NATURAL RESOURCES DATA MANAGEMENT SYSTEM (NRDMS)

MONTHLY ACTIVITY REPORT April - July 2025

Submitted by



District NRDMS Centre Zilla Panchayat, Koppal

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 Koppal District:

District Name: Koppal

Division: Kalaburagi

District Establishment Year:1997

Headquater: Koppal City

Current CPO (I/C): Manjunath D, Chief Planning Officer, Zilla Panchayat, Koppal.

Current CEO (CC): Varnit Negi, IAS, Zilla Panchayat, DC Office, Koppal.

2. Background of District NRDMS Centre, Koppal:

NRDMS programme aims to analyze the evolution of methodologies and techniques for

formulating development strategies. In a scenario of large diversity of data sets, data users and

data generating agencies, the programme aims at developing and demonstrating the use of

spatial decision support tools for integrated planning and management of resources at the

local level.

Koppal district was new district craved out of undivided Raichur district in the year 1997 and

District NRDMS Centre was established in the year 2007-08 at Zilla Panchayat Office. District

NRDMS Centre is been actively involved in providing Geospatial support to Zilla Panchayat

office, District administration and line departments of the districts for better planning and

execution of development work.

3. Geographical Features:

A. Location & Boundaries:

Introduction

Koppal, a newborn district of Karnataka state, carved out of Raichur District. It is situated between 15* 09' 00" to 16* 03' 30" North Latitude and 75* 47' 30" to 76* 48' 10" East

Longitude. It consists of four talukas Koppal, Gangavathi, Kushtagi, Yelburga and Newly formed three talukas (19.01.2018) Kanakagiri, Karatagi and (18.01.2018) Kukanoor. Koppal district is

surrounded by Raichur district in the east, Koppal district in the West, Bagalkot district in the north, Bellary district in the south. Koppal District headquarters is closest to the world heritage

Hampi.

Koppal district is an administrative district in the state of Karnataka in India. In the past

Koppal was referred to as 'Kopana Nagara' Hampi, a World heritage centre, covers some areas

1

of Koppal District. It is situated approximately 38 km away. Anegundi, is also a famous travel destination.

Koppal District located in the northern interior of Karnataka has an area of 8,458 sq km. It is bounded by the districts of Raichur, Bagalkot, Koppal, and Bellary. Koppal district is the best seed production centre in the state. Several national seed companies have seed production centres for flowers, fruits, vegetables and pulses here. Anegundi, Kanakagiri, Navabrindavana, and Kuknur are the important places to visit.

Geographically, Koppal is a stretch of rocky terrain on one side and acres of dry land on the other wherein agricultural crops like Jowar, Ground-nuts etc are grown. Farmers still use the old Bullock-Cart ploughing methods, depending mainly on the Monsoons which is a rarity in these parts of the world. However recently some of them have ventured into high-tech irrigational Farming especially after the Thunga-Bhadra river waters from the neighbouring town of Munirabad (20kms away with a huge Dam) is been redirected to the Town to solve its water problems. So, the current product crops are Pomegranites, Grapes and Figs (which are being exported)

The administrative blocks of the district are as follows

No. of Talukas : 4 and Newly formed Talukas: 3

No. of Hoblis: 20

No. of Inhabited villages: 594

No. of Un-Inhabited Villages: 35

No. of City & Municipal Corporation/Councils/Town Panchayath: 9

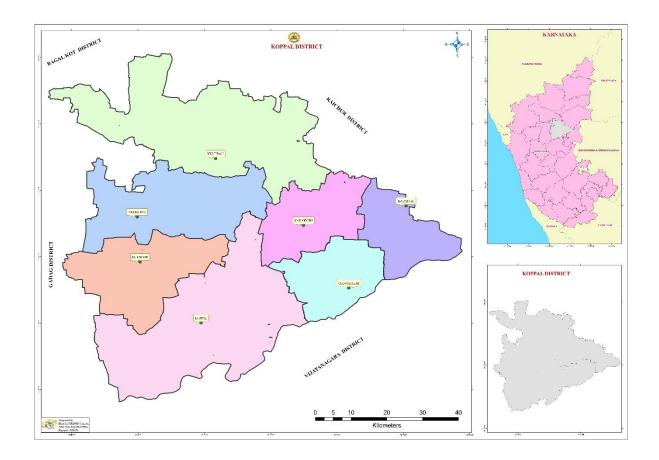
> No. of Gram Panchayath: 153

Topography:

The Koppal district of Karnataka is a region with a varied topography characterized by plains, undulating terrain, and significant river systems, notably the Tungabhadra River, which is crucial for the region's agriculture and infrastructure. The topography includes elevated areas, such as Koppal Hill, where historic forts and temples are located, and lower-lying areas along the river, contributing to the overall surface features of the district.

