

NATURAL RESOURCES DATA MANAGEMENT SYSTEM (NRDMS)

MONTHLY ACTIVITY REPORT

April - July 2025

Submitted by

**District NRDMS Centre
Zilla Panchayat, Uttara Kannada**



Submitted to

**Karnataka State Council of
Science and Technology (KSCST)**

**Indian Institute of Science Campus,
Bengaluru - 560012**

1. Cover Page

- **Title:** District Technical Report – Uttara Kannada District Technical Report
- **Period of Reporting:** April - July 2025
- **Submitted by:** Uttara Kannada NRDMS District Centre
- **Date of Submission:** 30-8-2025

2. Basic Information of the District

- **District Name:** Uttara Kannada District
- **Division:** Belagavi
- **District Establishment Year:** 1993-1994
- **Headquarters:** [Insert Headquarters City/Town]
- **Current CPO (Chief Planning Officer):** Shri Someshekar Mesta, District Statistical Officer and In charge District Planning officer, ZP Uttara Kannada District
- **Current CEO (Chief Executive Officer, Zilla Panchayat):** Dr. Dileesh Sasi, I.A.S

3. NRDMS Background of the District

The Uttara Kannada district NRDMS Centre was established in the year 1993-94 at Dr A.V. Baliga College of Arts and Science at Kumta, 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 polling personnel and materials as required by DC to be submitted to Election commission and Observers.
- Preparation of updated maps on Rainfall, Crops, Ground water table in comparison with previous years and Drinking water facilities as required by District administration.

- Digitization and creation of Contours on 1:50,000 scale based on SOI toposheets as per directions of DST, GOI.
- Updation of data on Infrastructure facilities like drinking water, schools, medical facilities, rain fall, water quality, ground water and other details of the district.
- Preparation of HIV infected and other maps related to AIDS for the department DAPC.
- Assisting Planning section of Zilla Panchayath in preparing maps for Draft Action Plan report, Total Sanitation Campaign (Project of GOI).
- Preparation of MI Tanks location maps for Chief Planning officer, Zilla panchayath..
- Preparation of 198 ward maps of Bruhat Bangalore Mahanagara Palike of Bangalore Urban District.
- Preparation of updated **TP and ZP constituency maps for ZP/TP election** and submitted to CEO, ZP, Bangalore Urban district.
- Preparation of Data Dictionary of Bangalore district NRDMS Centre as per the direction of the Executive Secretary, KSCST, Bangalore during July'2012.
- Data Updation on Schools/Anganwadi's, Rainfall, PHCs as instructed by the Chief Planning Officer, Zilla panchayath, Bangalore Urban district.
- Technical assistance provided to ZP/TP/GP in preparing various spatial maps related to the district

4. Geographical Features

- **Location & Boundaries:**

- Uttara Kannada district is situated in the north-western sector of the State and is bounded by the Arabian sea on its west. Covering an expansive area of 10,291 square kilometres this district lies between the latitudinal parallels of 13°55'N and 15°31'N and the longitudinal parallels of 74°03'E and 75°05'E. From north to south and from east to west the district spans a distance of 328 Km and 160 Km respectively. The southern-most portion of the district is only 10 Km wide and the district bulges out mainly towards the east as one moves north. After crossing the mid middle zone the eastern boundary line turns west and proceeds in an irregular manner towards the north-west. The western boundary line on the other hand follows the coast in the north by north west direction and after reaching the mid-zone turns east and proceeds in a north by north-easterly direction describing an arc. Thus the district is seen to be of an irregular shape.
- District is bounded on the north-west by the Goa State, on the north by Belgaum district; on the north-east and east (upper half) by Dharwad district; on the east (lower half) and south-east by Shimoga district and on its southern tip by Dakshin Kannada district. Western boundary ends at 12 nautical miles in Arabian sea.
- Uttara Kannada District is included in Belgaum Division which is one of the four Revenue Divisions into which the State is organised. This district consists of 12 taluks which are Karwar, Ankola, Kumta, Honnavar, Bhatkal, Supa, Dandeli, Yellapur, Sirsi, Siddapur, Haliyal and Mundgod as mentioned, grouped into three revenue sub-divisions with headquarters at Karwar, Kumta and Sirsi. The District Headquarters located in Karwar. The number

of villages in the district is 1289 according to 2011 Census and it distributed in 35 Hoblis and 229 Grama panchayaths. During the decade 2020-25 the external boundaries of the district have remained unchanged. There have not been changes in the boundaries of various taluks and villages as well. Same thing cannot be said about the towns, for during this period new municipalities have been constituted and the boundaries of a few existing towns have been altered. The total no of Urban Local Bodies are 13Nos.

