



Government of Karnataka

DISTRICT DISASTER MANAGEMENT PLAN KOPPAL-2019-20



DEPUTY COMMISSIONER'S OFFICE, KOPPAL

DISTRICT DISASTER MANAGEMENT PLAN KOPPAL 2019-20

CONTENT

Chapter No	Topic	Page No	
		From	To
	PREFACE		
Chapter-1	INTRODUCTION	1	9
Chapter-2	KOPPAL DISTRICT PROFILE	10	18
Chapter-3	HAZARD, RISK, VULNERABILITY, CAPACITY ANALYSIS (HRVC)	19	30
Chapter-4	MITIGATION PLAN	31	42
Chapter-5	INSTITUTIONAL MECHANISM	43	60
Chapter-6	RESPONSE PLAN	61	78
Chapter-7	RECOVERY AND RECONSTRUCTION PLAN	79	81
Chapter-8	STANDARD OPERATING PROCEDURES SOPs)	82	87
Chapter-9	EQUIPMENTS AND RESOURCES AVAILABLE IN KOPPAL DISTRICT	88	94
Chapter-10	CONTACT NUMBERS	95	110
Chapter-11	DIFFERENT FACTORS MAPS OF KOPPAL DISTRICT	111	128

Shri P. Sunilkumar I.A.S.
Chairman District Disaster Management Authority
& Deputy Commissioner Koppal

Office of the Deputy Commissioner
Koppal District Koppal
Phone:08539-220844(O), 221235 (Fax)
E-mail: deo.koppal@gmail.com

PREFACE

The District Disaster Management Plan is key part of an emergency management. It will play a significant role to address the unexpected disasters that occur in the district effectively. The information avail in DDMP is valuable in terms of its use during disaster. Based on the history of various disasters that occur in the district, the plan has been so designed as an action plan rather than a resource book. Utmost attention has been paid to make it handy, precise rather than bulky one. This plan has been prepared which is based on the guidelines provided by the National Institute of Disaster Management (NIDM). While preparing this plan, most of the issues relevant to crisis management, have been carefully dealt with. During the time of disaster there will be a delay before outside help arrives. At first, self-help is essential and depends on a prepared community which is alert and informed. Efforts have been made to collect and develop this plan to make it more applicable and effective to handle any type of disaster.

The National Disaster Management Act was brought in year 2005 to promote a proactive approach focusing on all phases of Disaster Management and to give more coherence to the institution a structure required to take forward the paradigm shift in the approach to Disaster Management in the country. Accordingly, the State of Karnataka has formed the State Disaster Management Authority and District Disaster Management Authorities at all the districts for effective management of disasters in the district through the implementation of District Disaster Management Plans. Koppal District occupies an area of 7190 Square Kilometers which has covered most of the dry/wet lands, and often faces drought, and occasionally cyclones and floods like 2005-06, 2009-10, 2014-15 and in the current year in the month of August and September. While not all natural calamities can be predicted and prevented, a state of preparedness and ability to respond quickly to a natural calamity can considerably mitigate loss of life property and human suffering and restore normalcy at the earliest. Therefore Regional Commissioner Office and Deputy Commissioner Office played a major role in preparation and reformulation of District Disaster Management Plans (DDMP) in the year of 2019-20. As a whole this is a genuine effort of district administration to develop the plan and if you have any suggestions and comments are free to convey the same so that we can include them in the next edition. We are thankful to Regional Coordinator, concern Departments/Institutions and persons who have provided us the vital information in time. Also some blank space has been provided wherever possible so that any further new information can be included as and when required.