C. Climate:

Koppal District generally has a semi-arid climate with a warm temperature year-round, though it experiences distinct seasons. The district receives an average annual rainfall of about 572 mm, with the rainy season lasting roughly from late March to late November, and the peak rainy month being September. Temperatures are typically high, especially in the summer, but there are also cooler periods during the winter.



Seasons

- Rainy Season: From around March 30 to November 28, with at least 0.5 inches of rain in a 31-day period.
- Dry Season: The period between November and March, when there is less rainfall.

Temperature

- Temperatures are warm to hot throughout the year.
- High temperatures are experienced during the summer months.
- Winter months are cooler, with nights being cooler than days.

Rainfall

- The average annual rainfall for the district is approximately 572 mm.
- The month with the most rain is September, which receives an average of about 3.3 inches.

4. Spatial & Non-Spatial Data:

Status Code: Meaning

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

SPATIAL DATABASE

Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covere d	Status Code	File For mat
1. Natural Resources						
Land						
1. Topography						
Contour Map	30 Mtr	ASTER DEM		District	CC	.Shp
Slope Map	1:50,000	KSRSAC		District	CC	.Shp
2. Geology – A						
Rock features	1:50,000	KSRSAC		District	CC	.Shp
Structural features	1:50,000	KSRSAC		District	CC	.Shp
3. Geology – B						
Rock features		NA				
Structural features		NA				
4. Mineral Resources		NA				
5. Geomorphology	1:50,000	KSRSAC		District	CC	.Shp
6. Land use	1:50,000	KSRSAC		District	CC	.Shp
7. Waste Lands		NA				
8. Soils	1:25,000	NBSS & LUP		District	CC	.Shp
9. Forest & Wildlife				•		
Forest type	1:50,000	KFD		District	CC	.Shp

Crown Density		NA			
Forest Category		NA			
Forest admn.	1:50,000	KFD	District	СС	.Shp
Wild Life		NA			
Water					
1.Ground water					
Hydro Geology		NA			
Hydro chemistry		NA			
Ground water budget		NA			
2.Surface water					
Drainage	1:50,000	SOI	District	CC	.Shp
Surface water bodies	1:50,000	SOI & KSRSAC	District	CC	.Shp
3.Climate		NA			

Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covere d	Status Code	File Format
2.Demography				•		
Population						
Tehsil boundary	1:50,000	SOI		District	СС	.Shp
District boundary	1:50,000	SOI		District	СС	.Shp
Current popln. distbn.	1:50,000	SOI		District	СС	.Shp
Literacy	Literacy					
Levels of education		NA				
Occupation				•		

Village boundary	1:50,000	SOI	District	CC	.Shp
Employment					
District scenario		NA			
Employment exchange		NA			
Assets & Expenditure		NA			
Migration		NA			
Destitutes		NA			

3.Socio Economy						File Format
Industry		NA				
Developmental activity		NA				
4.Agro Economy						
Land Utilisation						
Private Land		NA				
Common property		NA				
Land Ownership patte	ern					
General scenario		NA				
Farmer's holdings		NA				
Principal crops		NA				
Irrigation						
Minor irrigation						
Canals	1:50,000	DLR & SS (KSRSAC)	District	СС	.Shp	
Tube wells		NA				
Dug wells		NA				
Tanks	1:50,000	DLR & SS (KSRSAC)	District	СС	.Shp	
Lift irrigation		NA				

Major irrigation						
Reservoirs	1:50,000	DLR & SS(KSRSA C)	District	СС	.Shp	
Anicuts		NA				
Agricultural implements						
Animal husbandry	1:50,000	AHVS	District	СС	.Shp	
Pisciculture		NA				
Plantation		NA				