In broad terms it may be observed that the taluks of Ankola, Karwar, Kumta, Honavar and Bhatkal have long stretches of coastal strips besides large areas of the low and rising hilly tracts; the central and western belts of the taluks of Dandeli, Siddapur and Sirsi and almost the entire Supa taluk consist of a hilly terrain; the taluks of Haliyal, Mundgod and Yellapur besides the eastern zones of Siddapur and Sirsi have undulating plains.

- **Geographical Coordinates:**

- Latitude: 13°55'N and 15°31'N
- Longitude: 74°03'E and 75°05'E

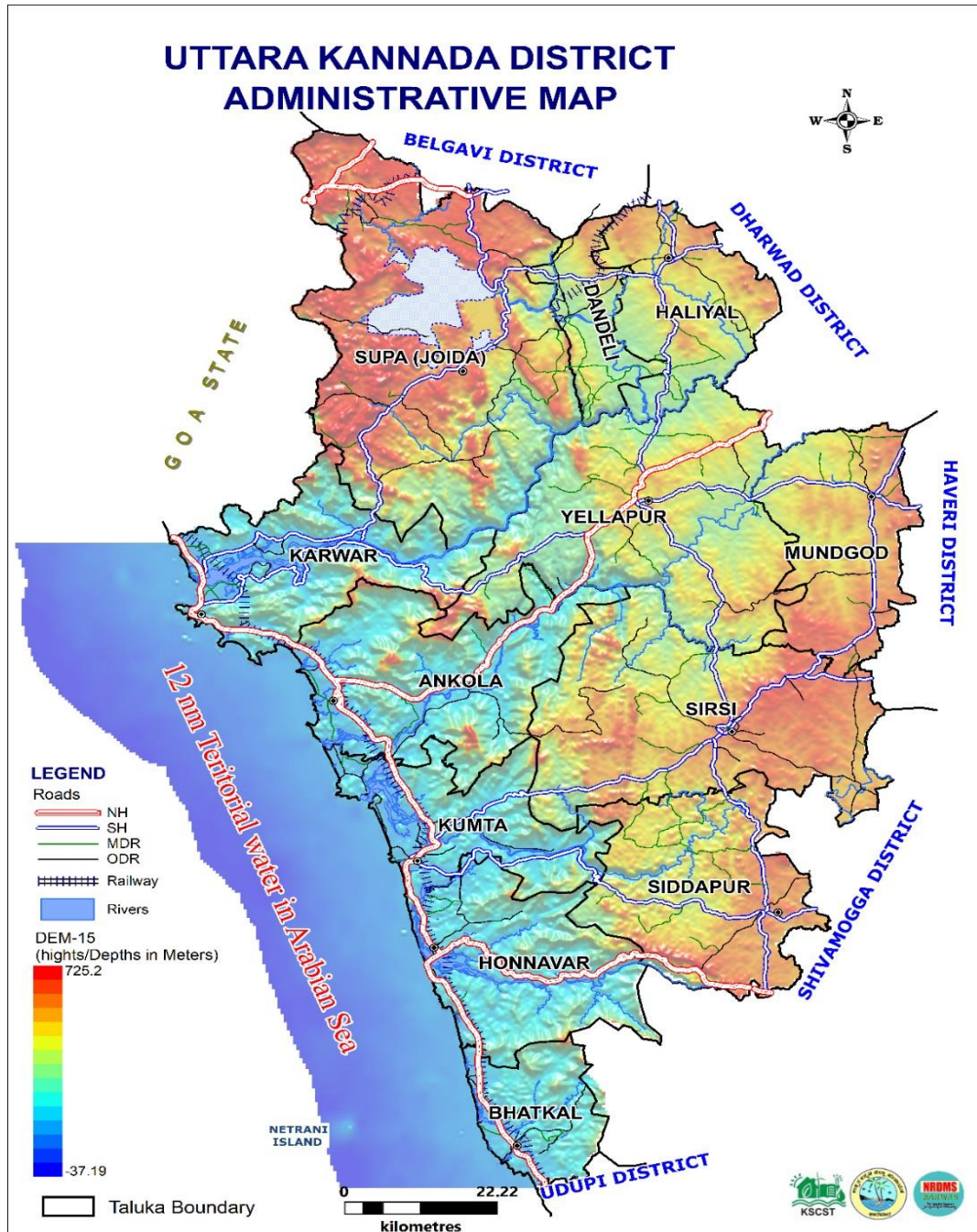
- **Topography:**

- Topographically the district can be divided into three distinct zones the coastal belt which is nothing but a succession of estuarine plains connected by narrow coastal strips; the central belt consisting of the hills and valleys of the Sahyadri range and the eastern table land. Broadly speaking the district can be categorised as essentially an upland, that is a hilly malnad. More than 75 per cent of the lands of this district belongs to this category. The eastern belt consists of a narrow transition zone of undulating lands and vast stretches of plains as one moves further eastwards. By and large the district is hilly in terrain and is covered by thick vegetation including some of the most magnificent forests. Geologically, the rock formations of this district belong to a most ancient period of earth's history and consist of archaean complex the oldest rock of the earth's crust. The rock formation is characterised by a system of ridges and a plateau on the west descending rapidly into a narrow strip of low lands covered by alluvial rocks. The archaean granites and gneisses are capped by laterite at several places.

