



ABSTRACT

Tamil Nadu Sustainable Urban Development Project - Mapping of properties and utilities for developing Municipal Information System using Geographical Information System (GIS) Technology in 14 Urban Local Bodies at an estimated cost of Rs.9.58 crore - Administrative sanction accorded - Orders - Issued.

Municipal Administration & Water Supply (MA2) Department
G.O.(Ms)No. 64

Dated:02.05.2022

திருவள்ளூர்வாராண்டு, 2053

சுபகிருது, சித்திரை மாதம் 19-ஆம் நாள்

Read:

1. G.O. (Ms) No.5, Municipal Administration & Water Supply (MA2) Department, dated 13.01.2016.
2. Minutes of Sanctioning Committee under Urban Sector Technical Assistance Component of Tamil Nadu Sustainable Urban Development Project Meeting held on 18.11.2021.
3. From the Director of Municipal Administration, Letter Roc. No.23890/2020/WB, dated 05.01.2022.

ORDER:

The Directorate of Municipal Administration (DMA), Government of Tamil Nadu has initiated the process to improvise the governance, physical and social infrastructure for the well-being of citizens with a thrust to address the needs of the urban sector through an integrated approach for sustainable local economic and urban development.

2. Development of Information Technology (IT) has enabled facilities for handling voluminous data. The concept of e-Governance has become the order of the day. Balanced urban development in the local bodies is possible only by integrating different datasets in a common platform that will envisage easy understanding, planning and generating of revenue.

3. In order to achieve this goal, Geographical Information System study for preparation of Base map & utility map using high resolution satellite images and integrating Geographic Information System (GIS) data and Municipal Information System (MIS) data available with Urban Local Bodies was carried out for 5 Urban Local Bodies, viz., Coimbatore, Tiruchirappalli and Madurai Corporations and Rajapalayam and Gobichettipalayam Municipalities, at a cost of Rs.2.82 crore under the Tamil Nadu Urban Development Project (TNUDP) III in the year 2006. Subsequently in the second phase, 12 Urban Local Bodies, namely,

Thoothukudi, Vellore, Salem, Dindigul, Erode Corporations and Sivagangai, Udhamandalam, Tambaram, Namakkal, Krishnagiri, Pudukkottai and Virudhunagar municipalities were taken up for Geographical Information System study in the year 2013-2014, at a cost of Rs. 4.60 crore.

4. The Director of Municipal Administration in his proposal third read above has stated that, under the on-going World Bank assisted Tamil Nadu Sustainable Urban Development Project, the Sanctioning Committee under Urban Sector Technical Assistance Component approved undertaking of Geographical Information System study in 14 Urban Local Bodies at an estimated cost of Rs. 4.67 crore at its meeting held on 24.01.2017. However, due to administrative reasons, errors / issues in the existing MIS data of Urban Local Bodies pointed out by the consultants who had undertaken the Geographical Information System survey previously and due to COVID 19 pandemic situation, the Geographical Information System study was not taken up.

5. The Director of Municipal Administration has further stated that, in the circumstances, detailed discussions were held with Task Team Leader, World Bank on 02.08.2021 and the reasons for non-commencement of Geographical Information System study were explained. The Team Leader, World Bank in his reply pointed out that, the Geographical Information System Sub Component under Tamil Nadu Sustainable Urban Development Project only envisages preparation of Geographical Information System maps and subsequent downstream applications such as property tax reform etc., are not part of the immediate scope of this subcomponent. Further, World Bank suggested to make use of Drone Technology for capturing field data.

