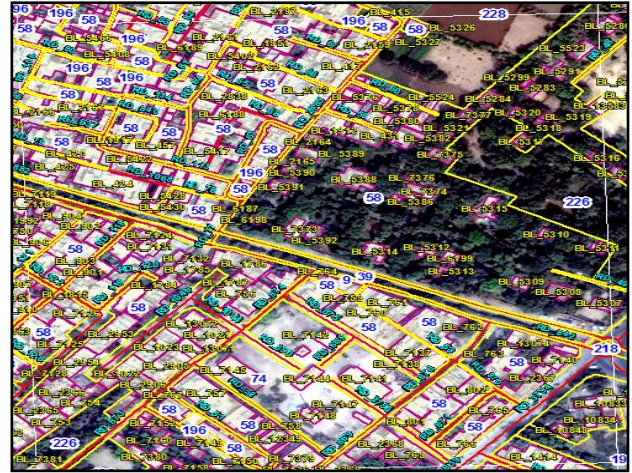
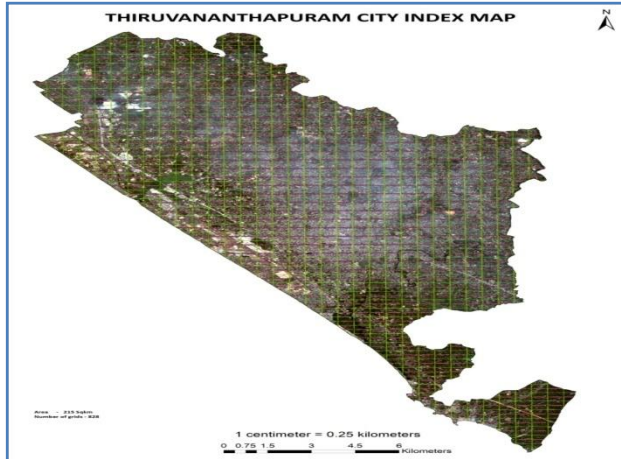


Sub-scheme on Formulation of GIS based Master Plan for AMRUT Cities



Training Report on Vetting and Attribute Data Collection at Thiruvananthapuram, Kerala

18-19 January 2019



सत्यमेव जयते

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 Geodatabase creation is one of the important components of the Sub-Scheme. Here National Remote Sensing Centre (NRSC), ISRO, Hyderabad is the major stakeholder in Geodatabase creation. NRSC is creating the Geodatabase for 242 cities (21 States/UTs) and

rest of the States are creating the Geodatabase 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 have 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 Kerala

In Kerala, there are nine cities under the Sub-Scheme, viz. Thiruvananthapuram, Kollam, Alappuzha, Kochi, Thrissur, Guruvayoor, Palakkad, Kozhikkode, Kannur.

Sl.No.	Name of Cities	Class of City	Area of Mapping (sq. km)	Applicable Area of mapping as per SAP
1	Thiruvananthapuram	I	214.86	200.00
2	Kollam	I	73.03	73.03
3	Alappuzha	I	46.71	46.71
4	Kochi	I	94.88	94.88
5	Thrissur	I	101.42	101.42
6	Guruvayoor	I	29.66	29.66
7	Palakkad	I	26.60	26.60
8	Kozhikkode	I	118.59	118.59
9	Kannur	I	78.30	78.30

The location of AMRUT cities of Kerala is shown the given map.

KERALA STATE CITIES UNDER AMRUT SUB-SCHEME



Karnataka State

kannur
Puducherry UT

Kozhikode

Palakkad

Guruvayur
Thrissur

Tamil Nadu State

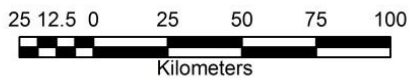
Kerala State

Kochi

Alappuzha

Kollam

Thiruvananthapuram



3.1 Progress

Under the Sub-Scheme, Rs. 6.47 Crore has been approved for nine cities in Kerala (Rs. 0.69 Crore is allocated to NRSC for Geodatabase creation and Rs.5.78 Crore is allocated State Government for Master Plan formulation and Capacity Building). The first installments of Rs. 1.15 crto State Government and Rs.0.69 Crore to NRSC 20% as advance have been released on October, 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	6.47
2	Funds allocated for State Govt. (MP and CB)	5.78
3	Funds allocated to NRSC (Geo-database creation)	0.69
4	Funds Released to State Govt. as IstInstallment (20%)	1.15
5	Funds released to NRSC	0.13

