NATURAL RESOURCES DATA MANAGEMENT SYSTEM (NRDMS)

MONTHLY ACTIVITY REPORT April - July 2025

Submitted by District NRDMS Centre Zilla Panchayat, Bengaluru Urban



Submitted to

Karnataka State Council for Science and Technology (KSCST)

Indian Institute of Science Campus, Bengaluru – 560012

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Basic Information of the District

District Name: Bengaluru Urban

Division: Bengaluru

District NRDMS Establishment Year: 2003

Headquarters: Banashankari, Bengaluru

Current CEO: Shri. Yathish. R, Chief Executive Officer.

Current CPO: Smt. Vinutha rani B, Chief Planning Officer.

NRDMS Background of the District.

Introduction:

The Bangalore Urban district NRDMS Centre was established in the year 2003 at Office of the Bangalore Urban Zilla Panchayath with financial support from Department of Science and Technology, Govt. of India, Implemented by K.S.C.S.T, Bangalore with active support from Dept. of Science & Technology, Govt of Karnataka. The main objective of the centre is to create the digital database on Natural resources, Demography, Agro & Socio economy and infrastructure facilities of the district to provide analysed information to the district administrators, Zilla panchayath, line departments, Academic institutions and NGOs in Natural resources management and rural development planning with the help of GIS and other advanced scientific technologies.

Activities carried out at District NRDMS Centre:

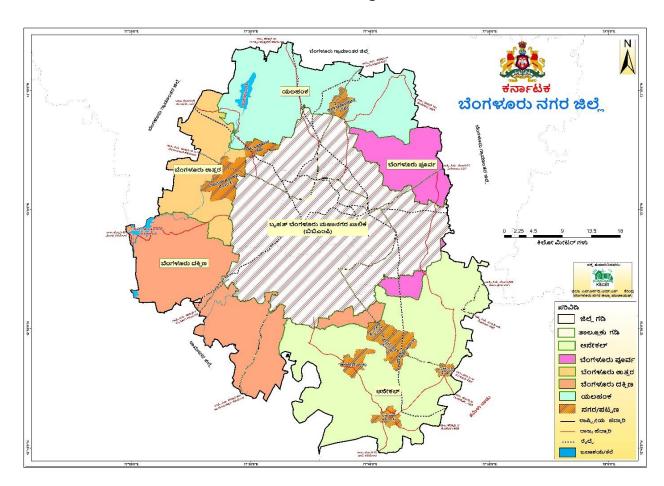
- The primary objective of District NRDMS Centre under NRDMS Project is to create Extensive data base on Spatial Database (Maps) and Non-Spatial Database (Attribute data) of Natural Resources, Socio & agro-economic parameters and Infrastructure facilities of the district after collating from the line departments and other organizations and it is been updating regularly based on nature of availability of data and requirements.
- The NRDMS Centre has been assisting the district administration, Zilla Panchayath, line departments, NGO's and Academic institutions by providing analysed information in the form of maps, graphs, charts and technical reports which are self-explanatory and more informative based on the requirements.
- The NRDMS Centre also assists District administration in preparing Legislative and Parliamentary Assembly Constituency Wise Location and Jurisdiction of Polling stations with Numbers and type of polling booths along with route maps to carry.

 Assisted Planning section of Zilla. Panchayath in Handling Avalokana, SSYOJANA, IPAAP, PAI Portal and also Technical Support to planning section as directed by CPO, ZP.

Geographical Features:

Bangalore Urban District is located in the South-Eastern corner of Karnataka State. The Bangalore urban district comprises of four taluks and within it lies the Bangalore city -the capital of Karnataka. It is the central point for running the state administration and is now known as Grater Bengaluru (GBA). Bangalore is the sixth largest city of India and one of the fastest growing cities of Asia. It has acquired the name of _Silicon City||, due to its progressive trend in Information technology Now, after the IT boom, Bangalore city has suddenly overgrown its size and the district administration is facing a challenging task for providing necessary infrastructures to the related economic activities, trade, commerce and housing facilities. Especially, the enormous pressure on water particularly ground water in the district needs scientific planning and effective management of water resources.