Place: Koppal
Date:


(P. Sunilkumar)

CHAPTER-I

INTRODUCTION

Vision:

There is need for a comprehensive Disaster Management Plan for the district authorities to manage disasters in the district, and to play a supportive and coordinating role, was realized in the wake of the frequent floods, droughts and various industrial and man made disasters. For a long time now, Koppal district has been experiencing losses and damages due to various natural and manmade disasters such as drought, flood, cyclones, epidemic, pest attack etc. The risks due to these hazards are increasing every year. Although, the district has been taking care of relief and response operations during disasters, greater attention is required for preparedness, mitigation and reconstruction. A comprehensive district plan was required to guide district administrations, line departments and all the agencies and industrial establishments and the community at large to ensure that the management plans for preparedness, mitigation, response and reconstruction are in place so that the impact due to any emergency or disaster situation is minimum and be able to facilitate faster recovery. The District Disaster Management Plan is intended to serve as an effective guide book to help the district administration better prepared for disasters to safeguard the lives, livelihoods and property. The vision of the plan is fail proof communication, authentic and accurate data base documented, rehearsed to be activated in the shortest possible time with minimum simple orders and procedures ensuring participation by administration, communities, industries, private/NGOs, Volunteers at all levels, making optimal utilization of human and material resources with no gaps or no overlaps to prevent/minimize loss to lives and property and faster restoration of normal life in the affected areas.

1.1. Rationale/Justification for DDMP

Natural Disasters are known to mankind before it evolved and will happen afterwards also. It reminds us of a meteorite that had hit the earth which eventually wiped off the entire dinosaurs, million years ago. Today, also we witness them in the form of Earthquake, Floods, Landslides, Cyclones, Wildfires, Avalanches, Cloudburst, Heat and cold waves and the tsunamis (giant tidal waves). Many countries have suffered loss of human lives and damage to property; their economic losses have been in million dollars. Thus, disasters not only kill people, but also have tremendous effect on economy. It enhances the poverty of an already poor country and makes it impoverish. In disasters, it is the poor and under privileged, who are the worst affected, they tend to lose their shelter, livelihood and become more impoverished.

1.2 Aims & Objectives

According to **Prof. G.P Sinha Centre for Disaster Management and Rural Development** following are the aims and objectives of Disaster Management.

1. To engage in activities this may help in minimizing the damages caused by disasters especially in rural areas.

2. To make endeavors towards creating awareness among the people about disasters and its consequences and to prepare them in advance to face such situations and to ensure their participation in the disaster mitigation plans.
3. Existing institutional arrangements, interdepartmental linkages, role of NGO's, voluntary agencies and local communities so as to understand their capabilities to mitigate specific disasters which will also facilitate effective coordination in their activities in times of need.
4. To act as an agency for the execution of disaster management schemes of the Government and the NGOs.
5. To undertake studies this will facilitate in the preparation of rural development schemes and their effective implementation.
6. To collect, compile and publish detailed information on the latest rural development policies and projects of the State Government and The Government of India and to engage in activities in the light of the thrust areas of Planning Commission such as food processing, horticulture, sericulture and service sectors etc.
7. Any financial incumbency, socially and economically deprived rural and urban women through literacy, education, self income generation schemes, professional training and overall awareness building.
8. To undertake studies on a regular basis to procure Disaster Management Information – Data base and to engage in the task of risk assessment and vulnerability analysis both for the state and districts.
9. To evolve information reporting and monitoring tools for preparedness, immediate response and damage assessment, keeping in view the socioeconomic conditions of urban and rural areas.
10. To undertake studies with a view to facilitating the preparation of a comprehensive 'District Disaster Management Plan' so as to help the Government in providing uniform directives from the state government to the district administration and to establish standardized response to any disaster situation.
11. To engage in activities directed towards spreading literacy among minorities, dalits, most backward classes, tribal and economically deprived communities and to ensure community participation and income oriented generation of literacy and professional skills.
12. Children specially those who are the victims of floods, droughts, earthquake and similar other disasters in rural and urban areas.
13. To make efforts for the identification and elimination of child labor and to restore children's rights. For this Centre intends to provide economic incentive to the deserving children in school going category and to actively campaign for the removal of socio-cultural constraints in the community.
14. To establish educational & training institutions for educating communities in the areas of "Disaster Management" and "Rural Development".

1.3. Need for Disaster Management

Data on disaster occurrence, its effect upon people and its cost to countries, are primary inputs to analyze the temporal and geographical trends in disaster impact. Disaster losses, provide the basis for identifying where, and to what extent, the potentially negative outcomes embedded in the concept of risk is realized. They help to understand where, and to whom, disaster risk becomes impact. They also provide the basis for risk assessment processes, a departing point for the application of disaster reduction measures.