As regards the hill peaks, it may be noted that Darshanigudda (915 m. MSL) The other prominent peaks are Kaltigudda (763 m), Bhedsgave (763 m) Gudehalli (549 m) and Nishanigudda (457 m) besides the smaller peaks of Shirve-gudda, Hukali, Mavinagundi and Motigudda. Gudehalli and Kaltigudda have been recognised.

Kali, Bedthi, Aghanashini and Sharavati are the principal west flowing rivers of the district. Besides these major rivers there are several streams and rivulets which are known after the villages near which they traverse.

Uttara Kannada having approximately 144 km of Coastal line and it is about to recalculate by adding several Islands falling within 12 nautical mile Territorial waters.



- **Climate:**

- **Average Rainfall:** [Insert Average Rainfall Data] The district receives an average rainfall of 2936 mm per annum. In the matter of rainfall Uttar Kannad is quite fortunate and is blessed by the presence of the western ghats. It does not suffer from any large scale variations in the amount of rainfall from year to year. Its location on the sea coast has however rendered it vulnerable to the havoc occasionally caused by the depressions and the cyclonic storms that are formed in the Arabian sea and the Indian ocean.

- **Temperature Range:** The climate of Uttara Kannada district is fairly well balanced. The average temperature is around 33 degree Celsius during summer and 20 degree Celsius during winter.
- **Climatic Zones:** The year may be divided into 4 seasons The summer season lasts from March to May and is marked by the rising temperature. From June to September, which marks the monsoon or the wet season, The months of October and November mark the retreating monsoon these two months as the most pleasant months of the year. Winter season sets in during December and lasts till the end of February. During this period the weather is dry with a clear bright sky and an agreeably low temperature as well as humidity.