It is having an aerial extent of 2190 sq.km and is located between the North latitude 12°39' 32"and 13°14' 13"and East longitude 77°19'44"and 77°50'13". The



district is bounded by Bangalore rural district in the East, West and North except in southeast, where the district is bounded by Dharmapuri district of Tamil Nadu state as shown in figure 3.1. The district is divided into 5 taluks namely Anekal, Bangalore North, Bangalore South, Bangalore East and Yalahanka taluks. There are 19 hoblies, 9 municipal corporation and 668 villages in the district. As per the 2011 census, total population of the district is 9588910 with population density of 4378 persons per sq.km compared to 2985 persons per sq.km in the year 2001. The sex ratio is 908 females among thousand males and the literacy rate of the district has increased from 83.91% on 2001 to 88.48 % in 2011.

> Topography:

Bengaluru lies in the southeast of the South Indian state of Karnataka in the heart of the Mysore Plateau (a region of the larger Deccan Plateau) at an average elevation of 900 m (2,953 ft). The city covers an area of 741 km2 (286 sq mi). The Bengaluru metropolitan region covers an area of 7,005 km2 (2,705 sq mi) across three districts–Bengaluru urban, Bengaluru rural and Ramanagara. The topography is generally flat, with the highest point at Doddabettahalli, located 962 m (3,156 ft) above sea level on a ridge on the western part of the city. Towards the south, the terrain is uneven, with small hills and rocks made of granite and gneiss.

Climate:

Bengaluru has a tropical savanna climate with distinct wet and dry seasons. Due to its high elevation, Bengaluru usually enjoys a more moderate climate throughout the year, although occasional heat waves can make summer somewhat uncomfortable. The dry season extends from December to February followed by the summer season from March to May. The monsoon brings most of the rainfall from June to September, followed by a post-monsoon season in October and November. April is the hottest month with an average high of 34.1 °C (93.4 °F), and January is the coolest month with an average low temperature of 15.1 °C (59.2 °F). The highest temperature ever recorded in Bengaluru was 39.2 °C (103 °F), recorded 24 April 2016, corresponding with the strong El Niño in that year. The lowest ever recorded is 7.8 °C (46 °F) in January 1884. Winter temperatures rarely drop below 14 °C (57 °F), and summer temperatures seldom exceed 36 °C (97 °F).

Bengaluru receives rainfall from both the northeast and the southwest monsoons, and the wettest months is September, followed by October and August. The summer heat is moderated by fairly frequent thunderstorms, which occasionally cause power outages and local flooding, such as in 2022. Most of the rainfall occurs during the late afternoon or evening and rain before noon is infrequent. The heaviest rainfall recorded in a 24-hour period is 179 mm (7 in) recorded on 1 October 1997.

> Natural Resources:

The soil in the city consists of red laterite and red, fine loamy to clayey soils. The vegetation in the eastern and northern parts consists of scrubs interspersed with various water bodies, and the southern hilly region consists of scrubs and forests. The city had a forest cover of 68.3% in the early 1970s, which reduced to less than 15% in the 2010s. Trees are frequently felled to pave way for infrastructure development. Though the city has been classified as a part of the seismic zone II (a stable zone), it has experienced earthquakes of magnitude as high as 4.5 on the Richter scale.

➤ Major Rivers/Water Sources:

There are no major rivers run in the city, though six rivers arise at the Nandi Hills, about 60 km (37 mi) to the north. The Vrishabhavathi, a tributary of Arkavathi flows through the city. Arkavathi, Dakshina Pinakini and its tributary Chinnar, and Suvarnamukhi rivers water the fringes of the city. Most of these rivers are polluted, and depleted due to sewage from the city. Kaveri runs towards the southwest of the city, the water from which is used to cater to majority of the water requirements of the city. The city has a considerable number of freshwater lakes and water tanks, most of which are seasonal and rain-fed. The city had 265 lakes in the 1960s, which shrunk to 98 by the late 2010s, and most of the city's lakes are polluted the government began revival and conservation efforts in 2020. Groundwater occurs in silty to sandy layers of the alluvial sediments, and are extracted through open wells.

