

NATURAL RESOURCES DATA MANAGEMENT SYSTEM (NRDMS)

***MONTHLY ACTIVITY REPORT
April - July 2025***

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



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

*Indian Institute of Science Campus,
Bengaluru – 560012*

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1. Basic Information of the District:-

District Name: Dakshina Kannada

Division: Mysuru

District Establishment Year: 1993

Headquarters: Mangaluru

Current Chief Planning Officer: Sandhya K S

Current Chief Executive Officer: Narwade Vinayak Karbhari, IAS

2. NRDMS Background of the District:-

The NRDMS Centre for Dakshina Kannada district was established on 1993 at the office of Zilla Panchayat, Dakshina Kannada. This Centre is implemented by Karnataka State Council for Science and Technology, Bangalore. The main Objectives of the centre is to create the digital database on Natural Resources, Demography, Agro and Socio economy and infrastructure facilities of the district to provide analysed information to the district administrators, Zilla Panchayat, line Departments etc.

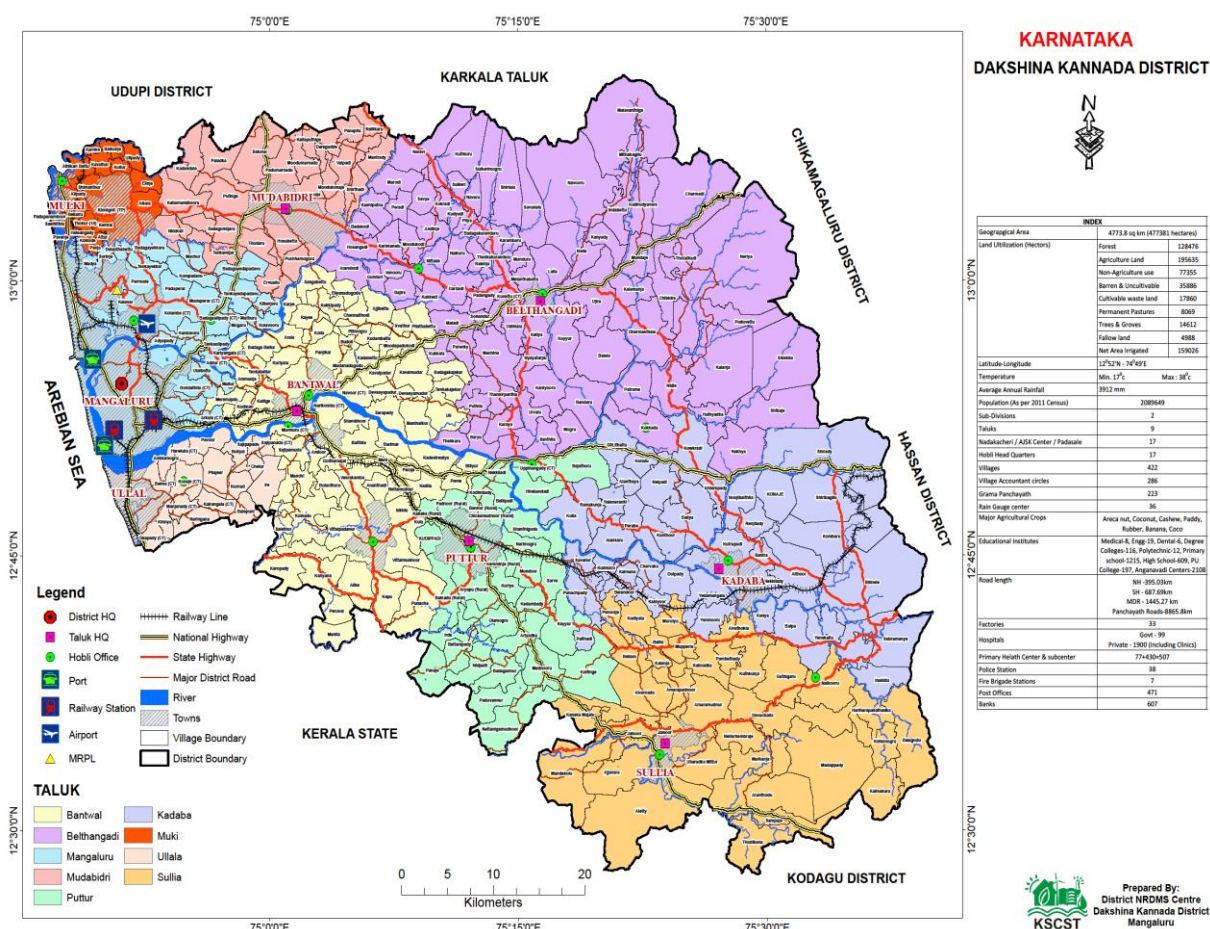
3. Geographical Features:-

- **Location and Boundaries:-**

Dakshina Kannada is coastal Karnataka district in the state of Karnataka in India. It is bordered by Udupi district to the north, Chikkamagaluru district to the northeast, Hassan district to the east, Kodagu District to the southeast, and Kasaragod district in Kerala to the south. The Arabian Sea bounds it on the west. Mangalore is the headquarter and chief city of the district.

The Dakshina Kannada district has an area 4861 square kilometre. Density of human population is 430 persons per square kilometre. There are 331 villages in the district. The population of the district was 20, 89,649 of which 36.58 % is urban as of 2011.

The district is divided into nine taluks- Mangalore, Moodabidri, Mulki, Bantwal, Belthangady, Puttur, Kadaba, Sullia and Ullala.



considerable extent of barren land along the coast partly because it is sandy, rocky, and marshy. The area near sea is covered with coconut gardens. The Upland pediplain area interspersed with low hills between the Western Ghats and the coast, which is moderately cultivated with a considerable extent of fallow land, which can be put to agricultural use. The Eastern hilly area in the eastern part of the district is hilly with thick forest cover, which forms part of the Western Ghats. The hills of the area range in elevation from 1200 to 1500m a.m.s.l. and are capped with laterite, which form plateau usually of oval or elongated configuration. The hill ranges are dissected by numerous streams and rivulets. The prominent peaks in the area are Balihalli (1240m), Amadikul betta (1298m) Attiberi Gudda (1522m), Banganabagile Gudda (1513m) etc.

- **Climate:**

Average Rainfall: 4030 mm

Temperature Range: 24 °C - 28 °C

The climate of the district falls under the Coastal Zone shares the wider climatic pattern of the other West Coast districts of India. It is characterized by excessive humidity (78%) during the greater part of the year.

There are four seasons viz., Four wet months of June, July, August and September, when the district encounters strong winds, high humidity, heavy showers and a slight fall in temperature. Two warm and damp months of October and November when south west monsoon is retreating. Three cool months of December, January and February when generally dry conditions prevail and Three hot months of March, April and May which is the period of rising temperature. Climate in the district is generally equable. However, it is colder in the interior than in the coast.

- **Natural Resources:**

- **Forest:**

Dakshina Kannada had 257 kha (kilhectares) of natural forest, covering 56% of its land area. However, in 2024, the region faced a loss of 957 hectares of natural forest. The Mangalore forest division, part of Dakshina Kannada, encompasses 1, 21,462.08 hectares of forest land, primarily consisting of semi-evergreen and secondary moist forests. Grazing is widespread, with 53% of the area heavily grazed, and the forest hosts approximately 83.20 million stems of various species, including significant areas of both semi-evergreen and moist deciduous forest types. The district also features mangrove forests in its coastal regions and is partially home to Kudremukh National Park.

➤ **Minerals:**

Dakshina Kannada district in India has several exploitable minerals. The mineral resources found in this region include Bauxite, China Clay, Iron ore, Kyanite, Limestone, and Quartz/Silica sand. The District Mineral Foundation Trust is a non-profit organization established in districts impacted by mining activities. The provided information highlights the variety of minerals present and the existence of a trust to manage the impacts of mining operations.