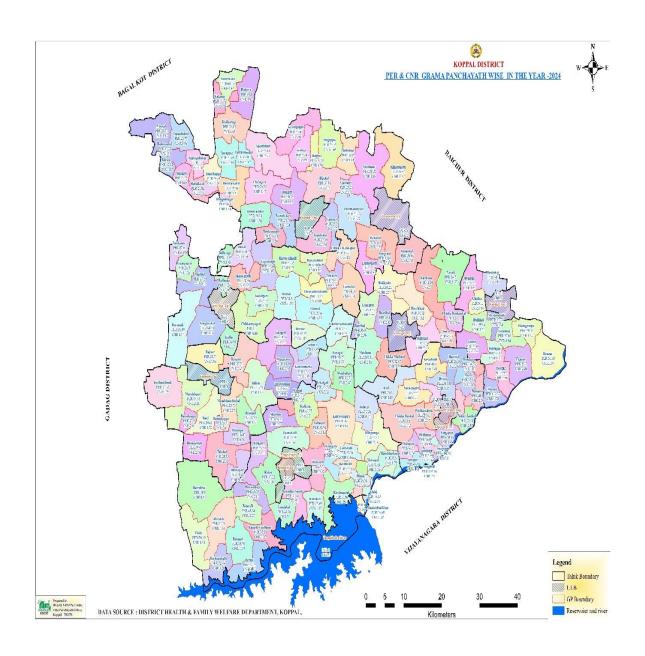
Sector / Subsector	Scale	Source	Survey / Publn. Year	Area covere d	Status Code	File Format
5.Infrastructure						
Communications						
Post offices	1:50,000	NA				
Telecommunicati on		NA				
Drinking water		NA				
Educational facilities	1:50,000	DDPI	District	СС	.Shp	
Electricity		Land Records				
Financial institutions		NA				
Markets		NA				
Health	1:50,000	DHO	District	СС	.Shp	
NGO's		NA				
Tourism	1:50,000	KSTDC	District	СС	.Shp	
Transport	1:50,000	PWD & SOI	District	CC	.Shp	
6.Miscellaneous						
District map with taluks	1:50,000	SOI	District	CC	.Shp	

District & taluk boundaries	1:50,000	SOI	District	СС	.Shp	
District map with hoblies	1:50,000	DLR & SS	District	СС	.Shp	
Village boundary with settlement	1:50,000	SOI/KSR AC	District	СС	.Shp	
Police station details	1:50,000	SP	District	CC	.Shp	
Details on Assembly constituencies	1:50,000	DC	District	СС	.Shp	
Gram Panchayhs & Zilla Panchayaths, its jurisdiction for all taluks	1:50,000	DC	District	СС	.Shp	