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

4.0 Training on Field Verification and Attribute Data Collection

Government of Kerala vide letter no. F84/22/2017n (2) dated 12.12.2018 had requested TCPO to impart training on field verification and attribute data collection the Geodatabase created by NRSC during 18 & 19 January 2019 at Thiruvananthapuram (Annexure-1). Accordingly, a team comprising of Sh. Mohd. Monis Khan, Town & Country Planner and Sh. S. Subhash, Research Assistant TCPO had visited Thiruvananthapuram and imparted the training.

In the training program more than 50 officers/officials from the State Government have participated comprising of Chief Towns Planner, Senior Town Planners, Town Planners, Deputy Town Planners, Assistant Town Planners, Planning Assistants, Draftsman and Surveyors etc. from Headquarter and all District Offices (Annexure-II).The details of the training program conducted are as follows:

Day 1. Briefing about Sub Scheme, Design & Standards and Vetting Procedures

After the formal inauguration and welcome address by Shri.Gigy George, Chief Town Planner (Planning), Kerala, a detailed 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 Kerala. 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 second 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 Metadata.



In third second session presentations were made by each District Town Planner, who are in-charge of Master Plan formulation for the AMRUT City in their District. In the presentations, they have briefly explained the status of the, physical & financial progress, the issues encountered by them during the implementation of Sub Scheme in their towns etc.



In the fourth session every detailed step by step procedure of vetting and attribute data collection was explained by Shri. Mohd.Monis Khan TCP, TCPO to the officials of the State Government (Annexure-III). Many officials have raised lot of doubts in vetting of base maps, which were clarified during the presentation itself (Annexure-IV).



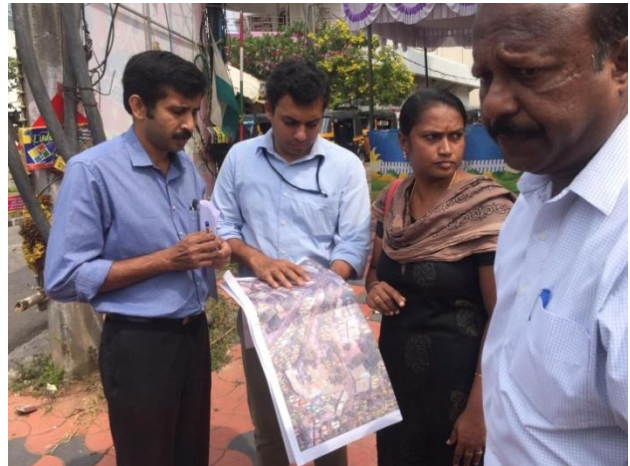
Day 2. Field Visit

In the second day, all the participants were divided into 16 groups (3 persons each group) and provided with one grid sheet of map, copy of the correspondent attribute table and



simplified coding list provided by NRSC and deputed them in different locations in

Thiruvananthapuram for sample vetting and attribute data collection. Each participant have taken part in the field training with much enthusiasm. The TCPO team and senior officers of Govt. of Kerala has supervised the field visit and rectified the queries and issued there itself on the field. The teams returned to the training centre afternoon with their field sheets and some queries.



Post Lunch session was to discuss the filed experience and feedback. During the session, one member from each group had explained how they have done the vetting and attribute data collection; the issues and doubts faced by them on the field etc. were clarified by Shri. Mohd. Monis Khan, TCP, TCPO and explained the procedures once again.



The two days training program was ended with the vote of thanks by Shri. J. Jayakumar, Senior Town Planner, Govt. of Kerala.