Development cannot be sustainable unless disaster mitigation is built into development process. Investments in mitigation are more cost effective than expenditure on relief and rehabilitation. Prevention and mitigation contribute to lasting improvement in safety and are essential to integrated disaster management. Disaster response alone is not sufficient as it yields only temporary results at very high cost. So emphasis must be on Disaster prevention, mitigation and preparedness, which help in achieving objectivity of vulnerability reduction.

1.3 What is a Disaster?

“A **Disaster** is a sudden, calamitous event that causes serious disruption of the functioning of a community or a society involving widespread human material economic or environmental losses and impacts which exceeds the ability of the affected community or society to cope using its own resources.”

--- UN International Strategy for Disaster Reduction, (UNISDR)

A Disaster is a "Situation or event, which overwhelms local capacity, necessitating a request to national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering".

----- Centre for Research of Epidemiology of Disaster (CRED), Belgium

1.3.1 Hazard: is a natural physical event which has a potential to convert into a disaster, causing widespread injury or deaths and damage to public or private property or the environment.

1.3.2 Vulnerability: means inability to resist a hazard or respond when a disaster has occurred. It depends on several factors such as people's age and state of health, local environmental and sanitary conditions, as well as on the quality and state of local buildings and their location with respect to any hazards. --- UNISDR

1.3.3 Disaster Preparedness

Pre-disaster activities that are undertaken within the context of disaster risk management and are based on sound risk analysis. This includes the development/enhancement of an overall preparedness strategy, policy, institutional structure, warning and forecasting capabilities, and plans that define measures geared to helping at-risk communities safeguard their lives and assets by being alert to hazards and taking appropriate action in the face of an imminent threat or an actual disaster.

--- Office of Commissioner for Humanitarian Affairs (OCHA)

1.3.4 Disaster risk reduction (DRR), attempts to look back at the root causes of risks and vulnerabilities in a society, state, town or even a single household. Factors can be broad or specific, depending on the scope of risk and vulnerability assessments.

1.3.5 Natural hazard: Natural process or phenomenon that may cause loss of life, injury or other health

impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

The **Natural disasters** were split into 3 specific groups:

1. **Hydro-meteorological disasters:** Floods and wave surges, storms, droughts and related disasters (extreme temperatures and forest/scrub fires), and landslides & avalanches;
2. **Geophysical disasters:** Earthquakes & tsunamis and volcanic eruptions;
3. **Biological disasters:** Epidemics and insect infestations.

1.3.6 Man made disasters

Disasters due to human activities could be unintentional, but lack of safety measures and abiding by certain safety rules and regulations, Most of these (barring coordinated terrorist activities) are due to certain accidents. Terrorism, Bomb blast, Wars, Riots, technology related, Accidents (Road, Ship, Air), Chemical and Nuclear, Industrial accidents etc.

1.4 Worst Disasters in the world

1. **Bam earthquake, Iran**, Dec 2003, magnitude 6.6 and 26,271 dead, 30,000 injured
2. **South Asian tsunami**, Dec 2004, magnitude 9.3 and 230,000 dead in 14 nations, 125000 injured, 45,752 missing and 1.69 million homeless
3. **Sichuan earthquake, China**, May 2008, magnitude – 7 and 8 69,195 dead, 18,392 homeless and 374,643 injured and 115 billion dollars loss
4. **Haiti earthquake**, Jan 2010, magnitude 7 and 150,000 dead, 300,000 injured and 100 million dollars loss
5. **Pakistan floods**, Jul 2010 --- 2,000 dead, 20 million affected and loss of 43 billion dollars
6. **Japan tsunami**, Mar 2011, magnitude 9 and 15,188 dead, 5,337 injured, 8,742 missing and loss of 300 billion dollars

1.5 The Indian scenario

India has been vulnerable to many disasters in the past both natural and manmade. Nearly, 60% of the landmass is prone to earthquake, 8% for cyclones (east and west coast) and 68% for drought. Some of them are mentioned below along with number of people dead and the economic losses incurred.

