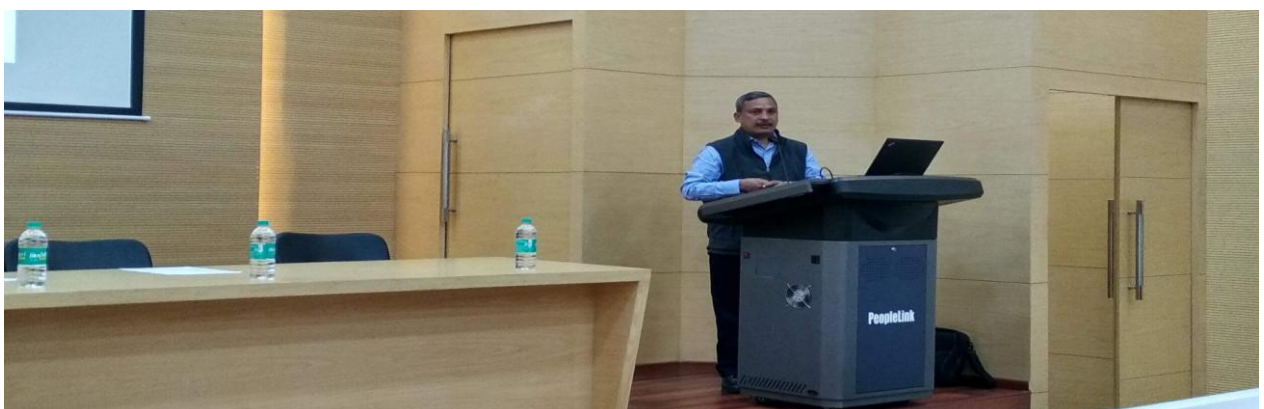
In the second session, a detail presentation was made by Shri. Mohd. Monis Khan, Town and Country Planner, TCPO on the Sub-Scheme on Formulation of GIS based Master Plan for AMRUT Cities comprising of overall physical and financial progress and status of Sub

Scheme in Madhya Pradesh. In order to make familiarize the Design and Standards of Sub Scheme, second detail presentation of Design and Standards were also done by him in the third session. The presentation focuses on 8 layers, 69 major classes and 475 sub-classes along with the standards on remote sensing, spatial reference, geo-spatial feature contents and GIS data structure, quality assurance/quality check and Metadatafo Design & Standards Document.

In the fourth session a very detailed step by step procedure of vetting and attribute data collection was explained Sh. Satish Jayanthi, Scientist from NRSC to the officials of the State Government.

Many officials have raised lot of doubts in vetting of base maps, which were clarified by Sh. Mohd. Monis Khan, TCP, TCPO Sh. Satish Jayanthi, Scientist from NRSC.

4.2   Day 2:- Field Visit

The day was started with preparation for field visit and participants were divided into 10 teams (each with 5 members), while a team of 30 participants mainly Computer Operators visited MPCOST. The teams were deputed in different parts of the Bhopal city with one grid sheet of map, copy of the correspondent attribute table and simplified coding list provided by NRSCwith a brief by Dr. Amit Gajbhiye, Joint Director about the site visit or hands on practice.

Each participant hastook part in the field trainingwith muchenthusiastically. The TCPO team and senior officers of Govt. of Kerala has supervised the field visit and resolved the queries

and issued there itself on the field. The teams returned to the training centre afternoon with their field sheets and lots of questions and doubts, which were resolved in the after lunch session by Sh. Mohd. Monis Khan.

Concluding Remarks:-

The concluding remarks and vote of tanks was delivered byDr. Amit Kumar GajbhiyeJoint Director.

List of AMRUT Cities/Towns

Sr. No.	Name of Town	Class of City	Area of Mapping (Sq. Km.)
1	Indore	Metro	600
2	Bhopal	Metro	722
3	Jabalpur	Metro	294
4	Gwalior	Metro	512
5	Ujjain	I	183
6	Dewas	I	1127
7	Satna	I	134
8	Sagar	I	282
9	Ratlam	I	122
10	Rewa	I	176
11	Murwara (Katni)	I	155
12	Singrauli	I	1035
13	Burhanpur	I	149
14	Khandwa	I	96
15	Morena	I	138
16	Bhind	I	60
17	Guna	I	111
18	Shivpuri	I	82
19	Vidisha	I	201
20	Mandsaur	I	102
21	Chhindwara	I	84
22	Chhatarpur	I	138
23	Neemuch	I	88
24	Pithampur	I	474
25	Damoh	I	70
26	Hoshangabad	I	168
27	Sehore	I	189
28	Khargone	I	32
29	Betul	I	122
30	Seoni	I	90
31	Datia	I	101
32	Nagda	I	42
33	Dabra	I	119
34	Omkareshwar	I	15

Department of Urban Development and Housing, Madhya Pradesh

Directorate of Town and Country Planning, Madhya Pradesh Bhopal

Capacity Building on Formulation of GIS based Master Plan for AMRUT Cities

9th & 10th January, 2019.

Venue: RCVP Naronha Academy of Administration, Bhopal (M.P.)

Schedule

Sr. No.	Particulars	Time
	Date : 09/01/2019	
01	Registration of Participants	10:00 AM to 10:30 AM
02	Inaugural Address – *Principal Secretary, UD&H, GoMP & Director T&CP, GoMP, Bhopal*	10:30 AM to 11:00 AM
03	Tea Break	11:00 AM to 11:30 AM
04	Introduction of Participants	11:30 AM to 12:00 Noon
05	An Overview of Formulation of GIS Based Master Plan & Design and Standards:- *TCPO, MoUD, New Delhi*	12:00 PM to 01:45 PM
06	Lunch Break	01:45 PM to 02:15 PM
07	Data Collection & Data Vetting to Assist GIS based Master Plan under AMRUT Cities :- *Dr. Satish Jayanthi ,NRSC, Hyderabad*	02:15 PM to 04:00 PM
08	Tea Break	04:00 PM to 04:30 PM
09	GIS based Master Plan Formulation for AMRUT Cities : *TCPO, MoUD, New Delhi*	04:30 PM to 05:00 PM
10	Overview of usage of GIS in AMRUT Cities : Dr. Vivek Katare MPCOST	05:00 PM to 05:30 PM
	Date : 10/01/2019	
01	Vetting of AMRUT Data & Site Visit : *TCPO, MoUD, New Delhi and Landuse Urban Survey Team, MPCOST* & Hands on Training to Computer operators at MPCOST	10:30 AM to 02:00 PM
02	Lunch Break	02:00 PM to 03:00 PM
03	Issue and Queries resolution : *TCPO/T&CP/MPCOST*	03:00 PM to 4:30 PM
04	Tea Break	04:30 PM to 04:45 PM
05	Concluding Remarks: *Dr. Amit Kumar Gajbhiye*	04:45 PM to 5:30 PM