

# **NATURAL RESOURCES DATA MANAGEMENT SYSTEM (NRDMS)**

## **MONTHLY ACTIVITY REPORT**

**April - July 2025**

**Submitted by**  
**District NRDMS Centre**  
**Zilla Panchayat,**



**Shivamogga**

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

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

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## 1. Basic Information of the District

1. **District Name** : Shivamogga
2. **Division** : Bengaluru
3. **District Establishment Year** : 1995
4. **Headquarters** : Shivamogga City
5. **Chief Planning Officer** : Sri. Hanuma Naik.
6. **Chief Executive Officer** : Sri. N. Hemanth

## 2. NRDMS Background of the District

The NRDMS Centre for Shivamogga district was established during the month of June 1995 at Office of the Deputy Commissioner, Shivamogga with financial support from Department of Science and Technology, Govt. of India Implemented by KSCST, 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. As per the G.O. of Govt. of Karnataka, the centre was shifted to Zilla panchayath premises and been functioning at office of the Zilla panchayath since June 2002.

## 3. Geographical Features

### • Locations and Boundaries :

Shivamogga district is located in the Malnad region of Karnataka, India, between 13°27' and 14°39' N latitude and 74°38' and 76°04' E longitude, and it is bordered by the districts of Haveri, Davanagere, Chikmagalur, Udupi, and Uttara Kannada. The region is known for its scenic beauty, lush green forests, and the presence of the Sahyadri ghats and major rivers like the Sharavathi and Tunga.

### • Geographical Coordinates

- **Latitude** : 13°27' and 14°39' N
- **Longitude** : 74°38' and 76°04' E
- **Altitude**: At a mean altitude of approximately 640 meters (2,100 feet) above sea level.

### • Topography:

Shivamogga district in Karnataka is characterized by diverse topography, including parts of the Western Ghats, with altitudes ranging from -70 meters to 2674 meters above sea level. The district features both mountainous regions with high rainfall and drier plateau areas, leading to a mix of vegetation and agricultural patterns.



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- **Climate :**

Shivamogga district has a tropical wet and dry climate. The district experiences a rainy season from June to October, with the majority of rainfall occurring during this period. Temperatures typically range from 20°C to 35°C (68°F to 95°F). The region is also known for its lush forests, scenic beauty, and cool climate, particularly after rainfall.

- **Natural resources :**

Shivamogga district boasts a variety of natural resources, including minerals, forests, and fertile agricultural land. The district is known for its rich mineral deposits, including building granite, laterite, and minor quantities of quartz, dolerite, and lime shell. Forests cover a significant portion of the district, providing valuable timber like teak, rosewood, and sandalwood, as well as fruits like tamarind, mango, and jackfruit. The district's fertile soil and abundant rainfall support diverse agricultural activities, including paddy, arecanut, pepper, and sugarcane cultivation.

- **Major rivers and Watersources :**

The Shivamogga district's major rivers include the Tunga, Bhadra, and Sharavati (which forms Jog Falls), along with Varada, Kumadvathi, and Chakra rivers. Significant water sources also include dams such as the Linganamakki Dam on the Sharavati River and the Gajanur Dam on the Tunga River. The district is located in the Western Ghats, a region known for its high rainfall and numerous streams and waterfalls.

#### 4. SPATIAL AND NONSPATIAL DATABASE

**Status Code : Meaning**

CC	: Computerised.
ND	: Not Digitized
NA	: Not Procured
NR	: Not Relevant
NF	: Not Finalised

Name	: Shankara P
Name of the District Centre:	Shivamogga
Database status as on date	: June 2025
Year of Establishment	: 1992

#### SPATIAL DATABASE

Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covered	Status Code
<b>1. Natural Resources</b>					
<b>Land</b>					
1. Topography					
Contour Map					NR
Slope Map	1:50,000	SOI	2009	District	CC
2. Geology – A					
Rock features	1:50000	MGD	NA	District	CC
Structural features	1:50000	MGD	NA	District	CC

3. Geology – B					
Rock features	1:50000	MGD	NA	District	CC
Structural features	1:50000	MGD	NA	District	CC
4. Mineral Resources	1:250000	MGD	NA	District	CC
5. Geomorphology	1:50,000	MGD	NA	District	CC
6. Land use	1:50000	KRSAC	NA	District	CC
7. Waste Lands	1:50000	KRSAC	NA	District	CC
8. Soils	1:50000	NBSS&L UP	NA	District	CC
9. Forest & Wildlife					
Forest type	1:250,000	KFD	2012	District	CC
Crown Density					ND
Forest Category	1:250,000	KFD	2012	District	CC
Forest admn.	1:250,000	SOI	2012	District	CC
Wild Life					ND

<b>Water</b>						
1. Ground water						
Hydro Geology	1:50000	MGD	NA	District	CC	Shp
Hydro chemistry					ND	
Ground water budget					ND	
2. Surface water						
Drainage	1:50000	MGD	NA	District	CC	Shp
Surface water bodies		SOI & KRSAC	NA	District	CC	Shp
<b>3. Climate</b>						
Agro Climatic	1:50000	KRSAC	2022	District	CC	Shp

Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covered	Status Code	File Format
<b>2. Demography</b>						

<b>Population</b>						
Tehsil boundary	1:50000	SOI	2022	District	CC	Shp
District boundary	1:50000	SOI	2022	District	CC	Shp
Current popln. distbn.	1:50000	Census	2011	District	CC	Shp
<b>Literacy</b>						
Levels of education	1:50000	DDPI	2022	District	CC	Shp
<b>Occupation</b>						
Village boundary	1:50000	KSRSAC	2022	District	CC	Shp
<b>Employment</b>						
District scenario					NA	
Employment exchange					NA	
<b>Assets &amp; Expenditure</b>					NA	
<b>Migration</b>					NA	
<b>Destitutes</b>					NA	

<b>3.Socio Economy</b>						<b>File Format</b>
<b>Industry</b>	1:50000	DIC	2025	District	CC	Shp
<b>Developmental activity</b>	1:50000	DIC	2022	District	CC	Shp
<b>4.Agro Economy</b>						
<b>Land Utilisation</b>						
Private Land					NA	
Common property					NA	
LULC	1:50000	KSRSAC	2022	District	CC	Shp
<b>Land Ownership pattern</b>						
General scenario					NA	
Farmer's holdings					NA	
<b>Principal crops</b>	1:50000	Census	2011	District	CC	Shp
<b>Irrigation</b>						
<i>Minor irrigation</i>						
Canals	1:50000	DLR & SS	NA	District	CC	Shp
Tube wells	1:50000	DLR & SS	NA	District	CC	Shp
Dug wells	1:50000	DLR & SS	NA	District	CC	Shp