A. Natural disasters in India

1. **Latur earthquake**, Sept. 1993, magnitude 6.4 and 20,000 dead and 30,000 injured
2. **Orissa super cyclone**, Oct 1999, 15,000 dead 275,000 homes destroyed and 8,119 injured and 4.9 billion dollars loss.
3. **Gujarat earthquake**, Jan 2001, magnitude 7.7 and 20,000 dead and 167,000 injured and 400,000 homes destroyed and 5.5 billion dollars loss
4. **South Asian Tsunami**, Dec 2004, magnitude 9.3 and 12,405 dead, 5,640 missing and 647,599 homeless.
5. **Cyclone Aila**, 25 May 2009, 325 dead and 8,000 missing, one million homeless and loss of 552.6 million dollars and 7,000 infected with diarrhea due to floods

B. Manmade disasters in India

1. **Bhopal gas tragedy**, Dec1984 and 3,787 dead and 558,125 affected with disabling injuries.
2. **Gujarat riots**, Mar 2002
3. **Serial bomb blast**, Mumbai, Mar1993
4. **Bomb blast in suburban trains**, Mumbai, Jul 2006
5. **Terrorist attack**, Mumbai, Nov 2008
6. **Air plane accident**, Mangalore, May 2010

Thus, we can notice that most of the disasters have occurred within the last two decades, and the frequency, intensity and magnitude of the disasters are ever increasing.

1.6 National disaster management (NDMA) Act, 2005

The National emergency management authority was constituted in Aug 1999, which submitted a report in 2001, to have separate department for Disaster management in India Government enacted the National disaster management act on 23rd Dec 2005, which lead to the creation of National disaster management authority (NDMA).

Nodal ministries responsible for various categories of disasters

S.No	Type of Disaster	Responsible Department
1.	Earthquakes and Tsunami	MHA/Ministry of Earth Sciences/IMD
2.	Floods	MHA/Ministry of Water Resources/CWC
3.	Cyclones	MHA/Ministry of Earth Sciences/IMD
4.	Drought	Ministry of Agriculture
5.	Biological Disasters	Ministry of Health and Family Welfare
6.	Chemical Disasters	Ministry of Environment & Forests
7.	Nuclear Disasters	Department of Atomic Energy
8.	Air Accidents	Ministry of Civil Aviation
9.	Railway Accidents	Ministry of Railways
10.	Terrorism, bomblast, Riots	Ministry of Home Affairs

1.7 Importance of Multi-hazard Management Plan

It is apparent that this district is prone to natural disasters such as floods, cyclones, landslides etc. Also, it cannot ignore the man-made disasters. So the district plan is designed as per the present need and the major strategies to respond to any unexpected situation have also been considered. In the multi-hazard district plan, all the disasters will be handled properly following the given response mechanism, like ICS, use of resource inventory, Standard Operating Procedures (**SOP**), keeping coordination with the line agencies and proper community based awareness activities. SOP of line departments is designed to make them alert. It highlights their role and responsibilities during, after and normal time of the disaster.

1.7.1 The main features of multi-hazard plan are: -

1. It gives importance to all the disasters equally and helps to mitigate the situation beforehand.
2. All the departments are assigned with their proper role and responsibilities, which are clearly indicated in the SOPs.
3. The District administration has to be alert round the year as disasters may occur anytime, anywhere in the district, irrespective of time and location.

1.7.2 Disaster Management Cycle

In multi-hazard response plan, the disaster management cycle has a significant role to play. The four stages of disaster cycle have their own importance in terms of their implementation during, after and before the occurrence of any disaster.



1.7.2.1 Pre disaster activities

1. Policy development and National, State, district, local level disaster organization formation
2. Vulnerability and capacity assessment
3. Prevention and mitigation
4. Preparedness, planning and training

1.7.2.2 Emergency activities

1. Warning (beginning before the actual event)
2. Evacuation, search and rescue
3. Emergency assistance (relief) – food, water, shelter, medical aid

1.7.2.3 Post disaster activities

1. Repair and restoration of life lines (power, telecommunications, water transportation) 2.

Reconstruction and rehabilitation

1.7.2.4 Mitigation methods

i) Structural measures: Any physical construction to reduce or avoid possible impact of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. --- **NDMA (2005)**

ii) Non structural measures: Non engineered measures to reduce or avoid possible impacts of hazards such as education, training and emergency planning, capacity development, general public awareness, early warning system, hazard vulnerability risk analysis, communication mechanism etc. --- **NDMA (2005)**