➤ **Soil:**

The soil in the district is mostly lateritic type, found distributed in the Pediplain area characterised by high iron and aluminium content. Lateritic soil is mostly red in color and yellow loamy, pale to bright red colours are also seen. Lateritic soil is suitable for Paddy, Sugarcane, Arecanut and Plantation crops, viz. crops like Cardamom & plantains. Loamy red soils are distributed in the lower reaches of valleys. Red lateritic soil is the most dominant soil type in the area. The texture of the soil varies from fine to coarse. The soil in valleys and intermediate slopes is rich in loam whereas in upper slopes it is much coarse in nature. The soil responds well to irrigation and other soil -

management practices. Silty and loamy soils are of transported origin and are found mostly along river banks and in valley plains. They have good infiltration capacity and are well-suited for agriculture due to their fertility.

- **Major Rivers/Water Sources :**

The district geography consists of sea shore in the west and Western Ghats in the east. The major rivers are Netravathi, Kumaradhara, Phalguni, Shambhavi and Pavanje which all join Arabian Sea. The district also features various wetlands, which are important coastal ecosystems that interact with both fresh and saline water.

Major Rivers

Netravati River: One of the most significant rivers, it originates in the Western Ghats and converges with the Kumaradhara at Uppinangadi.

- Kumaradhara River: This river merges with the Netravati at Uppinangadi.
- Gurupura (Phalguni) River: This river is recognized for flowing through the city of Mangaluru.
- Shambhavi River: Another river that traverses the district into the Arabian Sea.
- Nandini (Pavanje) River: This river is also an important water body in the region.
- Payaswini River: This river also discharges into the Arabian Sea.

4. NRDMS Spatial and Non-spatial Data available in District NRDMS Centre

DATABASE STATUS FOR THE YEAR 2025-2026

Status Code : Meaning

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

Name	:	Kiran Raj K
Name of the District Centre	:	Dakshina Kannada
Database status as on date	:	23/06/2025
Year of Establishment	:	1992 -1993

SPATIAL DATABASE

Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covere d	Status Code	File Format
1. Natural Resources						
Land						
1. Topography						
Contour Map					NA	
Slope Map	1:50,000	KRSRAC		District	CC	.shp
2. Geology – A						
Rock features	1:50,000	KRSRAC		District	CC	.shp
Structural features	1:50,000	KRSRAC		District	CC	.shp
3. Geology – B						
Rock features	1:50,000	KRSRAC		District	CC	.shp
Structural features	1:50,000	KRSRAC		District	CC	.shp
4. Mineral Resources		KRSRAC			NA	
5. Geomorphology	1:50,000	KRSRAC		District	CC	.shp
6. Land use	1:50,000	KRSRAC		District	CC	.shp
7. Waste Lands		KRSRAC			NA	
8. Soils	1:50,000	NBSS & LUP		District	CC	.shp
9. Forest & Wildlife						
Forest type		KFD			NA	
Crown Density					NA	
Forest Category					NA	
Forest adm.		SOI			NA	
Wild Life					NA	

Water						
1.Ground water						
Hydro Geology	1:50,000	MGD		District	CC	.shp
Hydro chemistry		ZP			NA	
Ground water budget					NA	
2.Surface water						
Drainage	1:50,000	MGD		District	CC	.shp
Surface water bodies	1:50,000	SOI & KRSAC		District	CC	.shp
3.Climate					NA	

Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covered	Status Code	File Format
2.Demography						
Population						
Tehsil boundary	1:50,000	KRSAC		District	CC	.shp
District boundary	1:50,000	KRSAC		District	CC	.shp
Current popln. distbn.					CC	.Xcel
Literacy						
Levels of education					CC	.Xcel
Occupation						
Village boundary	1:50,000	KRSAC		District	CC	.shp
Employment						
District scenario					NA	
Employment exchange					NA	
Assets & Expenditure						
Migration					NA	

Destitutes					NA	
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3.Socio Economy					
Industry					NA
Developmental activity					NA
4.Agro Economy					
Land Utilisation					
Private Land					NA
Common property					NA
Land Ownership pattern					
General scenario					NA
Farmer's holdings					NA
Principal crops					NA
Irrigation					
<i>Minor irrigation</i>					
Canals		DLR & SS			NA
Tube wells		DLR & SS			NA
Dug wells		DLR & SS			NA
Tanks	1:50,000	DLR & SS (KRSRAC)		District	CC
Lift irrigation		DLR & SS			NA
<i>Major irrigation</i>					
Reservoirs		DLR & SS			NA
Anicuts		DLR & SS			NA

Agricultural implements					
Animal husbandry	1:50,000	AHVS		District	CC
Pisciculture					NA
Plantation					NA

Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covered	Status Code	File Format
5. Infrastructure						
Communications						
Post offices		DLR & SS			NA	
Telecommunication		DLR & SS			NA	
Drinking water		DLR & SS				
Educational facilities	1:50,000	DDPI		District	CC	.shp
Electricity		Land Records			NA	
Financial institutions		DLR & SS			NA	
Markets		DLR & SS			NA	
Health	1:50,000	DHO		District	CC	.shp
NGO's		DLR & SS			NA	
Tourism	1:50,000	KSTDC		District	CC	.shp
Transport	1" = ...miles	PWD			NA	
6. Miscellaneous						
District map with taluks	1" = ... miles	DLR & SS		District	CC	.shp
District & taluk boundaries	1:50,000	SOI		District	CC	.shp
District map with hoblies	1: =..	DLR &		District	CC	.shp

	miles	SS				
Village boundary with settlement	1:50,000	SOI/KSR AC		District	CC	.shp
Police station details	1:50,000	SP		District	CC	.shp
Details on Assembly constituencies	1:50,000	DC		District	CC	.shp
Gram Panchayths & Zilla Panchayaths, its jurisdiction for all taluks	1:50,000	DC		District	CC	.shp

Non-Spatial Database

Sector / Subsector	Source	Survey / Publn. Year	Area covered	Status Code	File Format
1. Natural Resources					
<i>Land</i>					
1. Topography					
Contour				NR	
Slope				NR	
2. Geology – A					
Rock Features	MGD			NR	
Structural features				NR	
3. Geology – B					
Rock features				NR	
Structural features				NR	
4. Mineral Resources	MGD			NR	
5. Geomorphology				NR	
6. Land use				NR	
7. Waste Lands				NR	
8. Soils	NBSS & LUP			NR	
9. Forest & Wildlife					

Forest type				NR	
Crown Density				NR	
Forest Category				NR	
Forest admn.				NR	
Wild Life				NR	
Water					
Ground water					
Hydro Geology	MGD			NR	
Hydro chemistry	CGWB			NR	
Ground water budget	MGD			NR	
Surface water					
Drainage				NR	
Surface water bodies				NR	
Climate	IMD			NR	

2. Demography					File Format
Population					
Tehsil boundary	DLR & SS			CC	.Xls
District boundary				CC	.Xls
Current popln. distbn.	DES			CC	.Xls
Literacy					File Format
Levels of education				CC	.Xls
Occupation					
Village boundary	DES			CC	.Xls
Employment					
District scenatio	EO			CC	.Xls

Employment exchange	EO			CC	.Xls
<i>Assets & Expenditure</i>					
<i>Migration</i>				NA	
<i>Destitutes</i>				NA	

3. Socio Economy					File Format
Industry	DIC			NA	
Developmental activity	DIC			NA	

4. Agro Economy					File Format
Land Utilisation					
Private Land	DSO		VILLAGE	NA	
Common property	DSO			NA	
Land Ownership pattern					
General scenario	DSO			NA	
Farmer's holdings	Rev. Dept			NA	
Principal crops	JDA		Taluk	NA	
Irrigation					
<i>Minor irrigation</i>					
Canals	CADA			NA	
Tube wells	DSO			NA	
Dug wells	DSO			NA	
Tanks	MIC/ ZPE			NA	
Lift irrigation	MID			NA	
<i>Major irrigation</i>					