6. The Director of Municipal Administration has also stated that, based on the above guidance from the World Bank, it has been proposed to take up Geographical Information System survey in the first phase in 14 Urban Local Bodies as detailed below:

Name of the District	Name of the Municipalities	No. of Property Tax assessments	Area (in sq. km)	Group
Kancheepuram	1) Kancheepuram	50,934	36.00	1
Tiruvannamalai	2) Arani	16,049	11.76	
	3) Thiruvathipuram	9,665	10.76	
	4) Tiruvannamalai	30,559	13.64	
	5) Vandavasi	8,134	9.71	
Krishnagiri	6) Hosur (Model City)	90,398	72.41	2
Thanjavur	7) Kumbakonam	33,602	12.56	3
Sivagangai	8) Pattukottai	25,102	21.53	
	9) Karaikudi	35,753	13.75	
	10) Devakottai	23,060	12.42	
Thoothukudi	11) Kovilpatti	43,143	12.58	4
	12) Kayalpattinam	16,158	12.50	
Coimbatore	13) Mettupalayam	22,789	7.20	
	14) Pollachi	25,641	13.87	
Total		4,30,987	260.69	
*Buffer area for 14 ULBs (Approximately minimum 2 KM - maximum 4 KM per ULB)			39.31	
Total area (Drone flying)			300.00	

7. The Director of Municipal Administration has stated that, as per the suggestions received from Team Leader, World Bank, it has been decided to change the source of data for preparation of Base Map & Utility Map from Satellite Image to Drone Image. A new methodology has been formulated for Base map preparation, property mapping and utility mapping for developing Municipal Information System and it is grouped into two segments, namely;

- (i) Drone & Differential Global Positioning System (DGPS) Survey by entrusting the assignment to Department of Aerospace, Anna University, Chennai,
- (ii) Door-to-Door Survey using mobile application for developing Municipal Information System and preparation of base map & utilities map by engaging private consultant.

8. The Director of Municipal Administration has stated that, accordingly, the proposal seeking approval for incurring an expenditure of Rs.9,81,33,579/- for implementation of GIS project in 14 Urban Local Bodies under Tamil Nadu Sustainable Urban Development Project was placed before the Sanctioning Committee under Urban Sector Technical Assistance component of Tamil Nadu Sustainable Urban Development Project at its meeting held on 18.11.2021, as detailed below:

Drone Flying & Capturing DGPS Points		
S No	Activity (300 sq km - 14 ULBs)	Cost (in Rs.)
(1)	DGPS Marking points (12 points Per sq km x 300 sq.kms= 3600 points x Rs.1200/-	43,20,000/-
	University overhead charges 30%	12,96,000/-
		56,16,000/-
	GST 18%	10,10,880/-
	Sub Total	66,26,880/-
(2)	Drone Survey Rs. 30000 per sq.km x 300 sq.km	90,00, 000/-
	University overhead charges	27,00,000/-
		1,17,00,000/-
	GST 18%	21,06,000/-
	Sub Total	1,38,06,000/-
	Total	2,04,32,880/-

Engaging Consultants		
S No		Cost (in Rs.)
1	Creating GIS data and Ground truth verification (Rs.150 *4,30,987 assessments)	6,46,48,050
2	Development of mobile application	12,00,000
		6,58,48,050
3	GST 18%	1,18,52,649
	Total	7,77,00,699
The total requirement of fund (Rs. 2,04,32,880/- + Rs. 7,77,00,699/-)		9,81,33,579

9. However, the Sanctioning Committee observed that, charging of 30% amount as University Overhead Charges, seems to be high and requested the Director of Municipal Administration to revise the University Overhead Charges from 30% to 15% in consultation with the Anna University. Accordingly, after revision of the overhead charges from 30% to 15%, the Sanctioning Committee has accorded approval for Drone survey and DGPS marking points at Rs. 1,53,18,000 + GST Rs. 27,57,240/- totally Rs. 1,80,75,240/-