1.8 Vision of DDMP:

There is need for a comprehensive Disaster Management Plan for the district authorities to manage disasters in the district, and to play a supportive and coordinating role, was realized in the wake of the frequent floods, droughts and various industrial and manmade disasters. For a long time now, Koppal district has been experiencing losses and damages due to various natural and manmade disasters such as drought, flood, cyclones, epidemic, pest attack etc. The risks due to these hazards are increasing every

year. Although, the district has been taking care of relief and response operations during disasters, greater attention is required for preparedness, mitigation and reconstruction. A comprehensive district plan was required to guide district administrations, line departments and all the agencies and industrial establishments and the community at large to ensure that the management plans for preparedness, mitigation, response and reconstruction are in place so that the impact due to any emergency or disaster situation is minimum and be able to facilitate faster recovery. The District Disaster Management Plan is intended to serve as an effective guide book to help the district administration better prepared for disasters to safeguard the lives, livelihoods and property. The vision of the plan is fail proof communication, authentic and accurate data base documented, rehearsed to be activated in the shortest possible time with minimum simple orders and procedures ensuring participation by administration, communities, industries, private/NGOs, Volunteers at all levels, making optimal utilization of human and material resources with no gaps or no overlaps to prevent/minimize loss to lives and property and faster restoration of normal life in the affected areas.

1.9 Objectives of DDMP

1. To prevent loss of human life and property damage
2. To study, analyze and evaluate the disasters
3. To identify the vulnerable locations and do the vulnerability and risk analysis
4. To improve preparedness, prevention and mitigation at district level
5. To ascertain the status of existing resources and facilities available
6. To recommend appropriate strategies and responses to deal with future disasters

1.10 Who formulates and carryout the Plan?

The disaster management plan has been formulated starting from the village level up to the district level. The deputy commissioner, sub-divisional officer and Tahsildar will head the management teams at their respective levels. Urban & rural local bodies, various engineering wings & civil society form an essential component of DDMP. The DDMP is executed by the district disaster management committee, chaired by the Deputy Commissioner.

1.4. Vision of District Disaster Management Plan

Make Koppal District disaster resilient, achieve substantial disaster risk reduction, and significantly decrease the losses of life, livelihoods, and assets – economic, physical, social, cultural, and environmental – by maximizing the ability to cope with disasters at all levels of administration as well as among communities.

1.5 Role of District Administration and organization

The District Magistrate/Collector has the responsibility for overall management of disasters in the district. He has the authority to mobilize the response machinery and has been given financial powers to draw money under the provisions of the General Financial Rules/Treasury Codes.

All departments of the State Government, including the police, fire services, public works, irrigation etc., work in a coordinated manner under the leadership of the Collector during a disaster, except

in metropolitan areas where the municipal body plays a major role. The District Collector also enjoys the authority to request for assistance from the Armed Forces if circumstances so demand. NGOs have also been effective in providing relief, rescue and rehabilitation in recent times.

1.6. Role of Local-Self Governments

Local self-governments, both rural and urban, have emerged as important tiers of governance, after the 73rd and 74th Amendments to the Constitution. For the people, they are also the nearest units of administration and are among the first responders to any crisis besides being closely knit with the communities. These units can thus play an important role in crisis management under the overall leadership of the District Administration.

1.7. Role of Public/NGO/Civil Society/Media:

The local community is usually the first responder in case of a disaster. Local community also carries traditional knowledge and relevant counter measures regarding disaster management. So the role of local community must be utilised with the help of NGOs and media.

They should be encouraged to play an active role in all three phases of disaster management. District administration should also focus on capacity building, participation and empowerment of these stakeholders in disaster management.

Mobilization of community action supported by local NGOs, along with government machinery is a must for quick, efficient and effective response. For this, healthy coordination must exist between local administration and local community/NGOs. Local NGOs and civil society must work on developing a deep culture of safety and prevention in society.