Reservoirs	CE (N)			NA	
Anicuts	CE (N)			NA	
Agricultural implements	Ag Census			NA	
Animal husbandry	AH&VS			NA	
Pisciculture	Fisheries			NA	
Plantation				NA	
Horticulture	HD			NA	
Sericulture	SD			NA	

Sector / Subsector	Source	Survey / Publn. Year	Area covered	Status Code	File Format
5. Infrastructure					
Communications					
Post offices	SSPO/ DES		Village	NA	
Telecommunication	TDM / DES			NA	
Drinking water	ZPE			CC	.Xls
Educational facilities	DDPI			CC	.Xls
Electricity	Census			NA	
Financial institutions	LEAD bank			NA	
Markets	FACS			NA	
Health	DHO			CC	.Xls
NGO's	DRS			NA	
Tourism	KSTDC			CC	.Xls
Transport					
Roads	PWD			NA	
Rail network	ZPED			NA	
Air transport/HELIPAD	PWD			NA	

Vehicle census	RTO			NA	
Inland & coastal waterways				NA	
Veterinary services					
Veterinary facilities	AHVS			CC	.Xls
Other veterinary serv.	AHVS			NA	
Incidence of diseases	AHVS			NA	
Anganwadi	D W&C			CC	.Xls

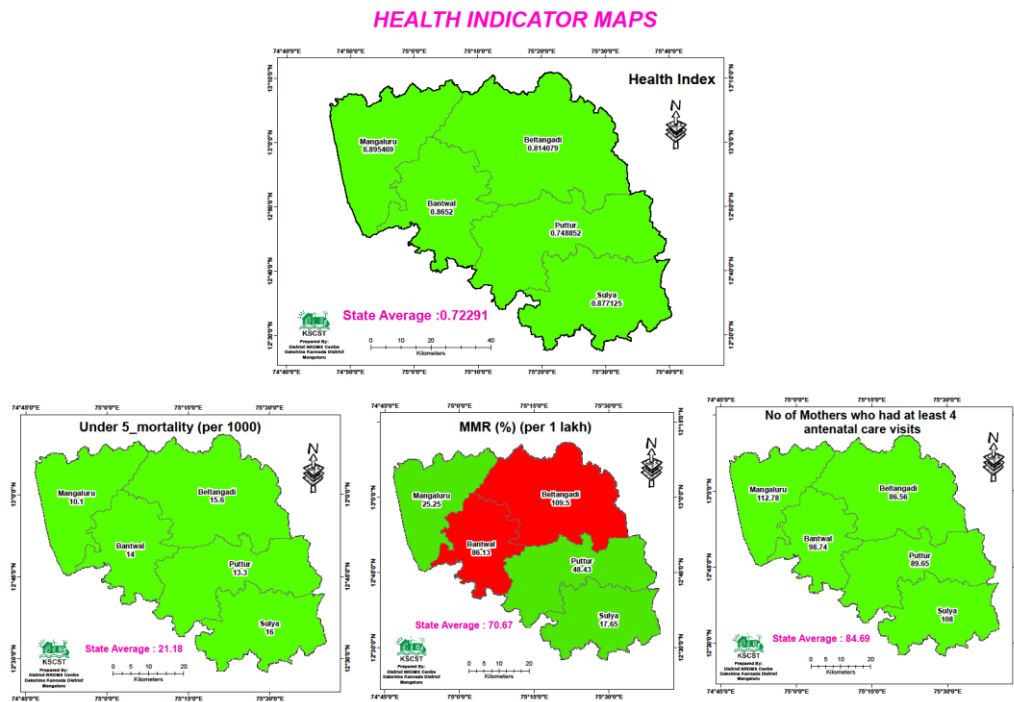
Sector / Subsector	Source	Survey / Publn. Year	Area covered	Status Code	File Format
6. Miscellaneous					
Administration	DC office				NA
Dt. & Subdivsns.	DC office				NA
Dt., with tehsils	ZP				NA
Dt., with panchayat	DC				NA
Tq., with census vil.	DC				NA
Prices & wages					NA
Environment					NA

5. NRDMS Centre Activities (April 2025 - July 2025)

- **Planning Department**

The Health Index is an annual tool by NITI Aayog to assess and rank district on their performance and overall health status. For this purpose prepared Health

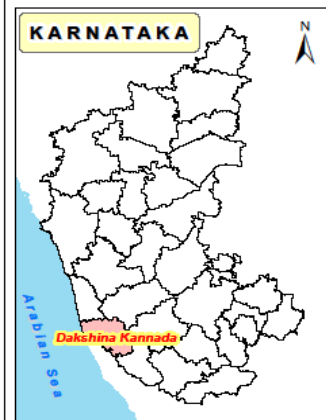
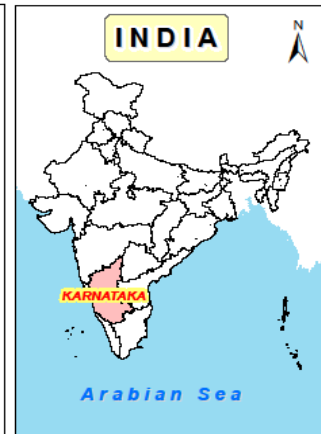
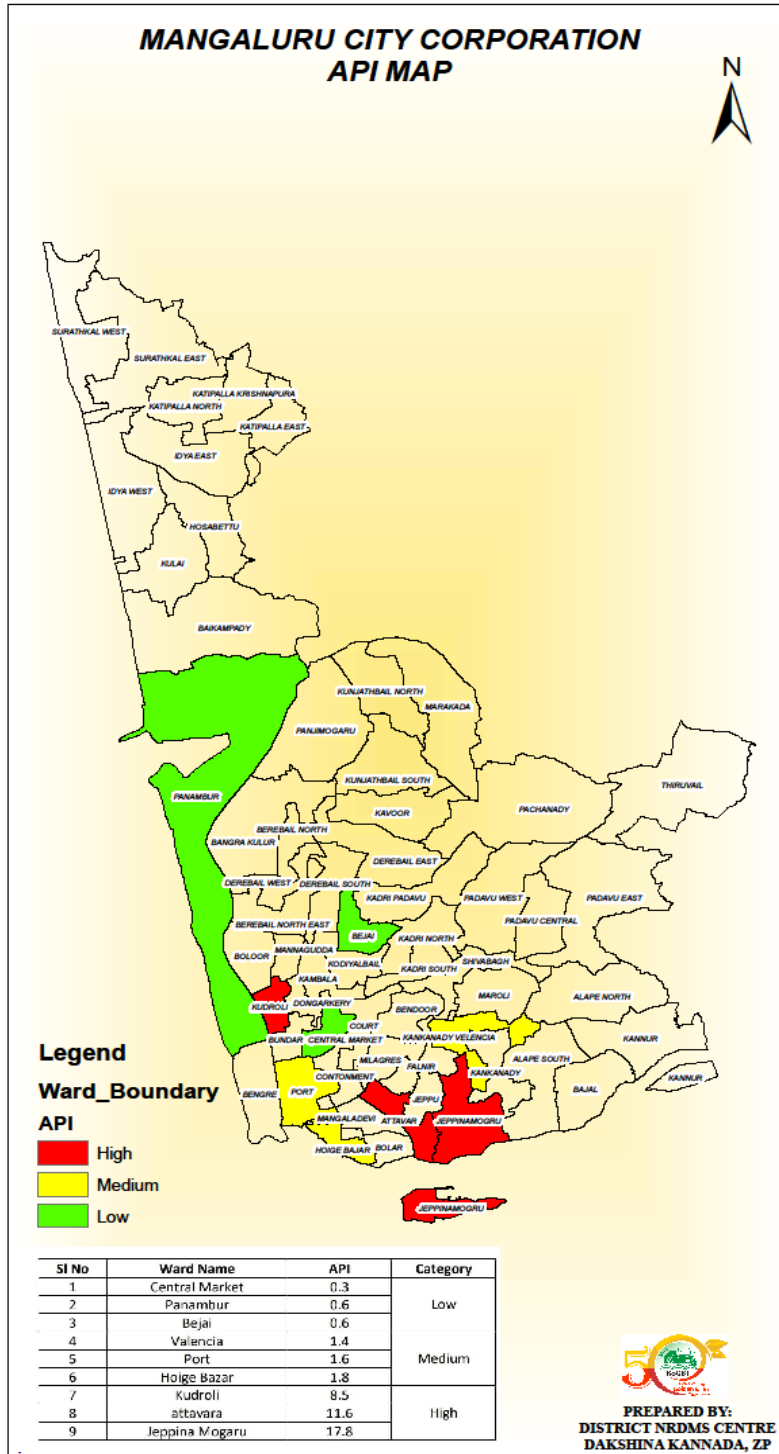
Index Map based on different Health indicators like under5 mortality, MMR and no of mothers who had at least 4 antenatal care visits.