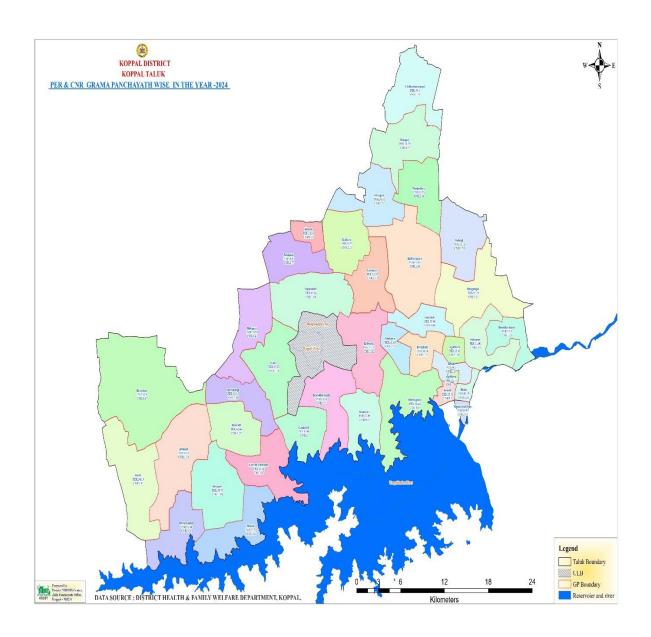
Additional Data

Cadastral Boundary	NA	NA	District	NA	NA	NA	
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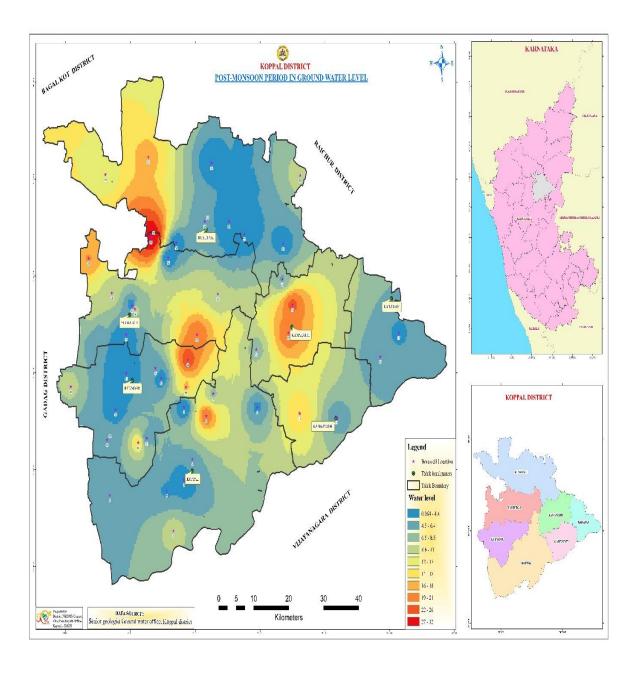
Title of work	Tuberculosis Map of PER & CNR Grama Panchayath Wise in the year -2024
Department Name	District Health & Family Welfare Department, koppal.
Objectives	Gram Panchayat wise To identify the gram panchayats related to tuberculosis and take action to make them tuberculosis free.
Data Used	Taluk Boundary, and GP boundary, ULB
Data Process	Tuberculosis Map of PER & CNR Grama Panchayath Wise thematic map
Type of Data Provided	PDF Map was provided



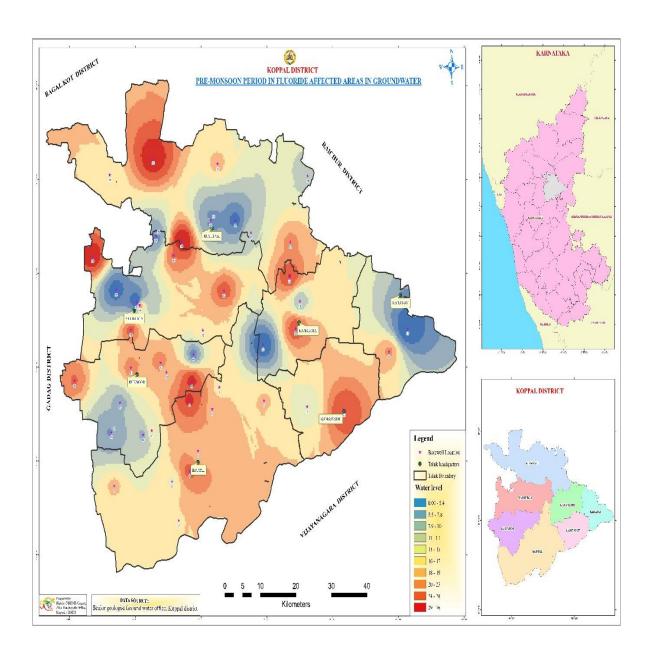
Title of work	Tuberculosis Map of PER & CNR Grama Panchayath Wise in the year
	-2024
Department Name	District Health & Family Welfare Department, koppal.
	Koppal taluk Gram Panchayat wise To identify the gram panchayats
Objectives	related to tuberculosis and take action to make them tuberculosis
	free.
Data Used	Taluk Boundary, and GP boundary, ULB
Data Danasa	Tuberculosis Map of PER & CNR Grama Panchayath Wise thematic
Data Process	map
Type of Data	PDF Map was provided
Provided	



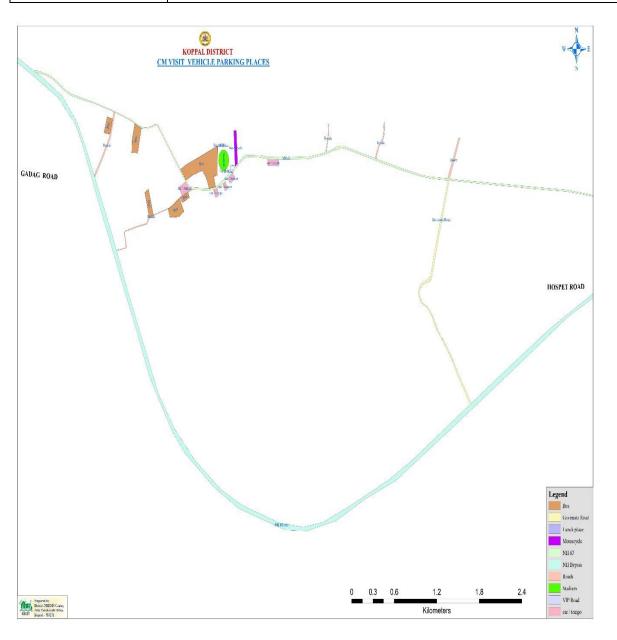
Title of work	Post-monsoon period in ground water level
Department Name	Senior geologist, groundwater department koppal district
	The solution is to identify the specific locations of groundwater and
Objectives	take measures to determine the amount of groundwater through these
	locations and conduct studies
Data Used	Taluk Boundary, borewell location and xl data
Data Process	Borewell location and IDW tools & xl data
Type of Data	PDF Map was provided
Provided	