NGOs, civil society and media also play an active role as pressure groups in a democracy so that any laxity on part of the government can be traced and fixed. So, the public and the NGOs should keep a close vigil over the functioning of the government regarding disaster management and render their services as a watchdog.

1.10. How to implement the plan

The disaster management plan has been formulated starting from the village level up to the district level. The deputy commissioner, sub-divisional officer and Tahsildar will head the management teams at their respective levels. Urban & rural local bodies, various engineering wings & civil society form an essential component of DDMP. The DDMP is executed by the district disaster management committee, chaired by the Deputy Commissioner.

1.11. Approval Mechanism of the plan: Authority for implementation at District level

As per Section 31(2) of the Disaster Management Act 2005, there shall be a plan for disaster management for every district of the state. The DDMP has been prepared by the district disaster management authority. Also, as per section 31(6) of the disaster management act 2005, the district authority shall send a copy of the district plan to the state authority which shall forward it to the state government. The approved draft plan has been sent to Karnataka state disaster management authority for final approval.

1.12. Plan Review and Updatation

As per Section 31(4) the district plan shall be reviewed and updated annually. Also, As per Section 31(7)the district authority shall, review from time to time, the implementation of the plan and issue such instructions to different departments of the government in the district as it may deem necessary for the implementation thereof.

CHAPTER-2

KOPPAL DISTRICT PROFILE

Background

The history of Koppal can be traced back to the kingdom of Shathavahanas, Gangas, Hoysalas and Chalukya Dynasties. The name of the district i.e., "Koppal" is found in the poetic work of the great poet Kavirajamarga (During King Nrupathunga's time of 814 to 878 A .D) as "Viditha Maha Kopana Nagara." During Ashoka's period, the Jainism gained greater momentum in this region. Therefore, it was called "Jainkashi." In twelfth century A.D Veerashaivism of social reformer Basaveshwara became popular. The present Gavi Math of Koppal has great attraction.

Koppal town being the head quarters of district is known for its historical glory and literary personalities. The other important places of the district are Bhagya nagar, Kinnal, Itagi, Hulagi, Kukanoor, Kalloor, Gangavati, Kanakagiri, Anegundi, Gudadur, and Munirabad. Bhagya nagar is known for weaving and many people are engaged in the work of preparing raw material to prepare wigs and exports to the other countries, i.e., Switzerland etc.,. Kinnal is known for its Traditional art in handicrafts- Toy making, Chowkis, Fruit plates etc., and Itagi is well known for Mahadeva. Hulagi is famous for Huligemmadevi temple, which is situated on bank of river Tungabhadra. As many as 50 rice polishing mills are situated in and around the Gangavathi town. Anegundi once known as Kishkindha is one of the important place, which is cited in the great epic 'Ramayana' and the first capital of Vijayanagara Dynasty. In Anegundi the old palace and fort still exist where annual festival called "Anegundi Utsava" is being celebrated in a befitting manner every year.