- **Mangalore city corporation API Map**

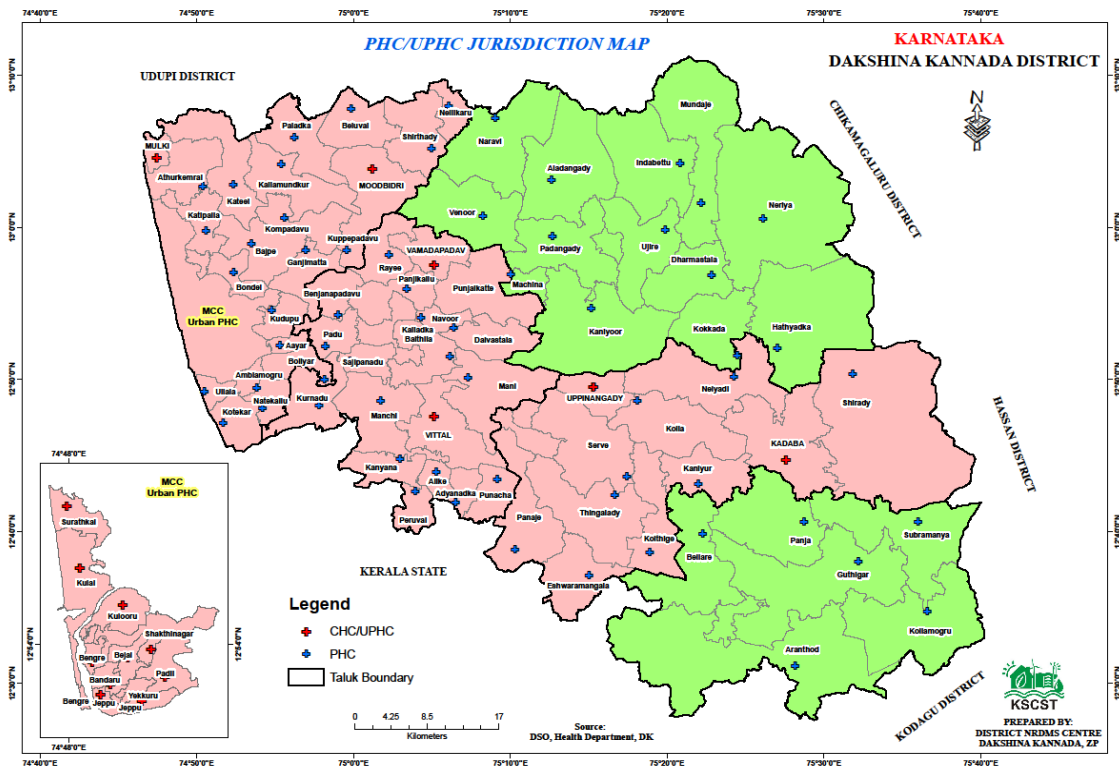
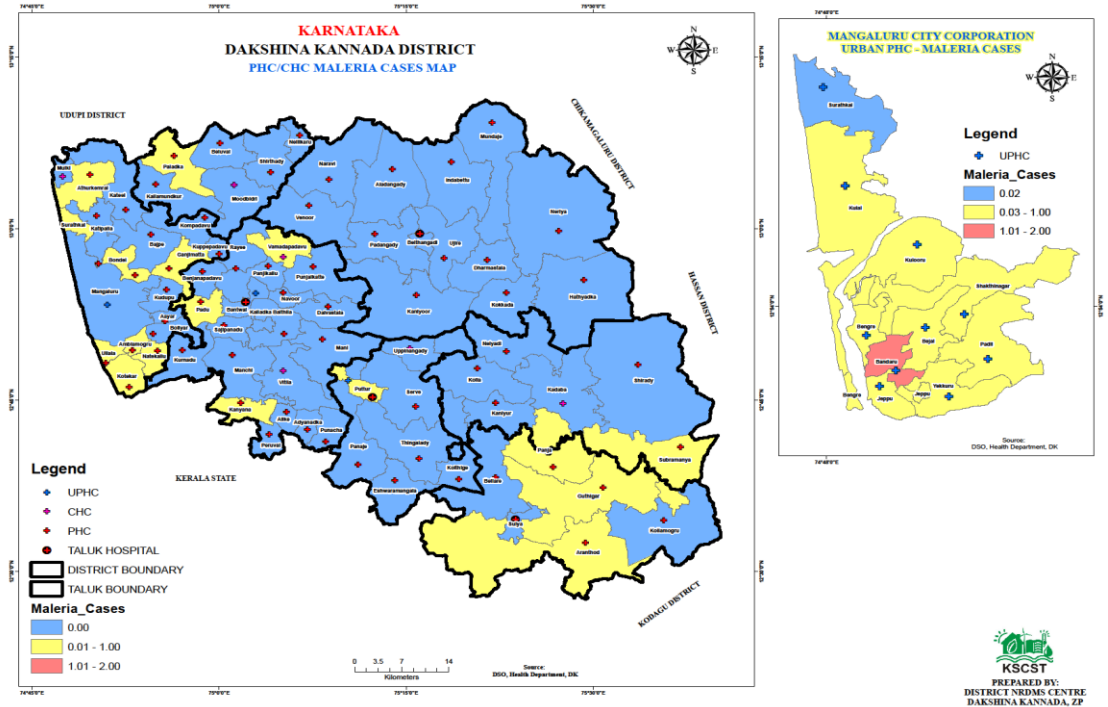
As per the Mangalore City Corporation Health Monitoring Section, prepare a category-wise, ward-wise Malaria API map. This map is categorized into high, medium, and low cases.