Spatial and Non-Spatial Data available in District NRDMS Centre:

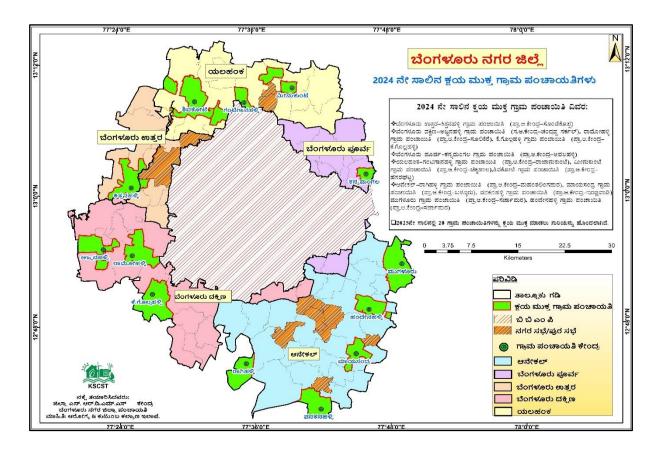
Status of database - Spatial and non-spatial

- ❖ Natural Resources (Drainage, Waterbody, Geology, Soil etc.)
- ❖ Administrative Boundary (District, Taluk, Hobli, GP, Village, etc.)
- Constituency Boundary (LAC, PC)
- Thematic (Agro-climatic, Geomorphology, Soil, LULC, Slope, Lithology, Groundwater etc.)
- ❖ Headquarters (District, Taluk, Hobli, Village Settlements, TP, ZP etc.)
- Watershed (Basin, Catchment, Sub-catchment, Watershed, Sub-watershed, Micro-watershed)
- ❖ Infrastructure (Health, Hostels, Transportation, Education, Anganwadi etc.)

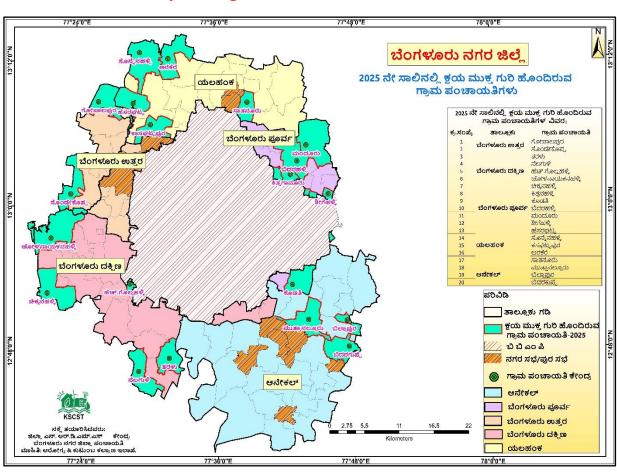
NRDMS Centre Activities (April to July -2025):

Geo-Spatial one workshop done by KSCST during the month of March, the Health and Family welfare Department approached NRDMS Centre and the centre prepared TB (Tuberculosis) free Grama Panchayat's in 2024 and TB free targeted Grama Panachayat's in 2025 of Bengaluru Urban District.