Tanks	1:50000	DLR & SS	NA	District	CC	Shp
Lift irrigation	1:50000	DLR & SS	NA	District	NA	
<i>Major irrigation</i>						
Reservoirs	1:50000	DLR & SS	NA	District	CC	Shp
Anicuts	1:50000	DLR & SS	NA	District	CC	Shp
<b>Agricultural implements</b>						
<b>Animal husbandry</b>	1:50000	AHVS	2024	District	CC	Shp
<b>Pisciculture</b>	1:50000	Fisheries Dept	2024	District	CC	Shp
<b>Plantation/LULC</b>	1:50000	Horticulture	2024	District	CC	Shp
<b>Sector / Subsector</b>	<b>Scale</b>	<b>Source</b>	<b>Survey / Publn. Year</b>	<b>Area covered</b>	<b>Status Code</b>	<b>File Format</b>
<b>5. Infrastructure</b>						
<b>Communications</b>						
Post offices	1:50000	DLR& SS	2024	District	CC	Shp
Telecommunication	1:50000	DLR& SS	2024	District	CC	Shp
<b>Drinking water</b>	1:50000	DLR& SS	2024	District	CC	Shp
<b>Educational facilities</b>	1:50000	DDPI	2024	District	CC	Shp
<b>Electricity</b>	1:50000	Census 2011	2024	District	CC	Shp
<b>Financial institutions</b>						NA
<b>Markets</b>	1:50000	DLR& SS	2024	District	CC	Shp
<b>Health</b>	1:50000	DHO	2024	District	CC	Shp

#### NON-SPATIAL DATABASE

Sector / Subsector	Source	Survey / Publn. Year	Area covered	Status Code	File Format
<b>1. Natural Resources</b>					
<i>Land</i>					
1. Topography					
Contour				NR	
Slope	KRSRAC	2022	District	CC	.dbf
2. Geology – A					



Rock Features	MGD	2022	District	CC	.dbf
Structural features					
3. Geology – B					
Rock features	MGD	2022	District	CC	.dbf
Structural features	MGD	2022	District	CC	.dbf
4. Mineral Resources	MGD	2022	District	CC	.dbf
5. Geomorphology	KSRSAC	2022	District	CC	.dbf
6. Land use	DAG	2023-24	District	CC	.doc
7. Waste Lands	DAG	2023-24	District	CC	.doc
8. Soils	NBSS & LUP	2022	District	CC	.dbf
9. Forest & Wildlife					
Forest type	Forest	2011	District	CC	.dbf
Crown Density				NA	
Forest Category				NA	
Forest admn.				NA	
Wild Life				NA	
<b>Water</b>					
Ground water					
Hydro Geology	MGD	2022	District	CC	.dbf
Hydro chemistry				NA	
Ground water budget				NA	
Surface water					
Drainage	KSRSAC	2022	District	CC	.dbf
Surface water bodies	KSRSAC	2022	District	CC	.dbf
<b>Climate</b>	IMD			NA	

<b>2. Demography</b>					<b>File Format</b>
<b>Population</b>					
Tehsil boundary	DAG	2023-24	District	CC	.doc
District boundary	DAG	2023-24	District	CC	.doc
Current popln. distbn.	DAG	2023-24	District	CC	.doc

<b>Literacy</b>					<b>File Format</b>
Levels of education	DAG	2023-24	District	CC	.doc
<b>Occupation</b>					
Village boundary	DES	2022	District	CC	.dbf
<b>Employment</b>					
District scenatio	DAG	2023-24	District	CC	.doc
Employment exchange	DAG	2023-24	District	CC	.doc
<b>Assets &amp; Expenditure</b>					
<b>Migration</b>					NA
<b>Destitutes</b>					NA

<b>3. Socio Economy</b>					<b>File Format</b>
<b>Industry</b>	DAG	2023-24	District	CC	.doc
<b>Developmental activity</b>	DAG	2023-24	District	CC	.doc

<b>4. Agro Economy</b>					<b>File Format</b>
<b>Land Utilisation</b>					
Private Land	DAG	2023-24	District	CC	.doc
Common property	DAG	2023-24	District	CC	.doc
<b>Land Ownership pattern</b>					
General scenario	DAG	2023-24	District	CC	.doc
Farmer's holdings	DAG	2023-24	District	CC	.doc
<b>Principal crops</b>	DAG	2023-24	District	CC	.doc
<b>Irrigation</b>					
<i>Minor irrigation</i>					
Canals	DAG	2023-24	District	CC	.doc
Tube wells	DAG	2023-24	District	CC	.doc
Dug wells	DAG	2023-24	District	CC	.doc
Tanks	DAG	2023-24	District	CC	.doc
Lift irrigation	DAG	2023-24	District	CC	.doc
<i>Major irrigation</i>					
Reservoirs	Census	2011	District	CC	.dbf

Anicuts	Census	2011	District	CC	.dbf
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<b>Agricultural implements</b>	DAG	2023-24	District	CC	.doc
<b>Animal husbandry</b>	DAG	2023-24	District	CC	.doc
<b>Pisciculture</b>	DAG	2023-24	District	CC	.doc
<b>Plantation</b>	DAG	2023-24	District	CC	.doc
<b>Horticulture</b>	DAG	2023-24	District	CC	.doc
<b>Sericulture</b>	DAG	2023-24	District	CC	.doc

<b>5. Infrastructure</b>					
<b>Communications</b>					
Post offices	DAG	2023-24	District	CC	.doc
Telecommunication	DAG	2023-24	District	CC	.doc
<b>Drinking water</b>	DAG	2023-24	District	CC	.doc
<b>Educational facilities</b>	DAG	2023-24	District	CC	.doc
<b>Electricity</b>	DAG	2023-24	District	CC	.doc
<b>Financial institutions</b>	DAG	2023-24	District	CC	.doc
<b>Markets</b>	DAG	2023-24	District	CC	.doc
<b>Health and family welfare services</b>	DAG	2023-24	District	CC	.doc
<b>NGO's</b>	DAG	2023-24	District	CC	.doc
<b>Tourism</b>	DAG	2023-24	District	CC	.doc
<b>Student Hostels</b>	DAG	2023-24	District	CC	.doc
<b>Banks</b>	DAG	2023-24	District	CC	.doc
<b>Co-operative Banks</b>	DAG	2023-24	District	CC	.doc
<b>Anganawadi</b>	DAG	2023-24	District	CC	.doc
<b>House hold toilets</b>	DAG	2023-24	District	CC	.doc
<b>Transport</b>					
Roads	DAG	2023-24	District	CC	.doc
Rail network	DAG	2023-24	District	CC	.doc
Air transport/HELIPAD	DAG	2023-24	District	CC	.doc
Vehicle census	DAG	2023-24	District	CC	.doc
Inland & coastal waterways				NR	

<b>Veterinary services</b>					
Veterinary facilities	DAG	2023-24	District	CC	.doc
Other veterinary serv.	DAG	2023-24	District	CC	.doc
Incidence of diseases	DAG	2023-24	District	CC	.doc

<b>Sector / Subsector</b>	<b>Source</b>	<b>Survey / Publn. Year</b>	<b>Area covered</b>	<b>Status Code</b>	<b>File Format</b>
<b>6. Miscellaneous</b>					
Administration	DC office	2024	District	CC	.dbf
Dt. &Subdivsns.	DC office	2024	District	CC	.dbf
Dt., with tehsils	ZP	2024	District	CC	.dbf
Dt., with panchayat	DC	2024	District	CC	.dbf
Tq., with census vil.	DC	2024	District	CC	.dbf
Prices & wages	DAG	2023-24	District	CC	.doc
Environment	DAG	2023-24	District	CC	.doc