Sl No	Ward Name	API	Category
1	Central Market	0.3	Low
2	Panambur	0.6	
3	Bejai	0.6	
4	Valencia	1.4	Medium
5	Port	1.6	
6	Hoige Bazar	1.8	
7	Kudroli	8.5	High
8	attavara	11.6	
9	Jeppina Mogaru	17.8	



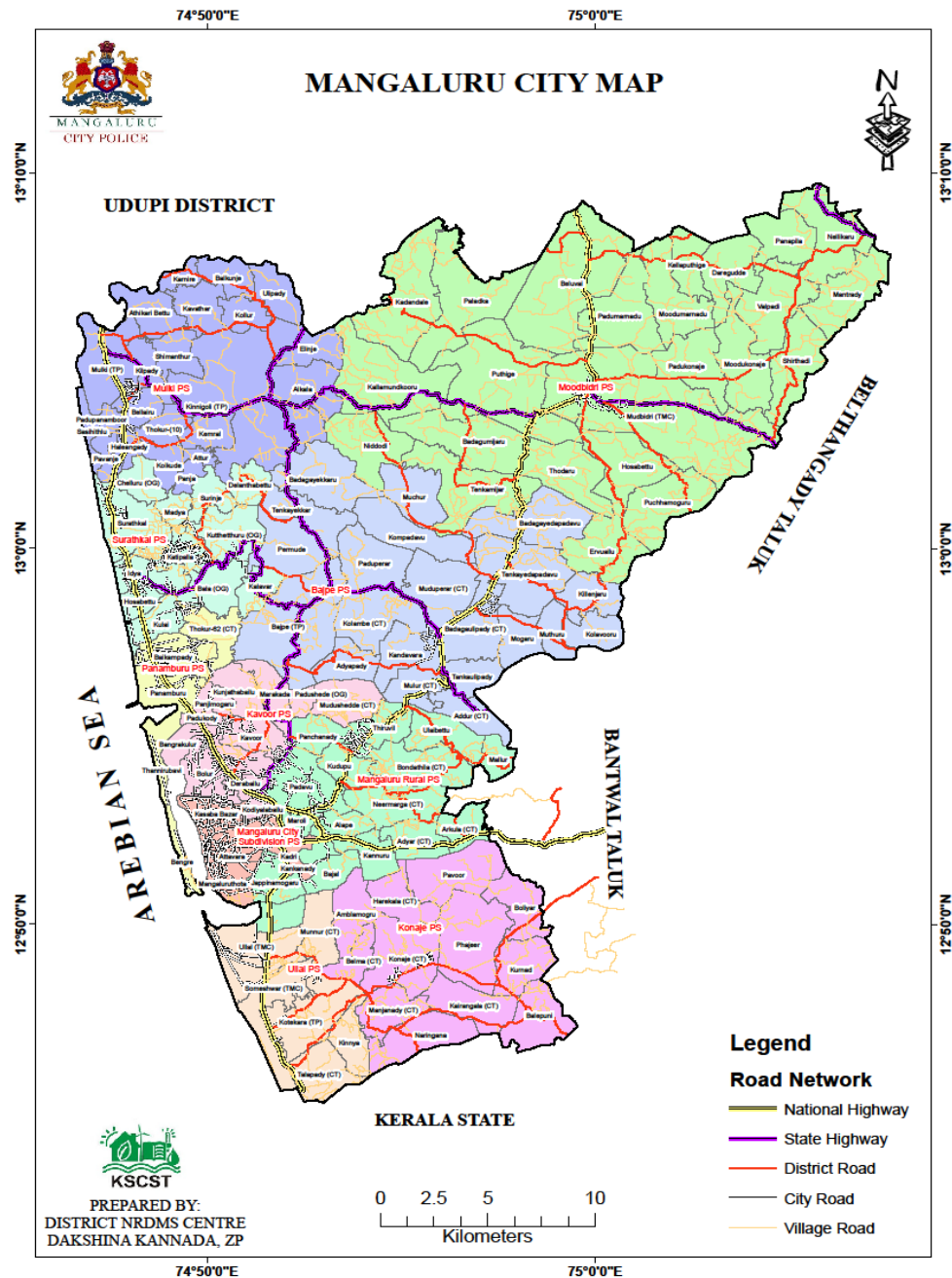
- **Health Department**

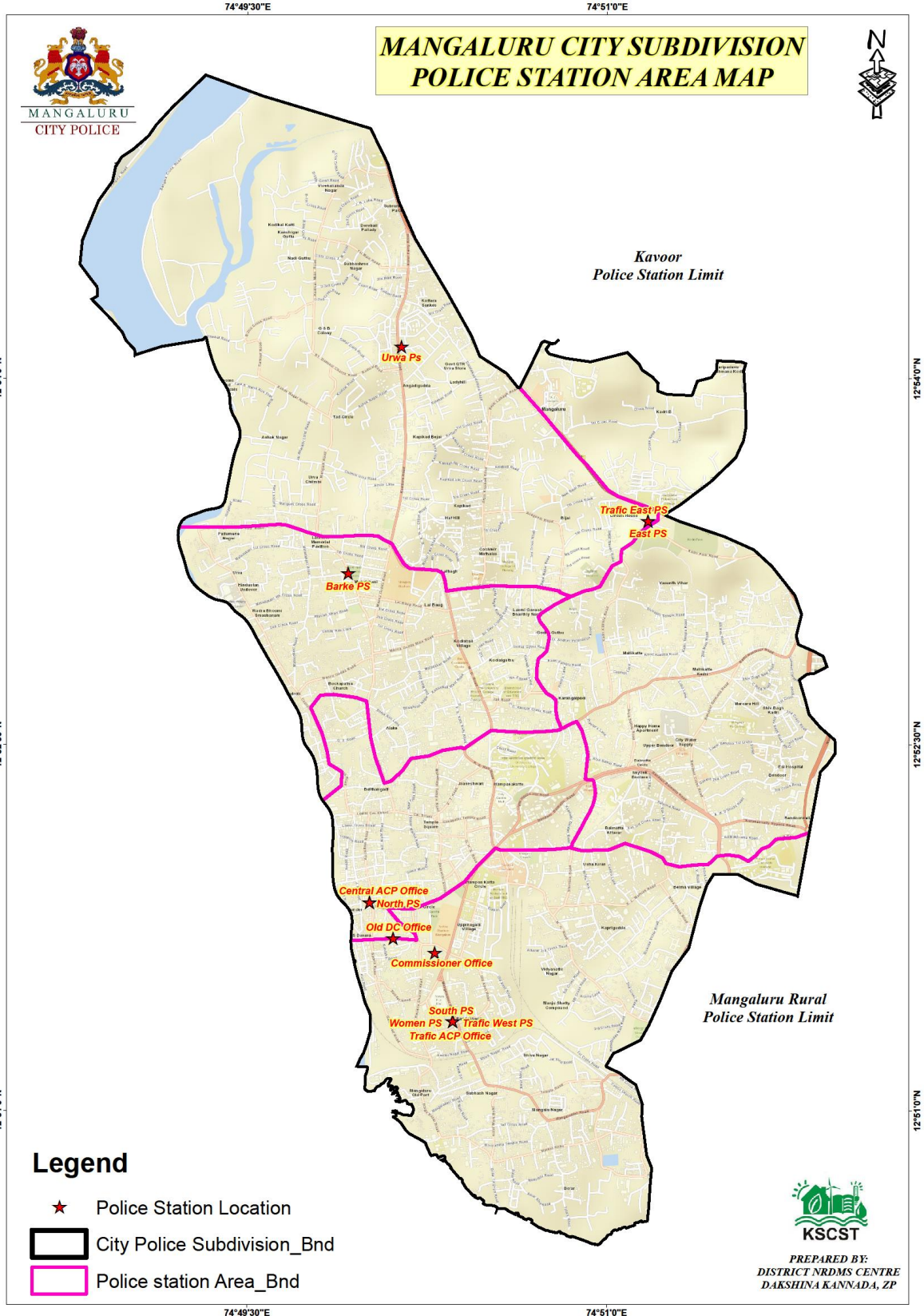
As per the request from the District Vector Borne Disease Control Office, Health Department prepared malaria cases-2025 found in Dakshina Kannada district under the Malaria Control Program to control malaria cases.