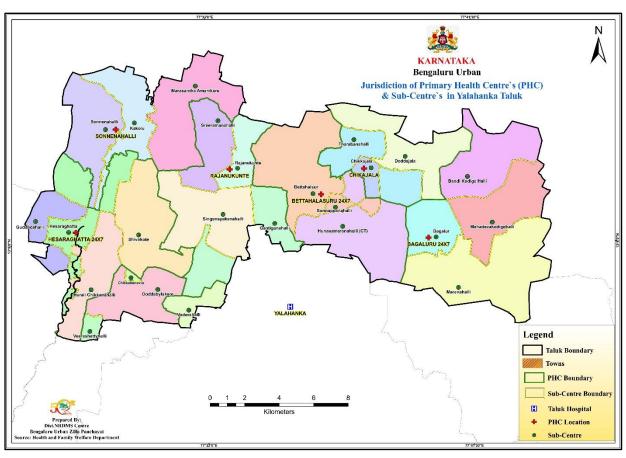
TB free Grama Panchayat's in 2024

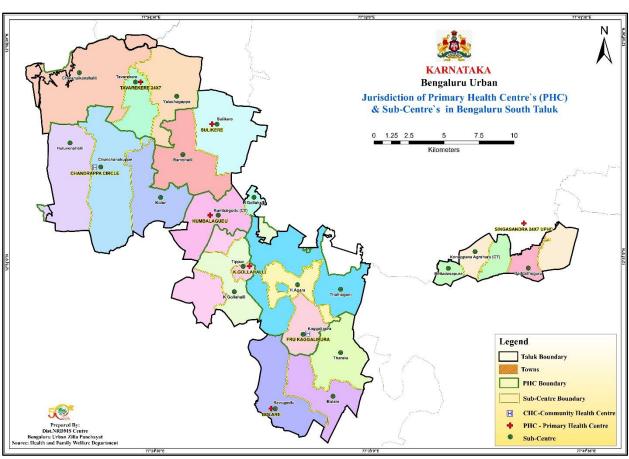


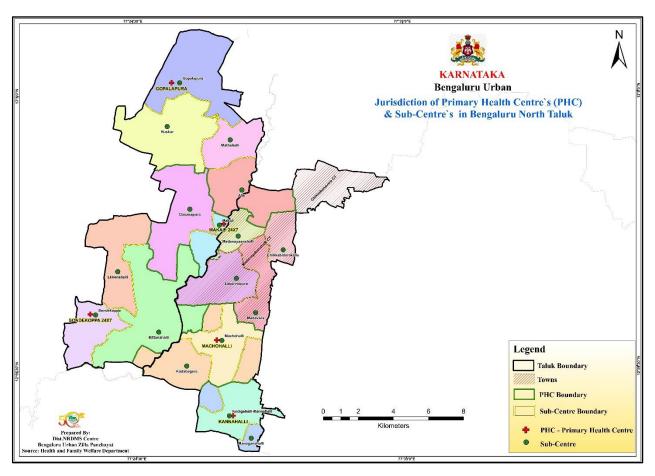
TB free Grama Panchayat's target in 2025

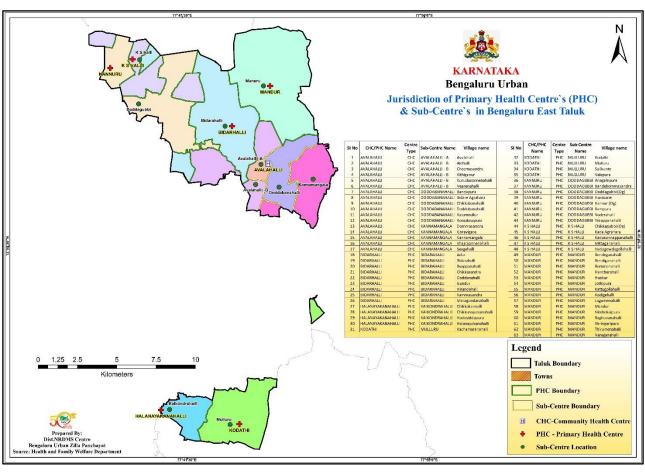


Jurisdiction of Primary Health Centre (PHC) & Sub-Centres in Bengaluru Urban District









Training Programme Attended:

During the Month of June-2025 Attended Following Training: -

- a) one-day training program on the Karnataka State Action Plan on Climate Change (KSAPCC), held on 06-06-2025 at the Taluk Panchayat Conference Hall, Bengaluru Urban. The program was organized by the Environmental Management and Policy Research Institute (EMPRI) in association with the Karnataka State Council for Science and Technology (KSCST).
- b) one-day training program on the Karnataka State Action Plan on Climate Change (KSAPCC), held on 20-06-2025 at the Zilla Panchayat Conference Hall, Bengaluru Rural. The program was organized by the Environmental Management and Policy Research Institute (EMPRI) in association with the Karnataka State Council for Science and Technology (KSCST).

Conclusion:

The District NRDMS Supporting all line departments, Zilla Panchayat, Planning Section with GIS tools for Planning District development activities using GIS tool. The centre also handling Following works:

- a) KGIS Road side Plantation Portal
- b) Supporting to MGNREGA Section to Prepare GIS Based Grama Panchayat Action Plans.
- c) Technical Support to Planning Section Handling Avalokana, Monitoring IPAAP, PAI Portal, and SS-Yojana Draft Plan Portal.