## 5. NRDMS Centre Activities (APRIL2025 – JULY 2025)

- As primary objective of the NRDMS Project, the NRDMS Centre has created 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.
  - Prepared Brief report on Existing and Proposed PHCs in the District and Submitted to DHO, Shivamogga District.
  - On instructions of Chief Secretary, Govt. Karnataka and Commisioner, RDPR Department and Additional Principle Chief conservator of forest (Social Forestry and Planning), updated road Side plantations Details around 16,504 Kms of Roads in Shivamogga District in Dash Board Developed by KSRSAC with the co-ordination of Social forest Division to plan for "Hasiru Patha" Development implemented by Social Forestry Division, Shivamogga district.
  - Principal Secretary to Government, Department of Rural Development and Panchayat Raj (RDPR), Bengaluru have directed to prepare GIS mapping and submit to the department after getting the information of village panchayats (271), street lights (1,02,081) with switch point (10,677) and pump sets (3,910) in Shivamogga district. According to the guidance and instructions of the Deputy Secretaries (Development), the information of the users of village panchayat wise street lights with switch point and pump sets in the district was obtained and their Distribution in the District was geospatially mapped and submitted to the Principal Secretary, Rural Development and Panchayat Raj Department, Bangalore.
  - Prepared Brief report on "Dengue, Maleria and KFD" affected villages in Shivamogga District along with maps (by Comparing 2023-24 and 2024-25) by classifying Seriously affected, moderately affected and non-affected villages and submitted to District Health Officer, Shivamogga.
- 
- To establish new veterinary centers and upgrade existing veterinary centers based on livestock census under the Animal Husbandry Department in Shivamogga district Prepared Brief report on "Existing and Proposed veterinary facilities in Shivamogga District" and submitted to District veterinary Officer , Shivamogga district.
  - Assisted the Development section and Project Director Section of Z.P in preparing action plans under SBM, MGNREGA (Jalasanjeevini) and NRLM as directed by the Chief Executive Officer, Zilla Panchayath, Shivamogga.
  - As per the RDPR instructions, various Haadis in Shivamogga district were identified and mapped in order to provide various basic infrastructure facilities under the direction of the Chief Executive Officer, Shivamogga district.
  - Collected and updated S & T intervention Data, Communicable and Noncommunicable

Data bases under the direction of the Executing Secretary, KSCST, Bangalore.

- Conducted various training Programmes likes Jalasanjeevini, Jalamrutha, Water Budgeting, Geospatial based Action plans preparations etc to PDO and Taluk Level Officers as per the directions of CEO, ZP, Shivamogga.
- Prepared Brief Report on Prioritization of Villages Providing Per capita Drinking Water Supply as per the instructions of the Chief Executive Officer, Zilla Panchayat, Shivamogga.

## 6. Training Programmes Attended

- All ADPCs, DMIS, NRDMS and Master Trainers of the state participated in a video conference held through Zoom regarding the **Yuktadhara Portal** organized by the Department of Rural Development and Panchayat Raj
- On the instructions of the Chief Executive Officer, Zilla Panchayat, Shivamogga, 2-day training program on **District-Centric Disaster Management Plan** was organized by the Administrative Training Institute, Mysore at the District Training Center, Shivamogga.
- Actively participated in a workshop organized by KSCST Bangalore on the use of **GIS technology for district level planning**.
- On instructions of Joint director (Horticulture) , RDPR, Bangalore along with and Deputy Conservators of Forests participated in workshop on the use of **KGIS web portal software in the implementation of the Green Path** under the NREGA scheme for the year 2025-26 at KRSAC, Bengaluru.
- On instructions of the Executive Secretary, KSCST, Bengaluru attended Webinar on **“Empowering a Sustainable Tomorrow Through Innovation”** organised by KSCST, Bengaluru.
- On the instructions of the Chief Executive officer Zilla panchayat Shivamogga participated in a one-day workshop on the **Child Marriage Act-2006 and the POCSO Act-2012** held at Abdul Nazir Saab Hall, Zilla Panchayat, Shivamogga.
- On instructions of the Executive Secretary, KSCST, Bengaluru attended Webinar on **“Climate Change and Sustainable Development”** organised by KSCST, Bengaluru.

## 7. Training Imparted to Line Departments

- Training was provided to district level officers on climate change action plan preparation in collaboration with EMPRI, Bangalore and KSCST, Bangalore at MADB Shivamogga
- Training on dashboard developed by KSRAC Bangalore to develop greenways on roadsides passing through rural areas under mgnrega was provided to the staff of the Forest Department.
- On the instructions of the Honorable Chief Executive Officer, Zilla Panchayat, Shivamogga, training was provided to law students of Shivamogga district regarding the activities of the District NRDMS Centr. Shivamogga District.

## **8. Science Outreach Activities**

No science-related programs have been conducted in government schools in the district since KSCST, Bengaluru has not organized any science-related programs in the district from April 2025 to July 2025.

## **9. CONCLUSIONS**

- **Summary of Activities and Key findings :**

From April 2025 to July 2025, the NRDMS Center in Shivamogga district prepared scientific and analytical mapping reports for several departments in the district and assisted in the scientific implementation of several projects.

- **Commitment to improve NRDMS Activities :**

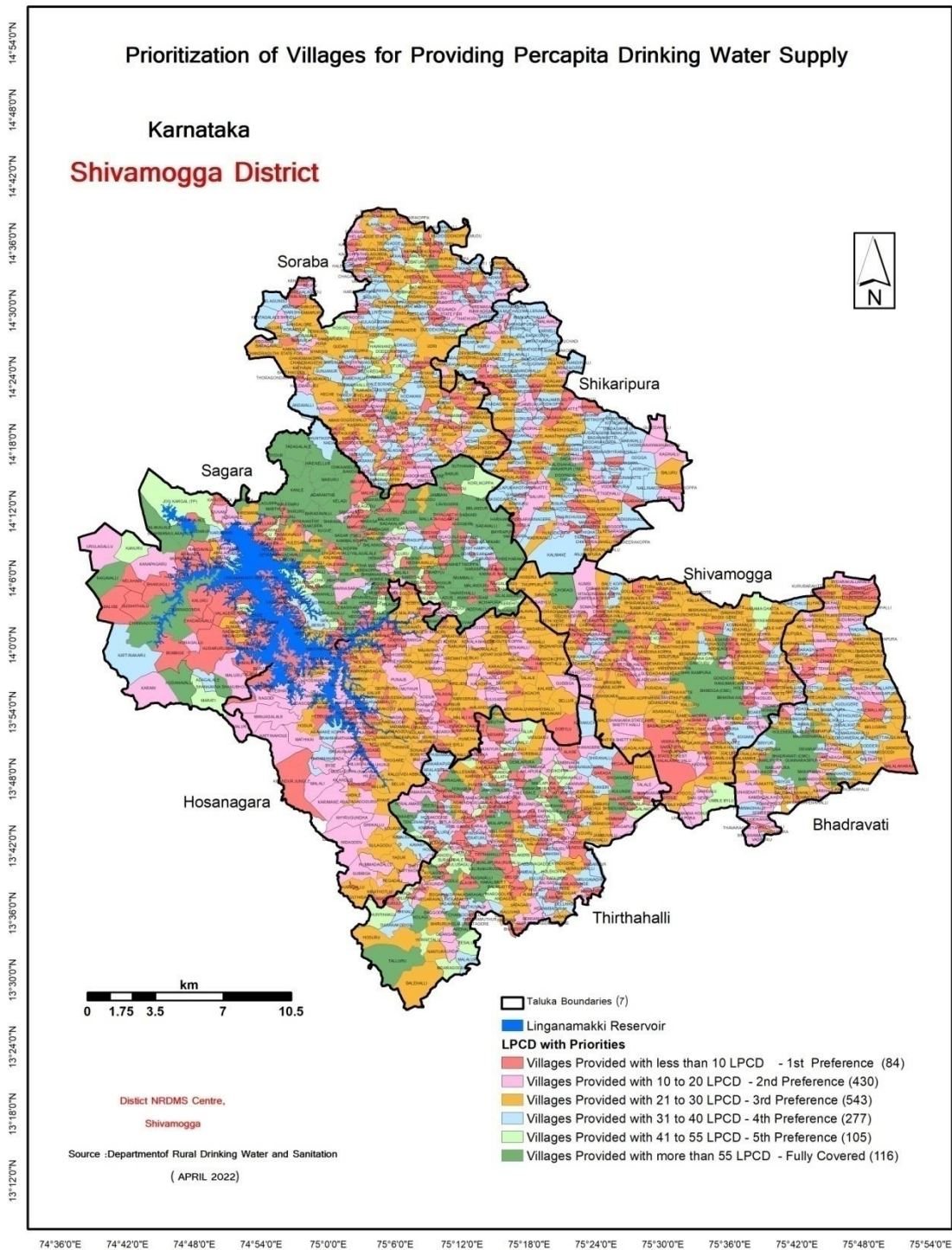
By updating the district-related Gram Panchayat level data, lower-level plans can be prepared scientifically. Additionally, incorporating new technologies into daily tasks can lead to further improvements.