- **Natural Resources:**

- **Forests :** Uttar Kannad district is very rich in forest wealth and about 81 per cent of its total geographical area stands classified as forests. The slopes of the western ghats and the lofty peaks as well are clothed with dense vegetation stimulated by heavy to very heavy rainfall and the fertile soils. The forests of the district can be categorised into the evergreen and the semievergreen which are rich in soft wood and packing-timber yielding trees, the moist deciduous which are rich in teak, rose wood, honne and other timbers the scrub jungle containing sandal wood trees among other species of tree growth and lastly the unwooded or sparsely wooded forests. There are reserved forests, plantations, protected forests and village forests. In the matter of forest wealth, Uttar Kannad happens to be the richest among the 31 districts of the State. The fauna of the district is also rich and varied. 5 wild life protected area and one Marine protected area (MPA), One Ramsar Site, one Blue flag certified beach and several PAN India beaches. The wild animals found here include the tiger, cheeta, bison, elephant, sambar, barking deer, Wolves, Dolphins, Sea turtles, Corals etc., The district is also noted for the marine and inland fishing activities and the variegated nature of its fish wealth.
- **NTFP Products:** Uttara Kannada district rich in Non Timber Forest Product variety of edible and non edible wild fruits, bark, seed, leaves, aril, roots, latex, resins and flowers are collected by locals. Major NTFP are Sheegeikai, Neerateberu, Vatehuli, Maddidhup, Dalchinni, Uppage, Murugalu, Jenu, Jaikai, Rampatre, Nelli, Ekanayaka, Antuvala, Nerale, Anale, Jumminkai etc
- **Minerals:** Uttar Kannad district is quite rich in mineral wealth. Iron and manganese are the major items while limestone, quartz, bauxite, silica, lime shells, sand and clay are the other important minerals.

- *Soil:* The soils of the district may be divided into two clear cut zones based on topography: the coastal alluvial soils and the upghat lateritic and granitic soils. Mixed laterites and traps are found in the taluks of Supa, Haliyal and Mundgod which contain certain patches of black cotton soils as well. The lateritic soils are highly leached, reddish brown in colour, shallow to medium in depth and loamy in texture, These soils are met with in the taluks of Karwar, Kumta, Honavar, Bhatkal, Sirsi and Siddapur. Red loamy soils are also found to some extent in the taluks of Supa, Mundgod and Haliyal, Red sandy loams are poor in bases and are well drained, being poor in moisture retaining capacity. Such soils are found in the taluks of Sirsi, Yellapur, Karwar and Ankola.
- *Gazni Lands:* In the coastal taluks there are numerous patches of gazni lands which contain a saline soil of light yellow or brownish colour. These lands are not quite suitable for cultivation even though the farmers have for long been accustomed to raise a crop of paddy of a particular variety in such fields also. The land also utilised for shellfish and finfish farming.
- *Marine Resources:* As per Marine fishery Census 47 village demarcated as Marine fishing villages. 583 mechanised fishing boats operating in the district.
- **Major Rivers/Water Sources:**
 - Major rivers: Kali, Bedthi, Aghanashini and Sharavati are the principal west flowing rivers of the district. Besides these major rivers there are several streams and rivulets which are known after the villages near which they traverse.
 - Major Streams : Pandri (Ujli) Diggi hole or the Kari (the Black) hole Thattihalla stream, Nuji stream, Kaneri halla, Vaki halla. Sonda Hole, Bene-halla It flows in a north westerly direction and receives Haridra-vati and Yenne hole. Gunbal Hole, Baskeri Halla, Swarna or Badgagani river, Ventapur River.
 - Major Esturies: Kali estuary, Gangavali estuary, Aghanashini Estury, Sharavathi Estuarine complex, Ventapur Estuary
 - Major Creeks: Kumta creek, Bhatkal creek, Arga creeks, Kodar creek, Belke creek, Hattikeri creek, Belikeri creek, Belmber creek, Keni Creek, Mavalli creek etc.
 - Major reservoirs: Supa Dam, Kadra Dam, Bommanalli Dam, Kodashalli Dam, Tattihalla Dam, Gersoppa Dam, Kadvinkatte Dam, Dharma Dam, Attiveri Dam, Sanavalli Dam, Nysargi Dam, Chigalli Dam etc.

5. NRDMS Spatial and Non-Spatial Data available in District NRDMS Centre

Non-Spatial Data	Spatial Data
<i>Natural Resources</i>	<u>Spatial Data- 1:50,000</u>
	Administrative boundaries

Lithology, Rock Features, Land, Geology, Mineral, Wasteland, Soil, Forest, Water, Drainage, Water body, Rivers, Rainfall & Climate.