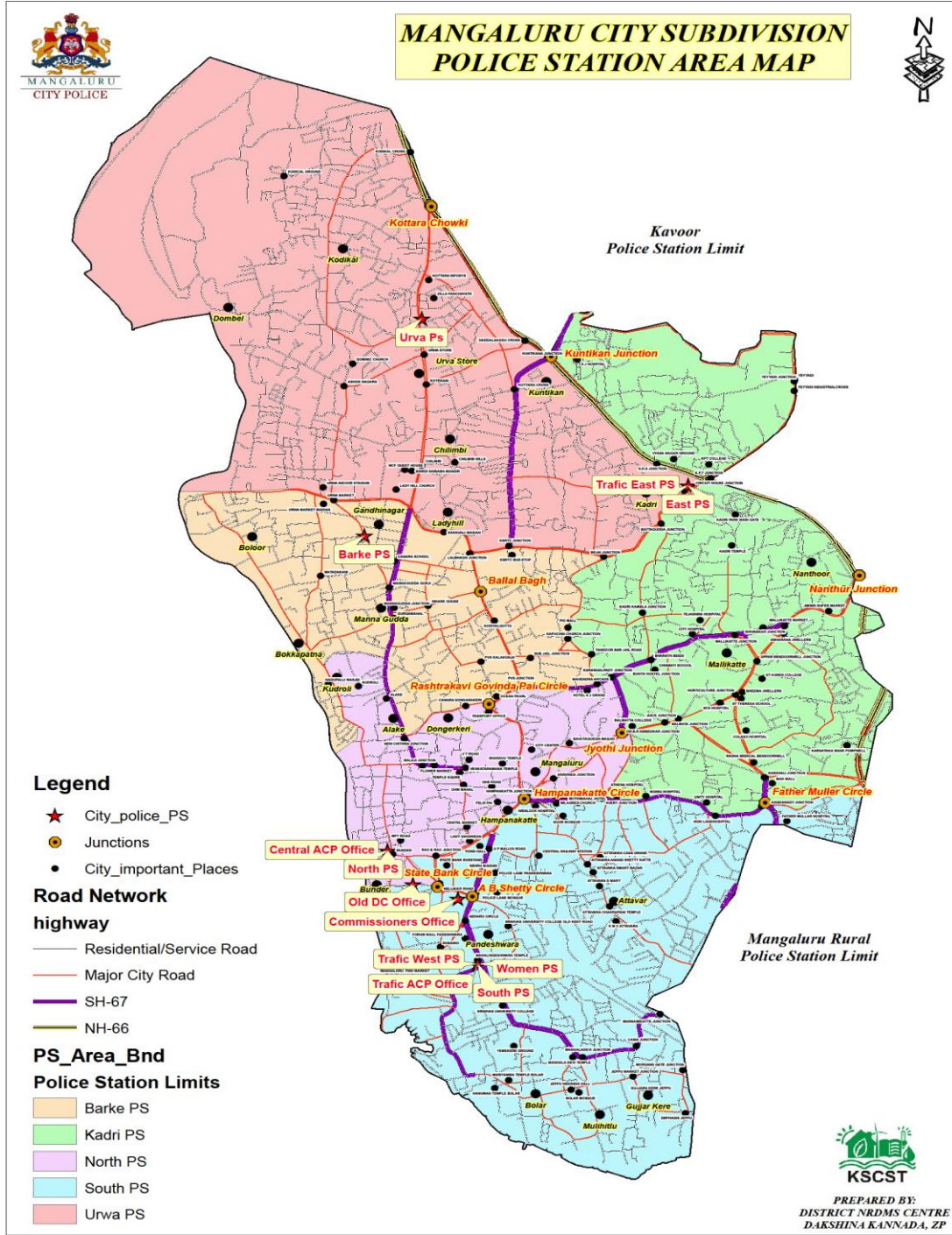


- **Mangaluru City Police Commissioner**

As per the order from the Mangaluru City Police Commissioner, the District NRDMS Centre has prepared the Mangalore City Police Jurisdiction map, City Cyber Crime Map, and City Central Police Station map using ARC GIS and QGIS software. This map is used to create a proper plan to address communal violence and other crimes. It also highlights important places and government offices.