## **10. ANNEXURES**

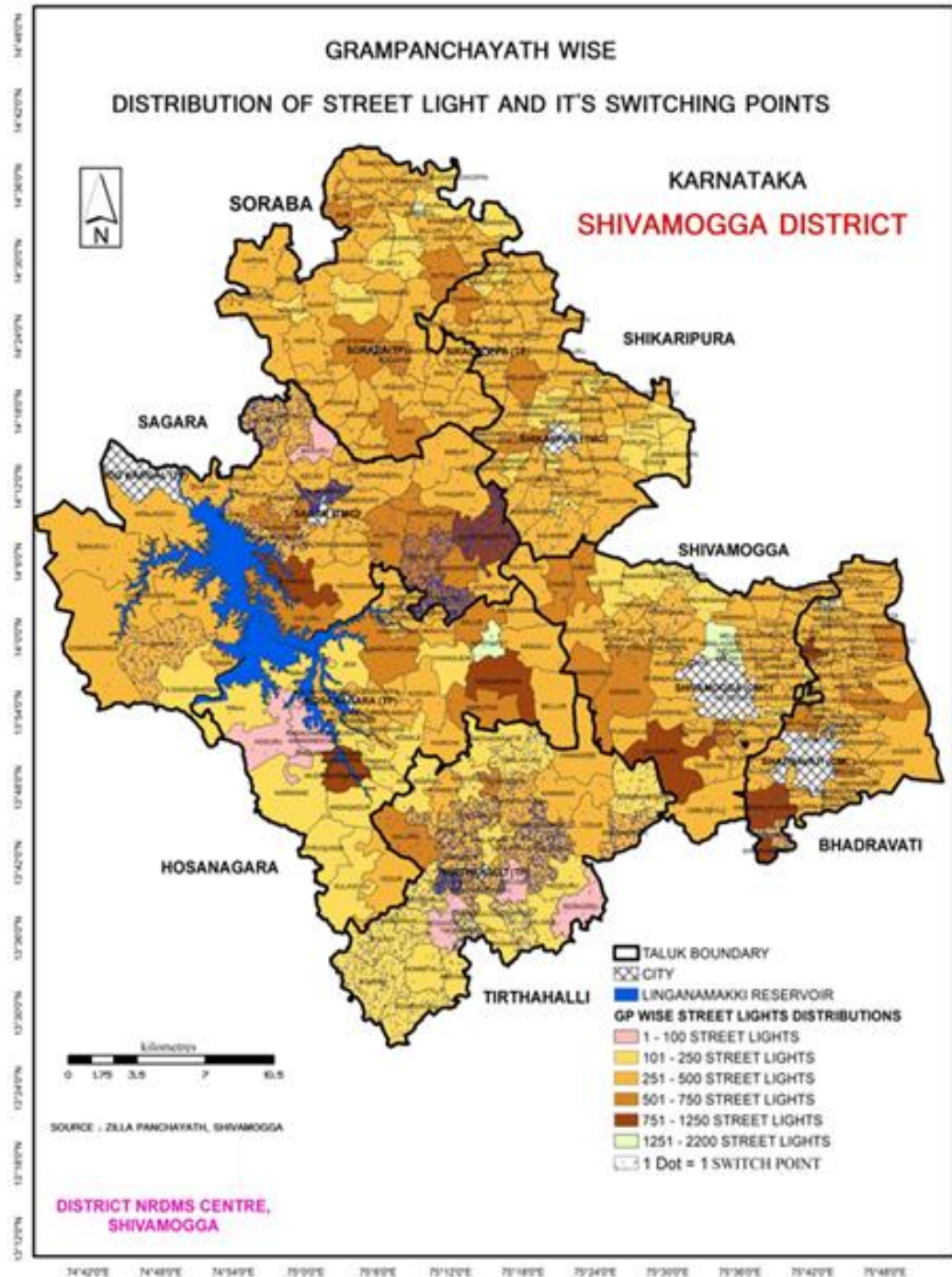


**Existing and proposed Health facilities in Shivamogga District**

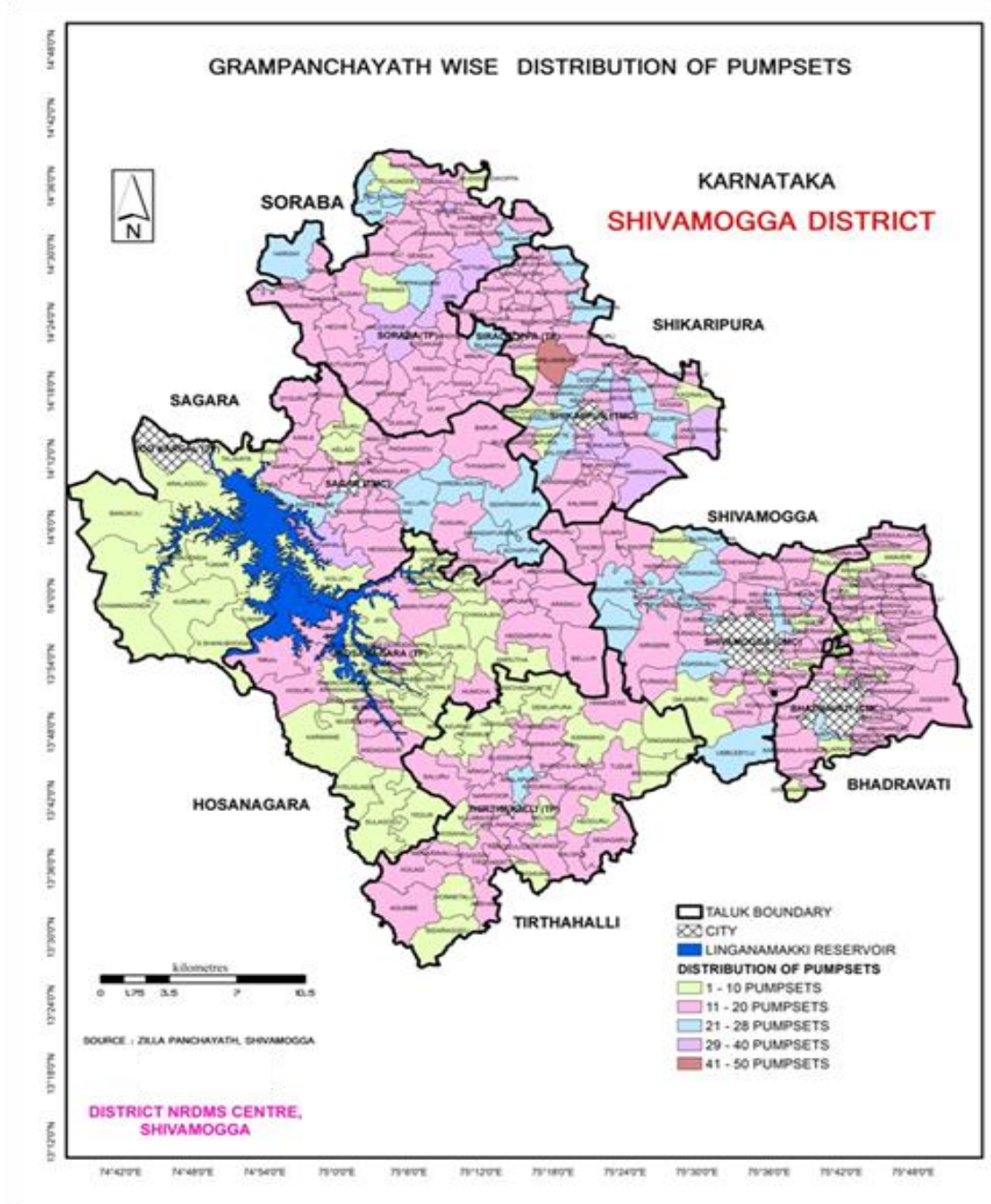




**Prioritization of Villages for providing Percapita