Demography: 2011, 2001 Census details,

Agro economy : Land utilization, Crops

Socio Economy: Industries details

Infrastructure: Roads, Rail, electricity, Fisheries, Hostels, Banks, Drinking Water, Health, Library, Veterinary, Education, Tourism, Electricity, Vehicle Census, Fishery census, Anganawadies.

Miscellaneous: Administration, Election Details, Police station Details, Fire stations, Coastal Police etc

- District, Taluk, Hobli, GP, ZPC, TPC, LAC, PC, Village Boundaries & settlements
- Natural Resources
- Topography – contour, slope
- Land use/Land cover
- Soil
- Wasteland
- Forest, Geology, Geomorphology, Lineaments
- Surface Water bodies – Rivers, Reservoirs, Anicuts, Drains, MI Tanks
- Basin, catchment, watershed, command area boundaries

Infrastructure Facilities

- Roads, Rail
- Post & telegraph, Hospitals, Schools, Drinking water facilities, AHVS, Hostels, libraries
- Forest administration (Range, Section, Beat) Sanctuary, MPA
- Fishery
- Islands
- CRZ Boundary
- Port limits and Ports
- Tourism
- DEM

6. NRDMS Centre Activities (April 2025 – July 2025)

- Katgal PHC Map submitted to PHC Katgal
- Nagoda GP, Joida KML correction work
- Rani Yele and Queen pepper GI Tag documentation
- GI Tag Field work
- Kaiga Project 16 km buffer Mapping: **GPs, Village**
- Kaiga Project 16 km buffer Mapping: **Roads and waterbodies**
- Kaiga Project 16 km buffer Mapping: **Ankola Taluk & Karwar Taluk**
- Kaiga Project 16 km buffer Mapping: **Joida taluk & Yellapur Taluk**
- Prepared and submitted Chitakula PS limit crime map
- Updated and submitted Chitakula PS limit map in Kannada fonts
- Prepared Chitakula Left and Right side Police Beat Map

- Prepared Ghadsai Police Beat Map
- Prepared Asnoti Police Beat Map
- Prepared Mudgeri Police Beat Map
- Prepared Majali Left and Right-side Police Beat Map
- Karwar taluka Poling station and Booths Modification work
- Ankola taluka Poling station and Booths Modification work
- Prepare maps for Rural Science Center Bhairumbe sirsi
- Information on Haliya constituency to KSCST SC-ST cell
- Prepared SC-ST population distribution map of Haliya constituency
- Prepared district administrative map for DC office
- Prepared District Territorial waters boundary map
- Prepared district DEM map for DC office
- Polling station data updating

7. Training Programmes Attended (April 2025 – July 2025)

- *Attended online KSCST Golden Jubilee year 2025: Webinar on “Intellectual Property Rights on 26-4-2025*
- Participated One-day State-Level Workshop on GIS for District-level Officials at KSCST, Bangalore on 28-04-2025
- K-GIS Training at Bangalore (Roadside Plantation) on 09-5-2025
- Participated in KSCST organized webinar on “Empowering a Sustainable Tomorrow Through Innovation” on 14-5-2025
- Attended Link document and Action plan 2025-26 review Training on 26-5-2025
- Attended the webinar on “Climate Change and Sustainable development”, organized by KSCST on 16-7-2025

8. Training Imparted to Line Departments (April 2025 – July 2025)

- Yuktdhara Training workshop at Kumta on 05-04-2025
- Yuktdhara Training workshop at Yellapur on 07-04-2025
- Attended Rani Pepper - Discussion on FCR and GI Tag@ Google Meet on 11-04-2025
- Participated in 3 day workshop as resource person on Preparation of Management Plan For Aghanashini Estuary Ramsar Site, Kumta from 19th to 21st-May-2025
- Newly appointed Village ADM officer Training on Geospatial Tech

9. Science Outreach Activities

- [No outreach activities in **April 2025 – July 2025**]

10. Conclusion

- **Summary of Activities and Key Findings:**
 - -
- **Commitment to Improve NRDMS Activities:**

- Marine resource data management
- Coastal Natural resource data management
- GP level Data collection.
- Island data collection