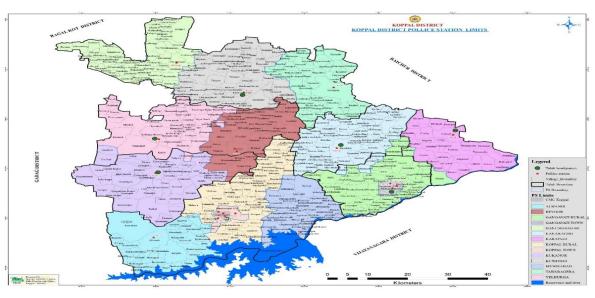
Title of work	pre-monsoon period in fluoride affected areas in groundwater
Department Name	Senior geologist, groundwater department koppal district
Objectives	The solution is to identify the specific locations of groundwater and take measures to determine the amount of groundwater through these locations and conduct studies, This is helpful in identifying fluoride areas affected by groundwater pollution and taking necessary steps.
Data Used	Taluk Boundary, borewell location and xl data
Data Process	Borewell location and IDW tools & xl data
Type of Data Provided	PDF Map was provided



Title of work	CM visit vehicle parking places
Department Name	District Superintendents of Police, koppal district
Objectives	As the Hon'ble Chief Minister is coming to Koppal district, for his security, he has arranged the roads and roads for parking to ensure that no mishaps occur and it is helpful to create a better arrangement for the general public.
Data Used	Google earth and xl data
Data Process	Google earth Arc gis & xl data
Type of Data Provided	PDF Map was provided

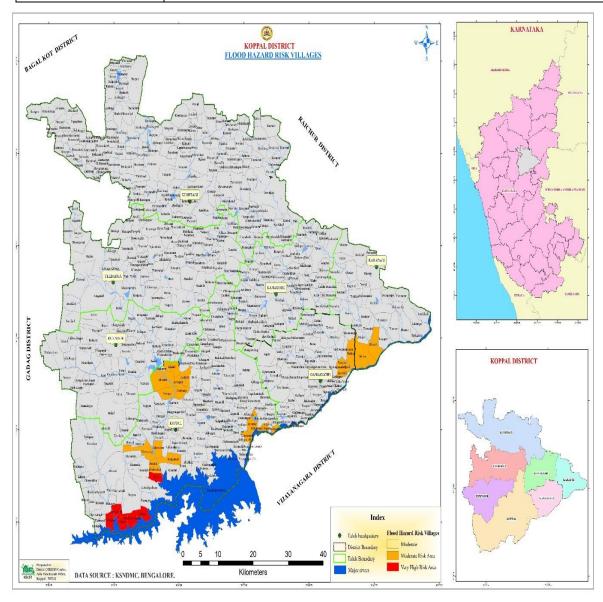


Title of work	Administrative Maps
Department Name	District Superintendents of Police, koppal district.
Objectives	To maintain law and order in Koppal District police station, circle and sub-divisional areas, it is necessary to revise and prepare new maps to create sectors during elections and to maintain law and order.
Data Used	xl data
Data Process	Taluk boundary and village boundary Arc gis & xl data thematic map
Type of Data Provided	PDF Map was provided





Title of work	Flood hazards maps
Department Name	Deputy Commissioner Office, koppal district.
Objectives	Flood hazard. The potential loss of life, injury and economic loss caused by future flood events. The degree of hazard varies with the severity of flooding and is affected by flood behaviour (extent, depth, velocity, isolation, rate of rise of floodwaters, duration), topography and emergency management.
Data Used	xl data
Data Process	Taluk boundary and village boundary Arc gis & xl data thematic map
Type of Data Provided	PDF Map was provided