Drinking water supply**

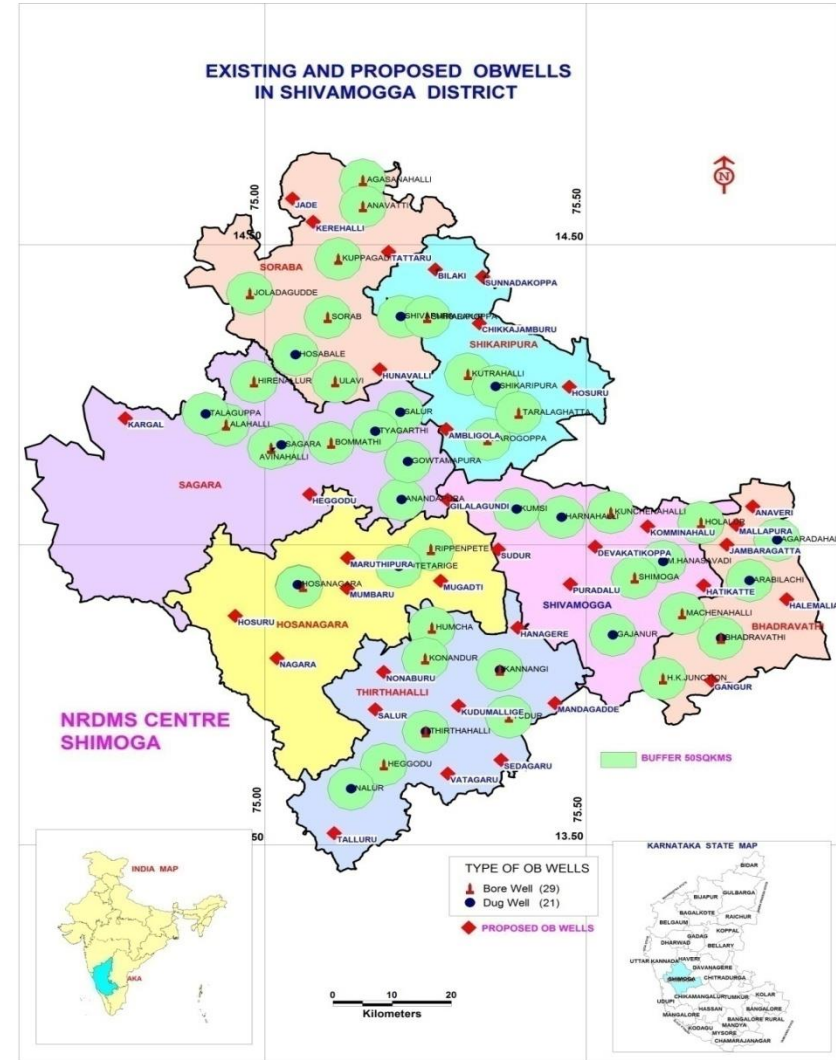


**Grampanchayath wise Distribution of Street lights and Swiching points**

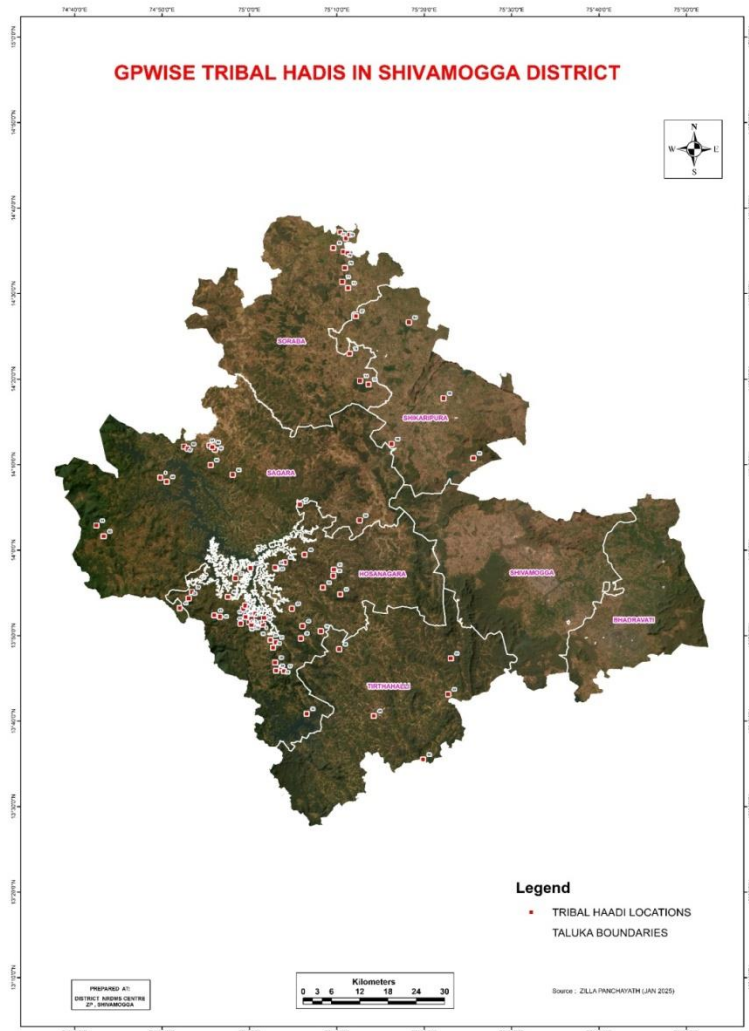
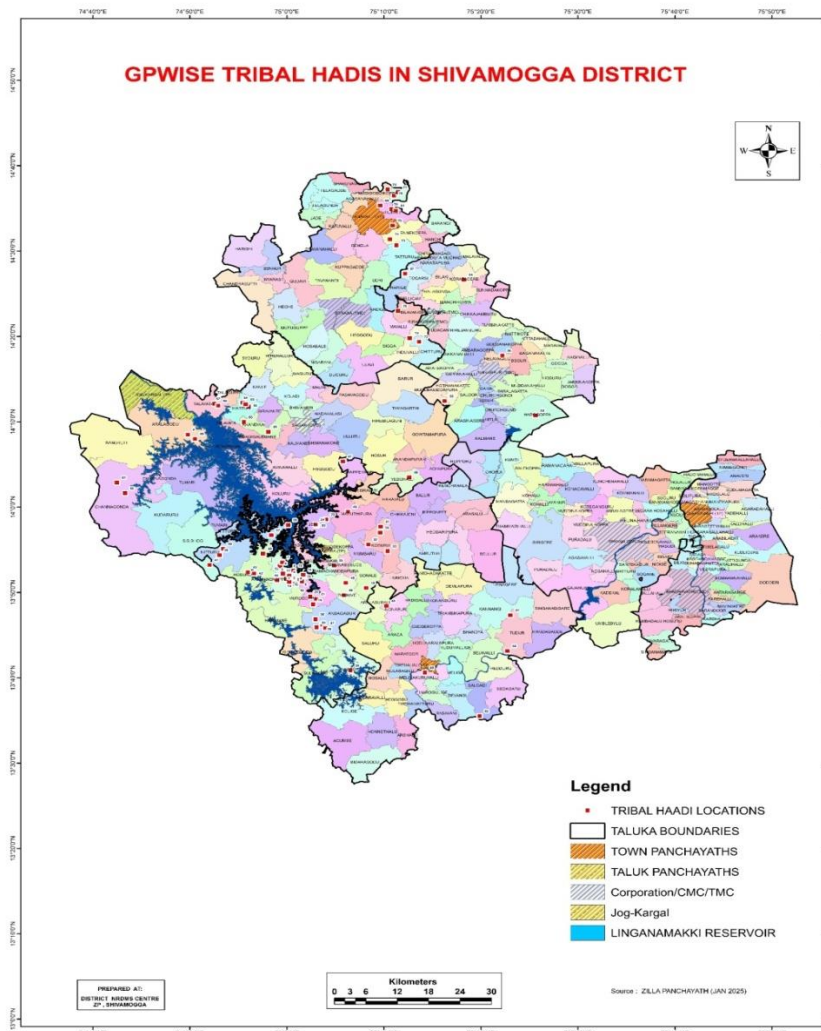