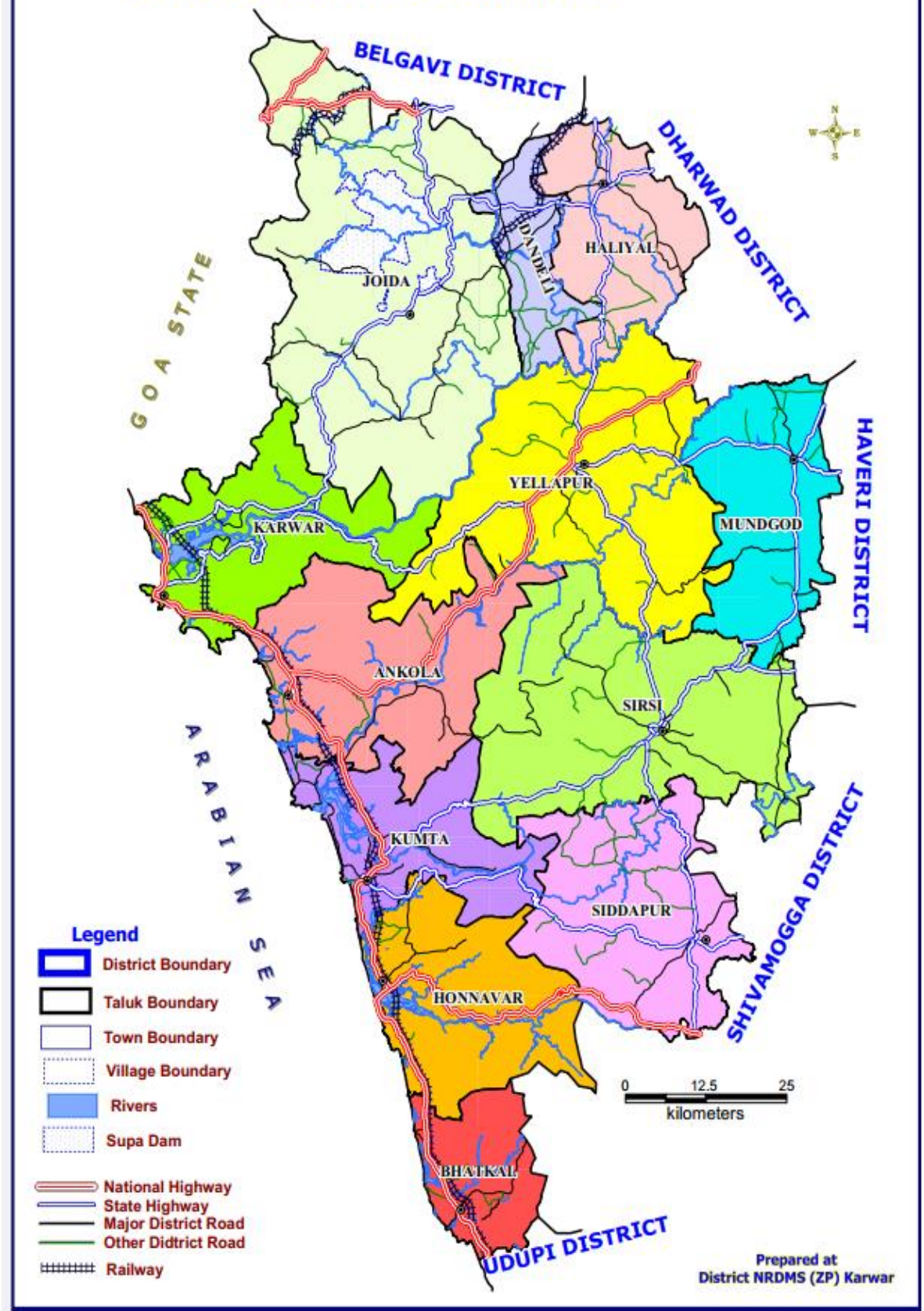
Needs: Printer, Scanner, Laptop, DGPS

11. Annexures

- **District Maps: (April 2025 – July 2025)**
attached

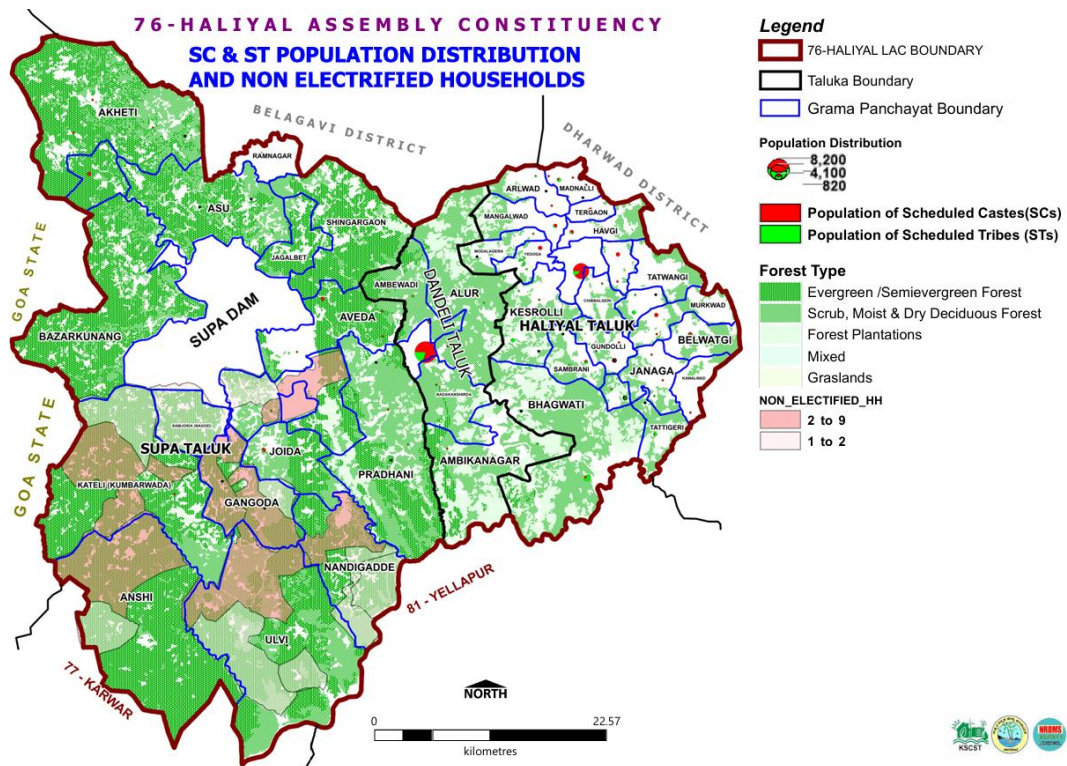
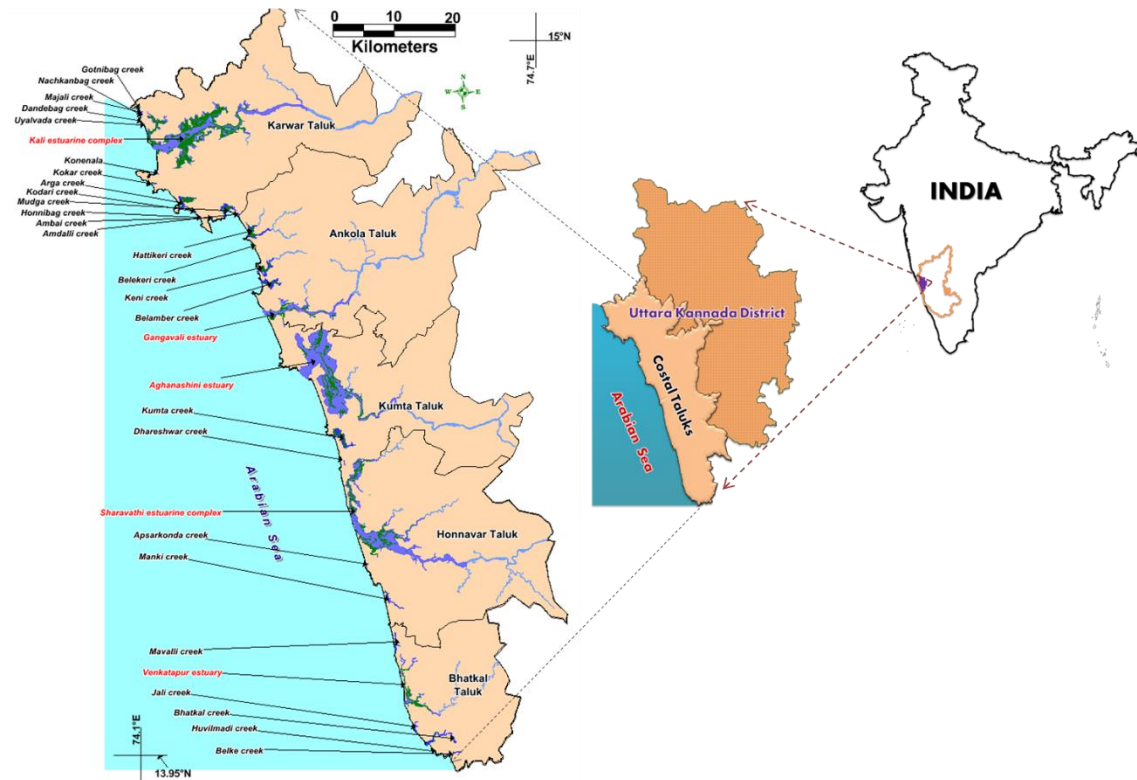
- [List or describe the maps included, e.g., Administrative Map, Thematic Maps related to NRDMS activities.]
- District maps (administrative, thematic, etc.).
- Tables of collected datasets.
- Photographs of events/field visits.
- Any additional documents.