Activity -1

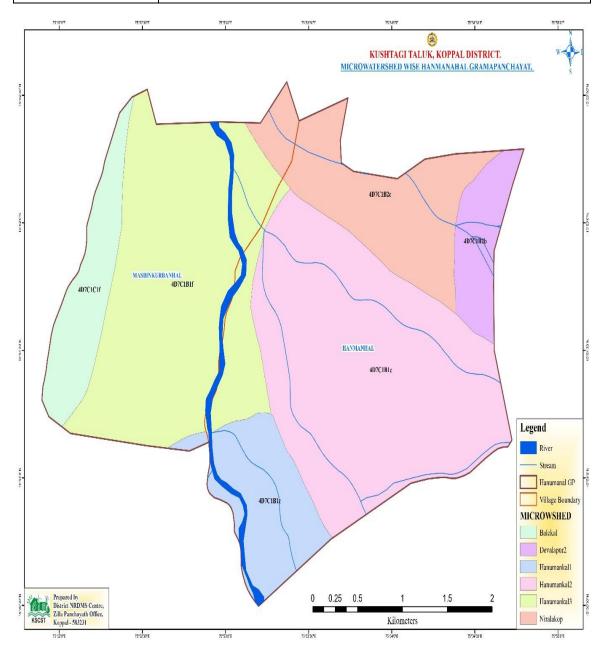
Title of work	Koppal Fort map
Department Name	Deputy Commissioner Office, koppal district.
Objectives	To develop the Koppal Fort, a map of its area related to Koppal
	Fort has been prepared
Data Used	Google earth Pro
Data Process	Arc gis
Type of Data	PDF Map was provided
Provided	



13. Major Activities Carried Out during the period of April-July 2025:

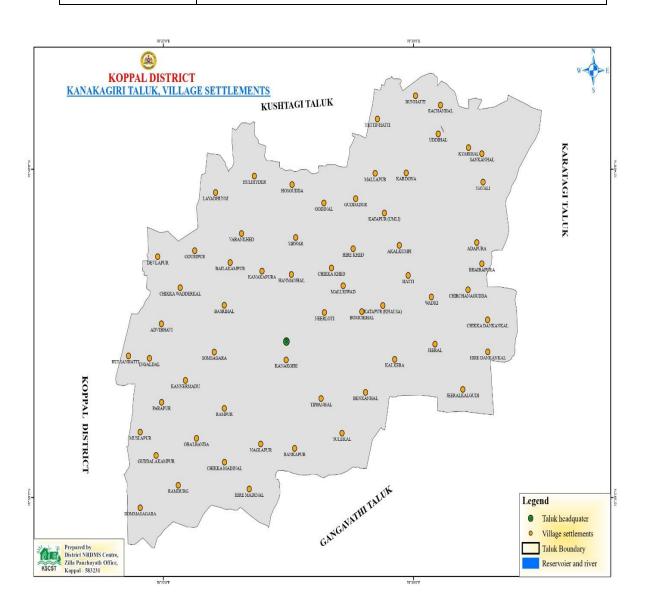
Activity -1

Title of work	Hanmanal GP micro watershed map
Department Name	Zillapanchayath office , koppal district.
	It is helpful to take scientific action to develop ground water in
Objectives	the area of micro water shed under Hanmanal Gram Panchayat
	of Kushtagi Taluk
Data Used	Shp.files
Data Process	Micro water, village boundary and drainage
Type of Data	PDF Map was provided
Provided	



14. Major Activities Carried Out during the period of April-July 2025:

Title of work	Village settlements amps
Department	karnataka university dharwad
Name	
Objectives	Spatial Distribution of Rural Settlements of Koppal District: A Geographical Analysis under my guidance and supervision and are to be submitted to the Department to fulfill the requirement to obtain their M. Sc Degree from the University for the year 2024-25.
Data Used	Shp.files
Data Process	Taluk boundary, Village boundary , Village settlements
Type of Data Provided	PDF Map was provided



15. Conclusion:

A) Summary of Activities Under Take.

During this period district NRDMS center, ZP Koppal provided various Maps, data and report to Zilla Panchayat Office, Deputy Commissioner Office and various line department, pertaining to implementation of various activities and assist district administration in disaster management.

B) Commitment to Improve NRDMS Activities.

District NRDMS Centre ZP Koppal is committed to provide quality and scientific assistance to department for implementation of developmental activities in district.

District NRDMS center is also committed to update the existing data base as up to date to enhance its performance and to assist the departments.

Centre is also committed to learn and update ourself to latest GEO SPATIAL technology and other software to improve our efficiency.