**Grampanchayath wise Distribution of pumpsets**

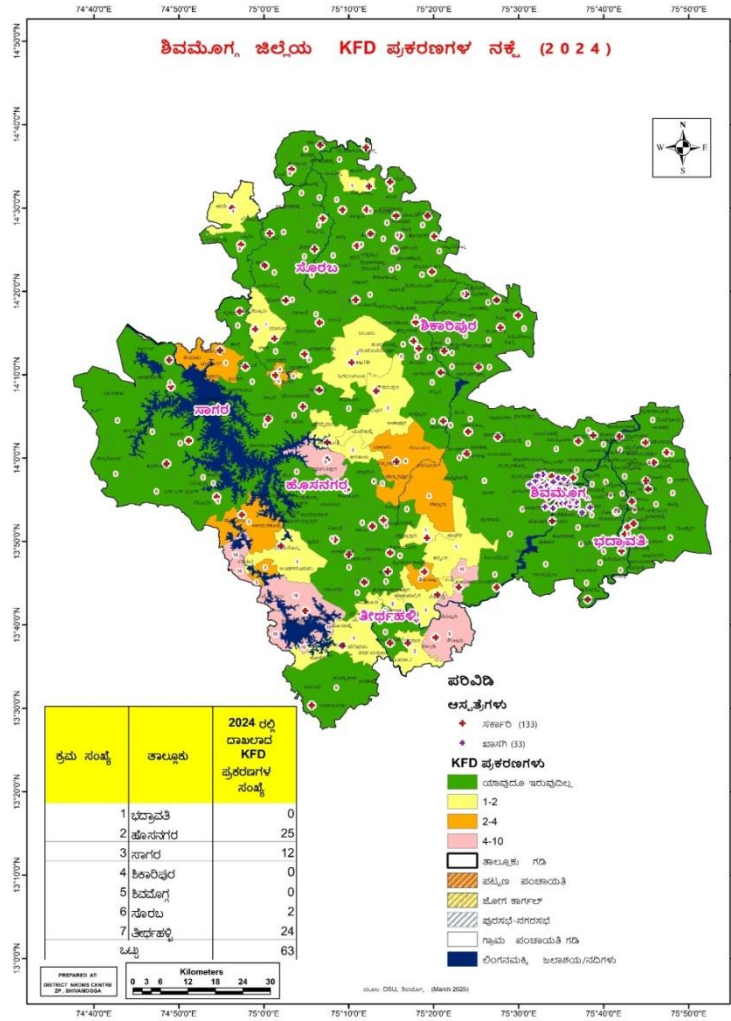
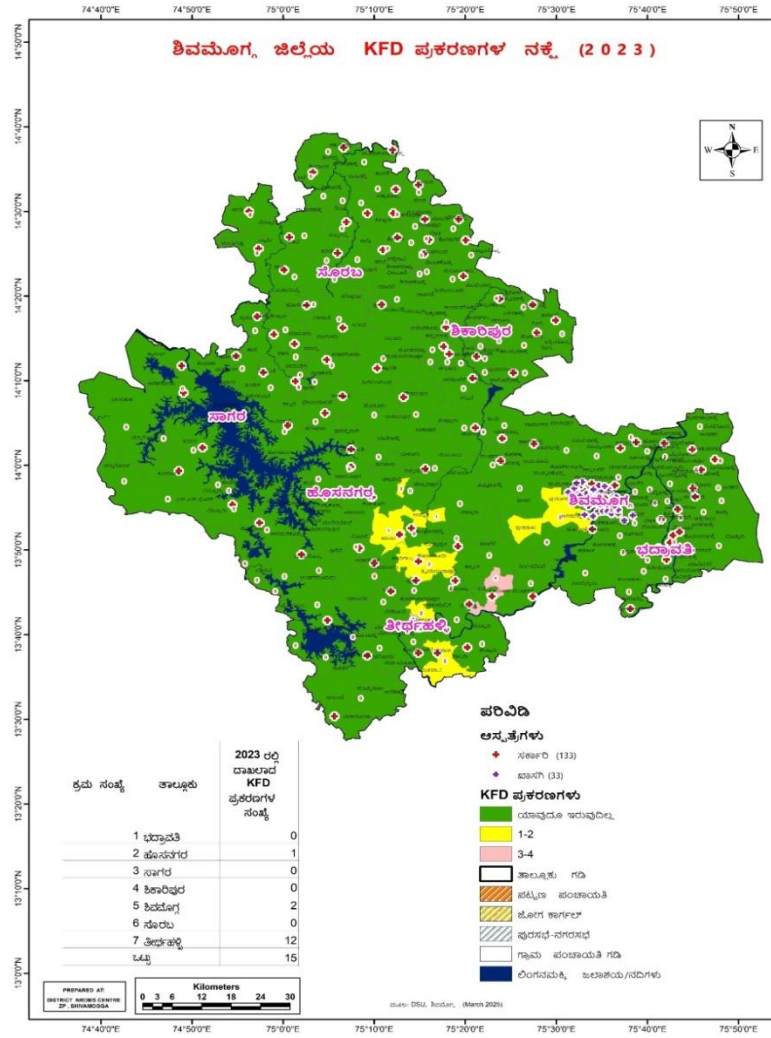