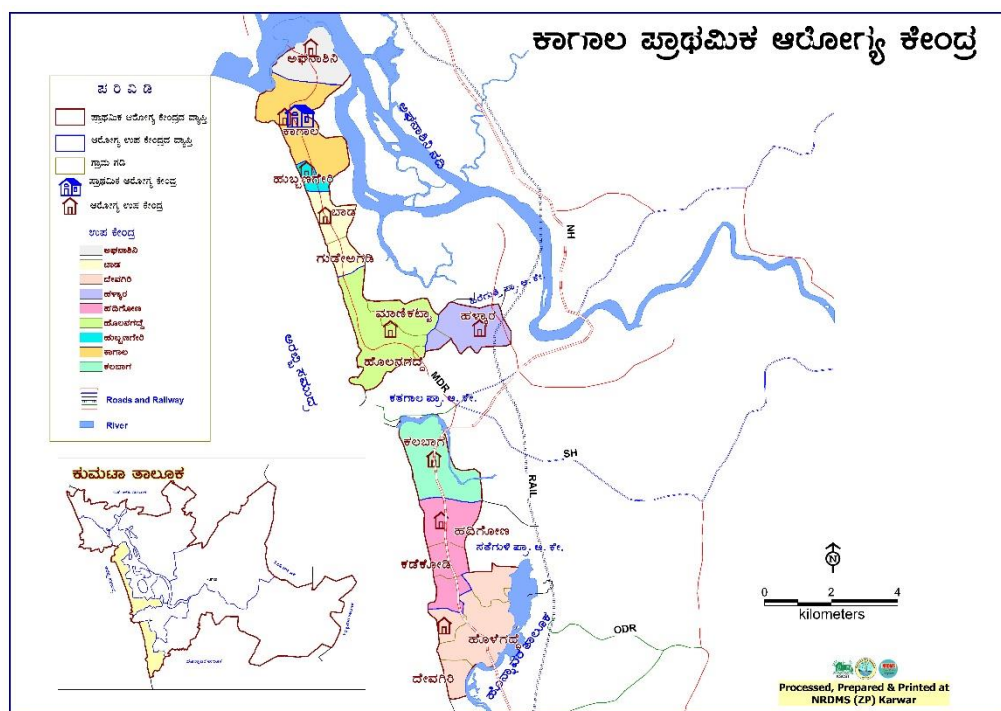
UTTARA KANNADA DISTRICT



Thematic Maps (April 2025 – July 2025)

Map showing Estuaries and Creeks of Uttara Kannada Districts





Kaiga Atomic Power plant 16 km radius Map showing Grama Panchayat & Health services