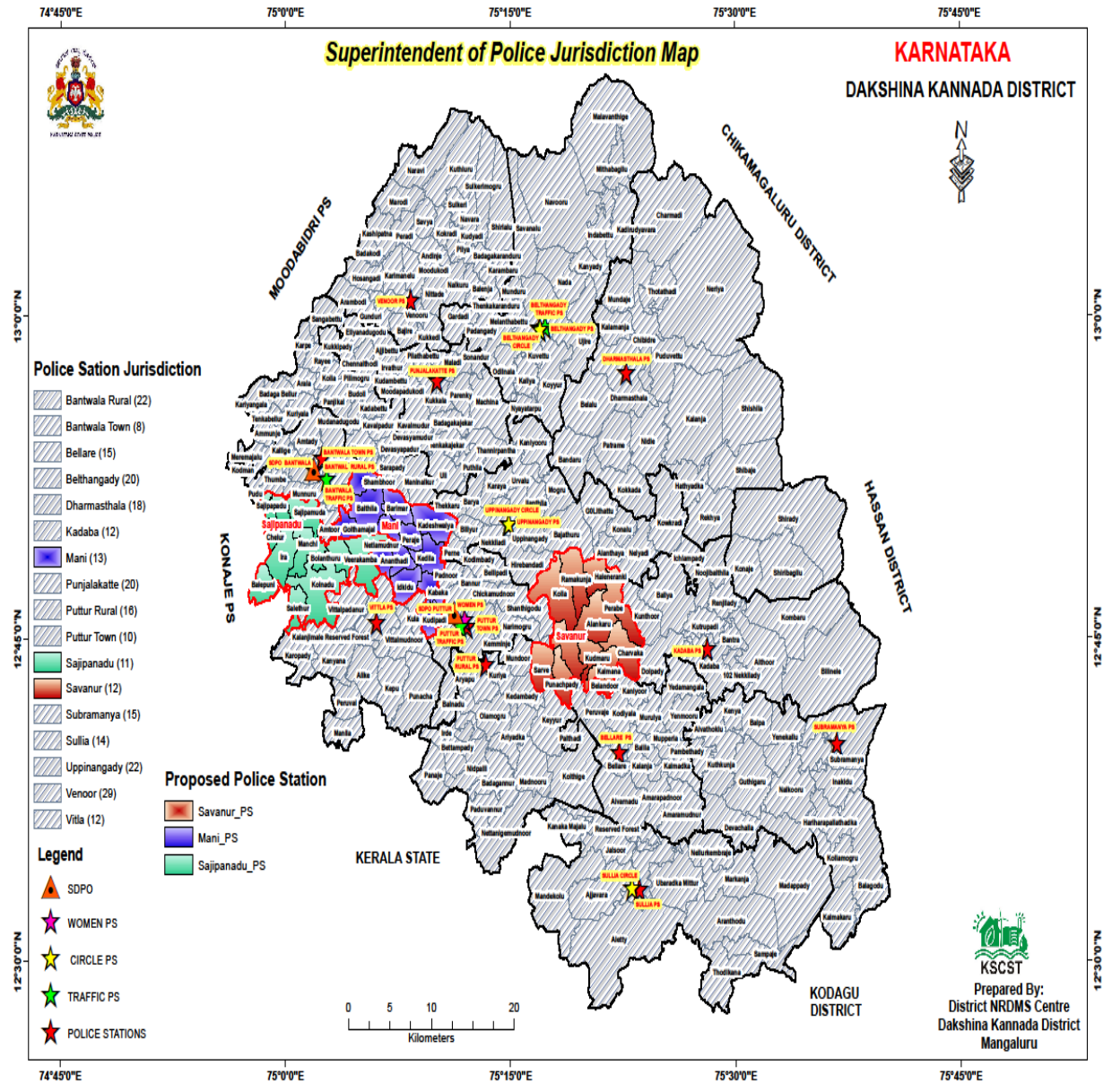






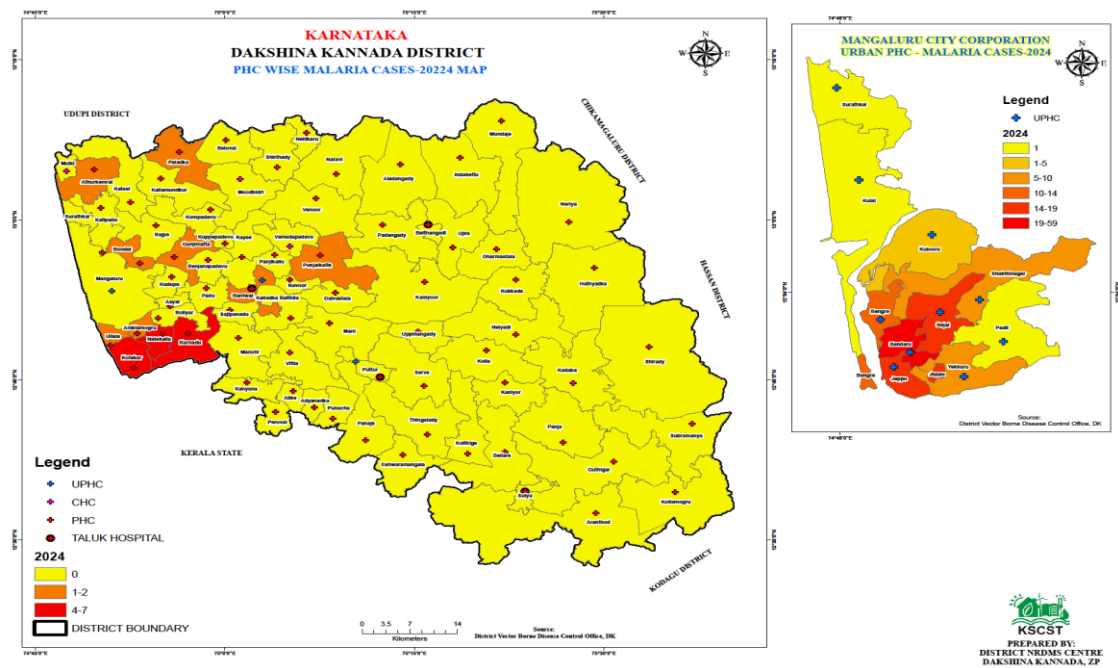
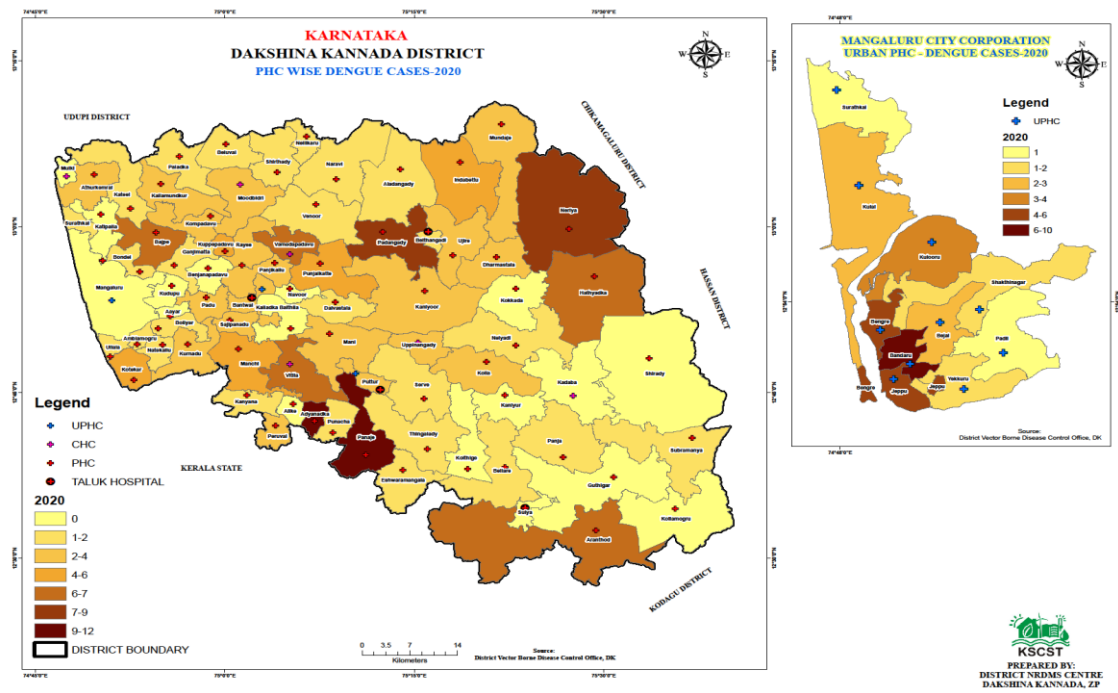
- **Superintendent of Police (SP) office**

As directed by the Dakshina Kannada Superintendent of Police (SP), the District NRDMS Centre has created a jurisdiction map for the Superintendent of Police, detailing all police station areas and circles, and has also prepared a proposal map for new police station areas.



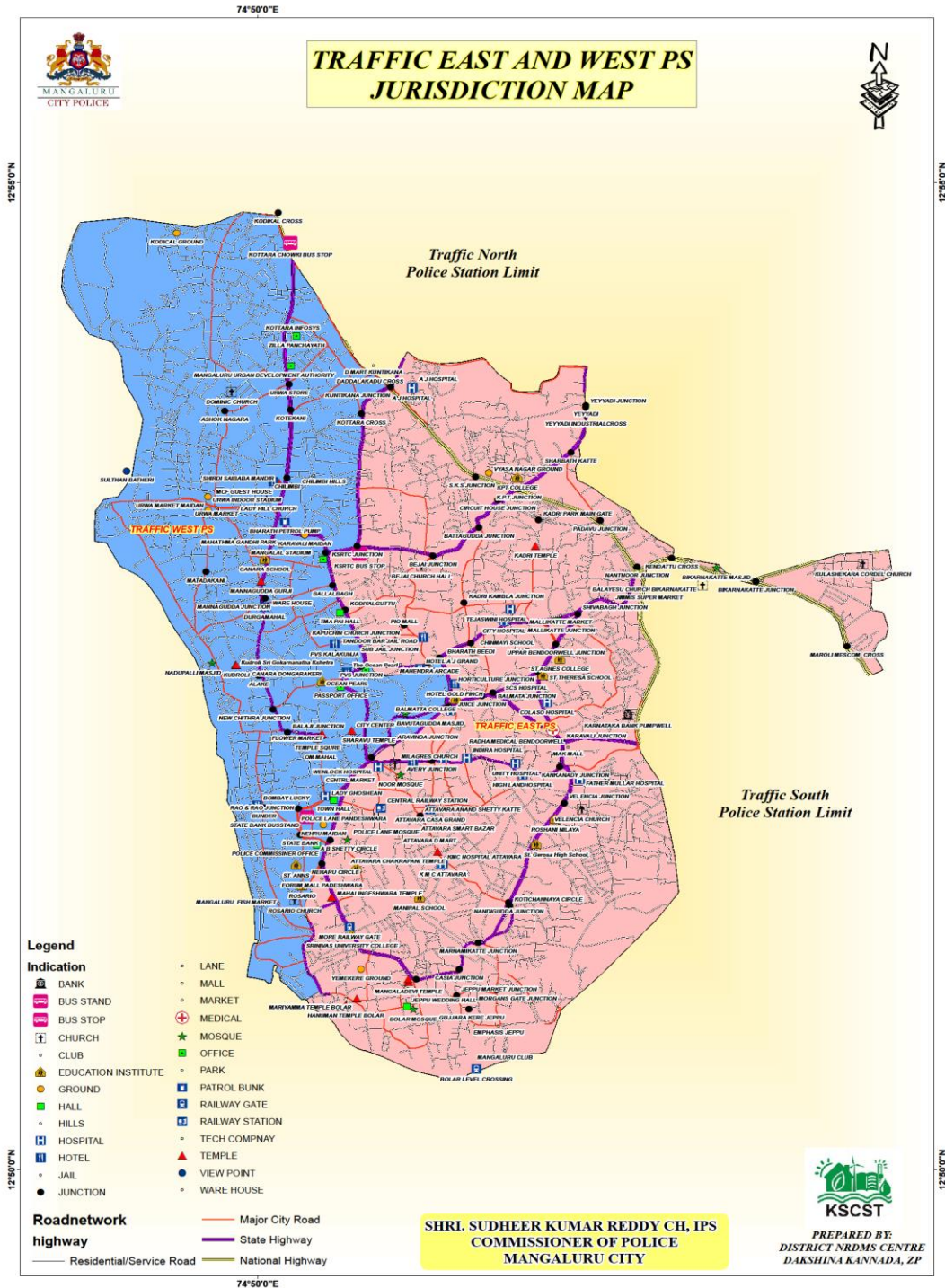
- **District Vector Borne Disease Control Office Health Department**