**Location of Existing OB wells and Proposed OB wells**



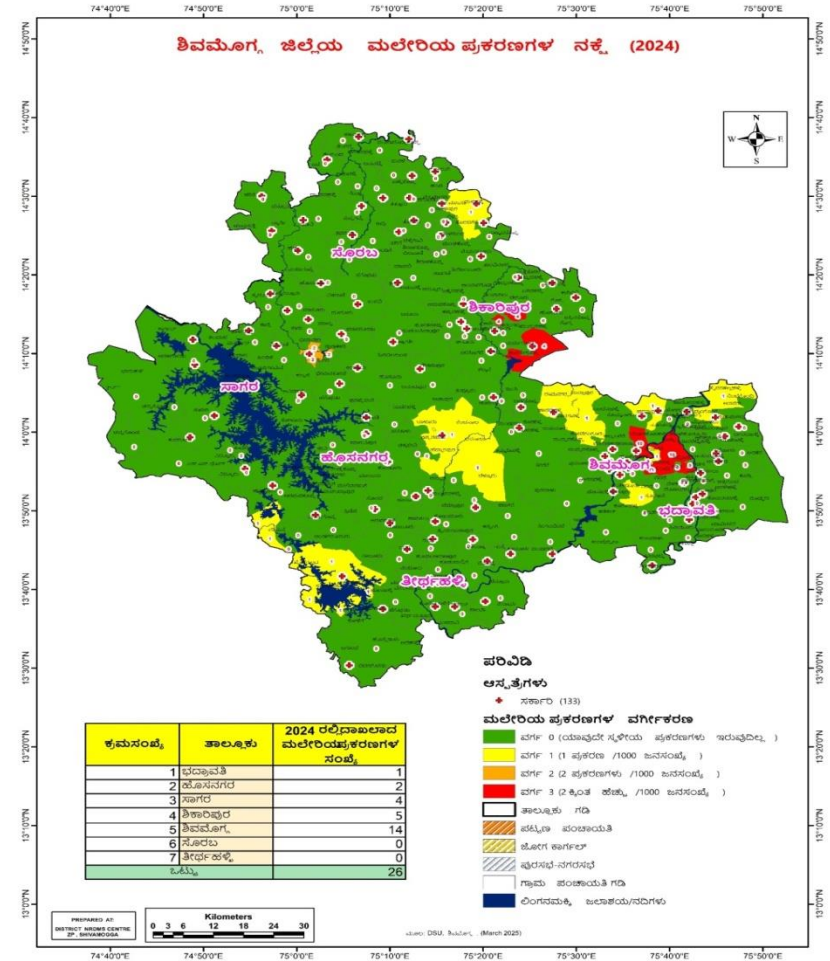
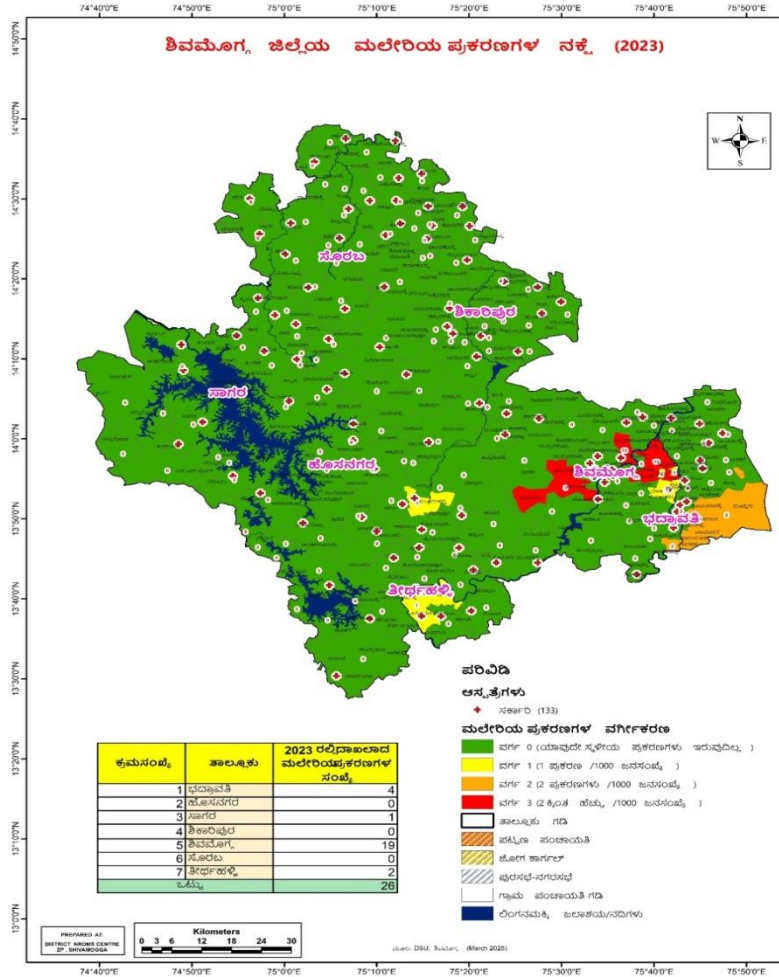
**GP Wise Haadis in Shivamogga District**