10. The Director of Municipal Administration has stated that, as there is no change in the Budget for engaging private consultants for creating GIS data and ground truth verification by conducting Door to Door survey using mobile application, the total Budget estimate for this project has been approved by the sanctioning committee at Rs.8.12 crore + GST Rs. 1.46 crore, totally Rs. 9.58 crore and recommended to Government for issue of orders. The reasons for increase in budget are previously, the budget was arrived for generating Municipal Information System without considering the cost for satellite imagery or drone survey. The cost was arrived based on number of property tax assessments x Rs. 115 (406185 assessments x Rs. 115 = Rs. 4,67,11,275/-). The reasons for additional cost of Rs. 4,90,64,264/- are furnished below:

i)	Increase of cost due to adoption of Rs. 150 per assessment at present for ground truth verification and digitization instead of Rs. 115/- in the year 2017 (406185 x Rs.35/-)	Rs.1,42,16,475/-
ii)	Increase in No. of. PT assessments 430987 (-) 406185 = 24802 x Rs. 150/-	Rs.37,20,300/-
iii)	Development of mobile Application	Rs. 12,00,000/-
iv)	Drone Technology for capturing field data & Fixing of DGPS points	Rs.1,80,75,240/-
v)	Earlier, GST was not taken into account for Ground truth verification. Now, an amount of Rs. 1,18,52,649/- (GST) has been included in the Budget.	Rs.1,18,52,249/-
	Total Increase	Rs. 4,90,64,264/-

11. The Director of Municipal Administration has stated that, out of the total allocation of Rs. 137.28 crore for "Municipal e-governance, PFM and GIS" Sub Component of Tamil Nadu Sustainable Urban Development Project, an amount of Rs. 52.00 crore has been spent as on 31.10.2021 for e-governance related activities. Out of the balance fund of Rs. 85.28 crore, the GIS survey will be taken up in the Urban Local Bodies.

12. In the above circumstances, the Director of Municipal Administration in his proposal third read above, has requested the Government to accord Administrative Sanction for taking up Geographical Information System survey under Tamil Nadu Sustainable Urban

Development Project in 14 Urban Local Bodies at an estimated cost of Rs. 9.58 crore including GST.

13. The Government after careful examination has decided to accept the proposal of the Director of Municipal Administration and accords administrative sanction for conduct of GIS survey under Tamil Nadu Sustainable Urban Development Project, in the following 14 Urban Local Bodies at an estimated cost of Rs. 9.58 crore including GST, as approved by the Sanctioning Committee under Urban Sector Technical Assistance Component of Tamil Nadu Sustainable Urban Development Project at its meeting held on 18.11.2021:

Name of the District	Name of Municipality
Kancheepuram	1) Kancheepuram
Tiruvannamalai	2) Arani
	3) Thiruvathipuram
	4) Tiruvannamalai
	5) Vandavasi
Krishnagiri	6) Hosur (Model City)
Thanjavur	7) Kumbakonam
	8) Pattukottai
Sivagangai	9) Karaikudi
	10) Devakottai
Thoothukudi	11) Kovilpatti
	12) Kayalpattinam
Coimbatore	13) Mettupalayam
	14) Pollachi

14. This order issues with the concurrence of Finance department, vide its U.O.No.19935 Finance(MAWS)/2022, Dated:27.04.2022.

//BY ORDER OF THE GOVERNOR //

SHIV DAS MEENA
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT

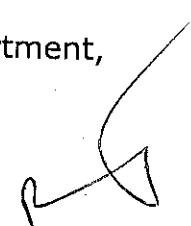
To

The Director of Municipal Administration, Chennai – 600 028.
The Chairman and Managing Director, Tamil Nadu Urban Infrastructure Financial Services Limited, Chennai-600 028
The Pay and Account Officer (East), Chennai -600 008.(2 copies)
The Principal Accountant General (A&E), Chennai -600 018.
The Resident Audit Officer, Chennai – 600 009.

Copy to:

The Senior Private Secretary to the Additional Chief Secretary to Government, Municipal Administration and Water Supply Department, Chennai-600 009.
The Finance (MAWS /EAP)Department, Chennai –600 009.
The Municipal Administration and Water Supply (OP2) Department, Chennai-600 009.

//FORWARDED BY ORDER//


SECTION OFFICER

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