As per the request from the District Vector Borne Disease Control Office, Health Department prepared a 5-year report of confirmed dengue and malaria cases found in Dakshina Kannada district under the Malaria Control Program to control dengue and malaria cases.



- **Mangaluru City Police Commissioner**

As per the order from the Mangaluru City Police Commissioner, the District NRDMS Centre has prepared the Mangalore City Traffic East_ West and Black Spots location map using ARC GIS and QGIS software. Updation works are in progress. This map is used to create a proper plan to address Traffic violence and other crimes. It also highlights important places and government offices.



6. Training Programmes Attended

- As per the order from RDPR attended KGIS Road side plantation web portal training at KSRSAC Bengaluru on 09.05.2025
- As per the order from Deputy Commissioner Dakshina Kannada attended Thematic Programme District Specific Disaster Management plan 5 days Training

Programme at ATI Mysore from 15.07.2025 to 19.07.2025. In the training, we learned about Disaster, Types of Disaster, Disaster Response System, HRVCA, Urban Planning, Psycho-social Care, Structural Mitigation, First Aid and Emergency Response, Social Justice and Equality, SOP, our roles, and the DDMP Report.

7. Training Imparted to Line Departments

As per the order from State government Given KGIS Road side plantation web portal training to RFOs and DFOs and other technical persons in forest department on 17.05.2025 and 09.06.2025

8. Conclusion

In the period from April to July 2025, the NRDMS Centre prepared all necessary maps for the Planning Department, Health Department, Excise Department, Mangaluru City Police Commissioner, Dakshina Kannada Superintendent of Police (SP) Office, and Mangalore City Corporation. Additionally, they attended the Disaster Training Programme at ATI Mysuru and the KGIS Portal Roadside Plantation training at KSRSAC, Bengaluru.

9. Annexures

District Maps:

- District Administrative Map
- Human Development Index Map
- Adyar Primary Health Centre Map
- Mangalore city corporation API Map
- PHC/UPHC wise Malaria cases Map
- Mangalore City Police Jurisdiction Map
- Mangalore City Police Subdivision Area Map
- New Police Station Proposal Map
- 5-year confirmed dengue and malaria cases Map
- Mangalore City Traffic East_ West Jurisdiction and Black Spots location Map

Tables:

Health index:

Raw Data					
Sl no	District	Taluka	Under5_mortality (per 1000)	MMR (%) (per 1 lakh)	No of Mothers who had at least 4 antenatal care visits
1	Dakshina_Kannada	Bantwal	14.00	86.13	98.74
2	Dakshina_Kannada	Belthangady	15.60	109.50	86.56
3	Dakshina_Kannada	Mangalore	10.10	25.25	112.78
4	Dakshina_Kannada	Puttur	13.30	48.43	89.65
5	Dakshina_Kannada	Sulya	16.00	0.00	108.00

Taluk wise Human Development Index(HDI) Analysis Dakshina Kannada District												
Sl No	District	Taluk	Living Standard Index		Health Index		Education Index		HDI			
			Value		Value		Value		Value	Rank	Value	Rank
			2011	2022	2011	2022	2011	2022	2011		2022	
1	Dakshina Kannada	Bantwal	0.514	0.7495	0.820	0.8652	0.527	0.6249	0.605	23	0.7400	5
2		Belthangady	0.345	0.6741	0.870	0.8141	0.503	0.6435	0.532	45	0.7068	11
3		Mangalore	0.756	0.7377	0.867	0.8955	0.591	0.7369	0.729	4	0.7867	1
4		Puttur	0.469	0.6652	0.799	0.7489	0.565	0.6812	0.596	25	0.6975	16
5		Sulya	0.409	0.7476	0.891	0.8771	0.520	0.6333	0.574	36	0.7461	4

Dakshina Kannada District has shown steady progress in every aspects of the HDI analysis report. As a result of this, the Rank of the District has indicated an overall development.

Mangalore city corporation Malaria cases API Database:

SI No	Ward Name	API	Category
1	Central Market	0.3	Low
2	Panambur	0.6	
3	Bejai	0.6	
4	Valencia	1.4	Medium
5	Port	1.6	
6	Hoige Bazar	1.8	
7	Kudroli	8.5	High
8	attavara	11.6	
9	Jeppina Mogaru	17.8	

PHC/UPHC wise Malaria cases API Database:

PHC_Name	Maleria_Case API	UPHC_Name	Maleria_Case API
Aayar	0.00	Surathkal	0.02
Adyanadka	0.00	Kulai	0.02
Aladangady	0.00	Kulooru	0.08
Alike	0.00	Shakthinagar	0.14
Amblamogru	0.06	Bandaru	1.22
Aranthod	0.50	Bengre	0.30
Athurkemral	0.02	Jeppu	0.41
Bajpe	0.00	Bejai	0.35
Bantwal	0.00	Padil	0.02
Bellare	0.00	Yekkuru	0.18
Belthangadi	0.00		
Beluvai	0.00		
Benjanapadavu	0.00		
Boliyar	0.00		
Bondel	0.05		
Daivastala	0.00		
Dharmastala	0.00		
Eshwaramangala	0.00		
Ganjimatta	0.03		
Guthigar	0.95		

Hathyadka	0.00
Indabettu	0.00
Kadaba	0.00
Kalladka Balthila	0.00
Kallamundkur	0.00
Kaniyoor	0.00

PHC/UPHC wise Dengue cases:

PHC_Name	2020	2021	2022	2023	2024
Aayar	0	0	2	2	2
Adyanadka	12	1	2	1	6
Aladangady	1	1	4	1	0
Alike	0	1	0	0	1
Amblamogru	1	1	2	0	4
Aranthod	7	6	7	2	0
Athurkemral	3	8	18	10	17
Bajpe	7	7	11	24	10
Bantwal	3	10	4	10	18
Bellare	1	6	5	2	2
Belthangadi	1	0	5	1	2
Beluvai	1	0	0	1	1
Benjanapadavu	0	3	1	4	4
Boliyar	2	2	1	0	5
Bondel	1	4	5	8	8
Daivastala	1	2	1	1	13
Dharmastala	3	3	7	2	2
Eshwaramangala	2	0	0	0	1
Ganjimatta	1	1	0	1	1
Guthigar	0	3	1	0	4
Hathyadka	7	2	2	1	2
Indabettu	5	1	3	6	3
Kadaba	0	5	0	0	1
Kalladka Balthila	0	1	2	8	15
Kallamundkur	3	1	1	2	1
Kaniyoor	4	6	2	5	1
Kaniyur	0	2	0	0	2
Kanyana	1	2	1	0	2
Kateel	2	5	5	2	10
Katipalla	0	0	1	2	2
Koila	3	3	0	0	7



**District Specific Disaster Management plan 5 days Training Programme at ATI
Mysore from 15.07.2025 to 19.07.2025**