**Gram panchayathwise Distribution of KFD cases in Shivamogga District**



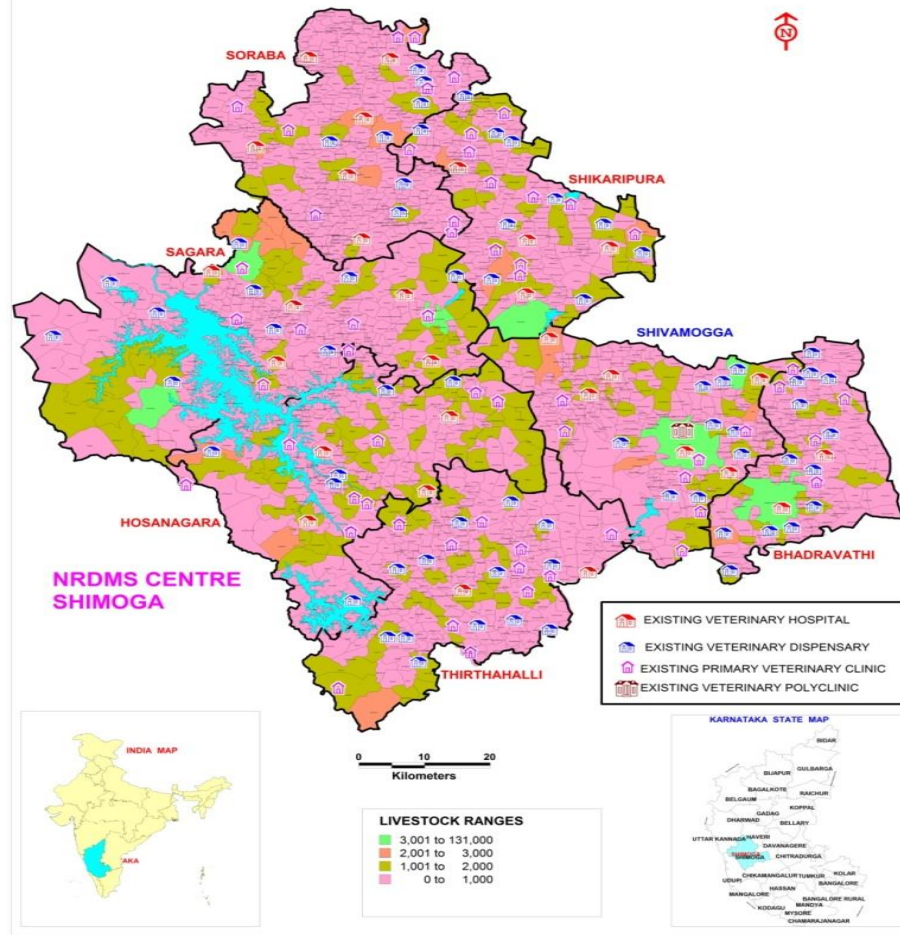




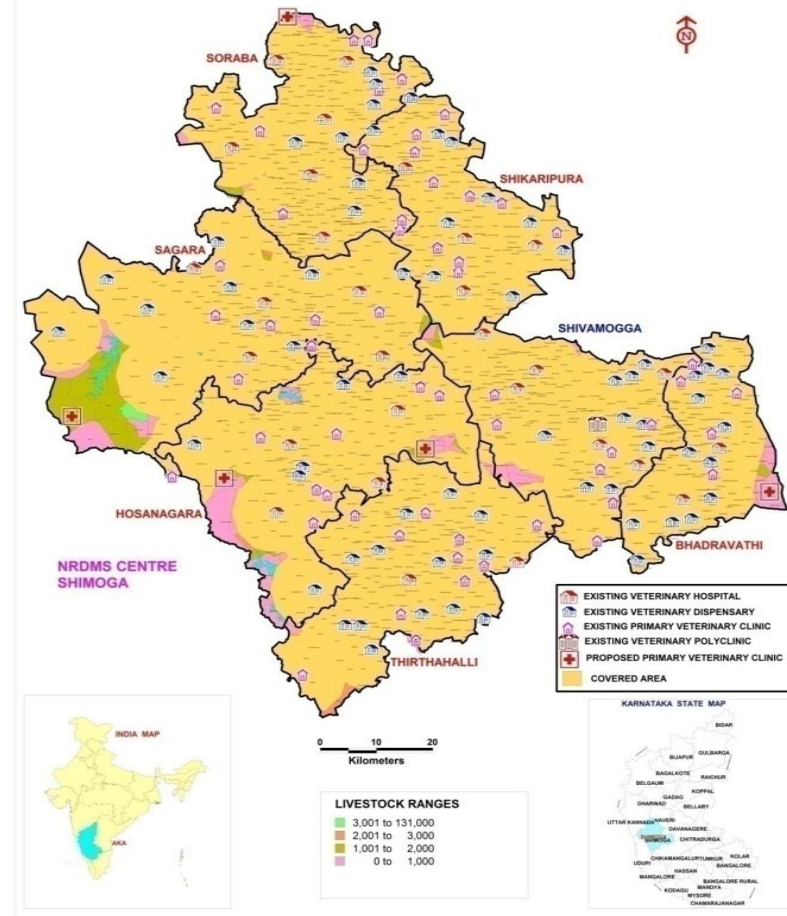
**Gram panchayathwise Distribution of Malaria cases in Shivamogga District**



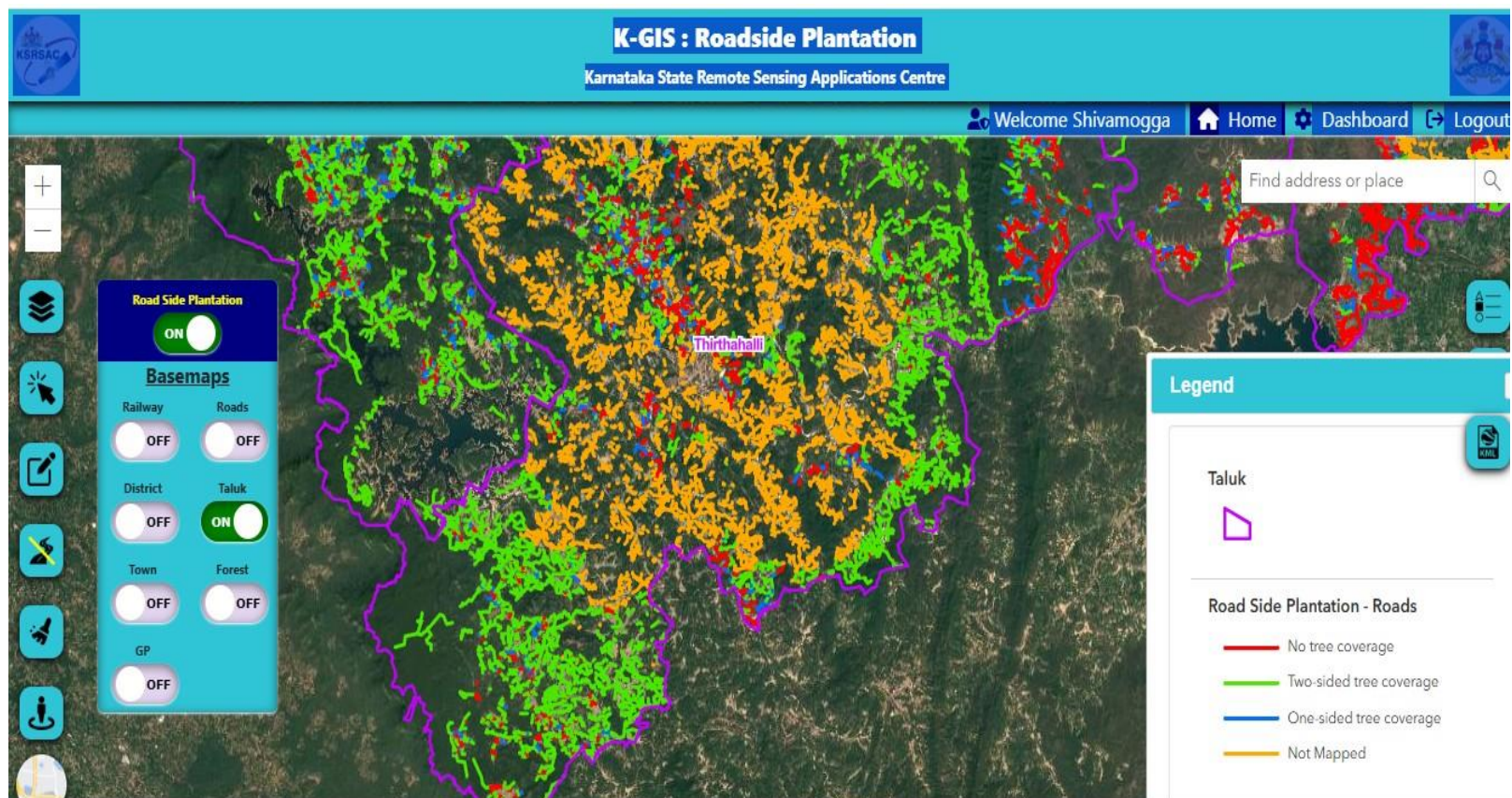
## VETERINARY FACILITIES IN SHIVAMOGGA DISTRICT



## PROPOSED VETERINARY FACILITIES IN SHIVAMOGGA DISTRICT



Existing and Proposed Veterinary facilities in Shivamogga District



Upadations of Road side plantation webportal – Developed by KRSAC, Bengaluru

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