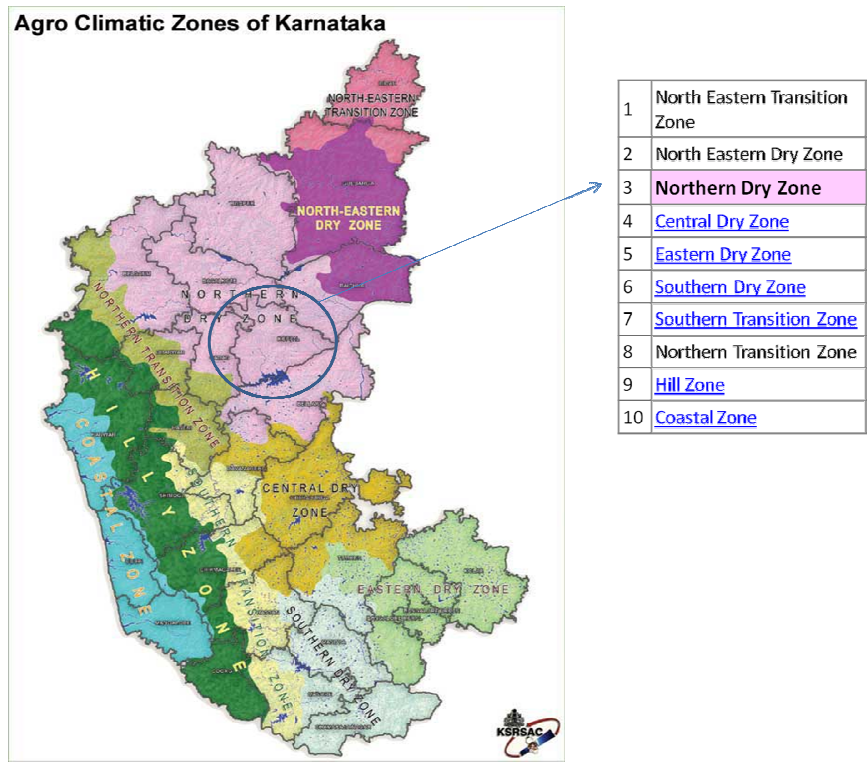


Before independence, Koppal was under the Nizam of Hyderabad. India got independence on 15-08-1947, since Koppal was part of Hyderabad region, the people of the region had to struggle further to attain independence from the clutches of Hyderabad Nizam. On 18th September 1948, Hyderabad-Karnataka region got independence from Nizam. Since then until 01-04-1998, Koppal district was in Raichur district

of Gulbarga revenue division. On 01-04-1998, Koppal district consisting of four talukas viz. Koppal, Gangavathi, Kushtagi and Yelburga came into being.

Geographical Features

Koppal a newborn district of Karnataka, carved out of Raichur district came into existence on 01-04-1998. It is known to be a backward district among the northern part of state in the old Hyderabad Karnataka region.



4

Koppal district is situated in northern part of Karnataka State. Koppal district has four revenue blocks namely, Koppal, Gangavathi, Kushtagi, and Yelburga. The district head quarter is at Koppal and almost all district offices are exists in Koppal city. The geographical area of district is 5559 sq meters and the district finds its position between 15°17' to 16°10' North latitudes, 75°45' to 76°45' East longitudes. Koppal district has 636 villages. The North-East of the district is surrounded by Raichur District, East by Gadag district, south is Koppal district and South East is Bagalkot district. The river Tungabhadhra flows along the border of Koppal and Gangavathi taluk as the district is arid zone area and is surrounded by hills belonging to Yamini Mountain series. Soil in Koppal district is mainly of moderate, fertility in nature. Major industry in Koppal district is Cotton textiles. Koppal district is bountifully blessed with plenty of mineral resources and it is considered to be a prosperous district. Iron ores are found in old mines in Kustagi taluka, but the Iron available here contains only 20-40% of Iron.

Facts and Figures

Description	Rural	Urban
Population (%)	83.19 %	16.81 %
Total Population	1,156,216	233,704
Male Population	582,958	116,968
Female Population	573,258	116,736
Sex Ratio	983	998
Child Sex Ratio (0-6)	955	973
Child Population (0-6)	170,550	31,104
Male Child(0-6)	87,254	15,762
Female Child(0-6)	83,296	15,342
Child Percentage (0-6)	14.75 %	13.31 %
Male Child Percentage	14.97 %	13.48 %
Female Child Percentage	14.53 %	13.14 %
Literates	651,001	158,084
Male Literates	382,270	86,515
Female Literates	268,731	71,569
Average Literacy	66.05 %	78.03 %
Male Literacy	77.12 %	85.48 %
Female Literacy	54.85 %	70.59 %
Area in Sq. Km	5524.95 sq. km.	
Density sq.km	171 sq. km	
Total cultivated land (in hectares)	358194	
Total irrigated land (in hectares)	85200	
Forest Land	29451 Hectare	
Latitude	15° 09' to 16° 03' 30" North	
Longitude	75° 47' 30" to 76° 48' 10" East	
Average rainfall	572 mm	
Postal Code	583231	
IRRIGATION BY DIFFERENT SOURCES	(ha)	
Dug wells	1366	
Bore wells	45851	
Tanks	355	
Canals	47138	
Other Sources	0.0	
Lift Irrigation	1309	
Gross Area Irrigated	96019	
No .of Ground Water structures		
Domestic BW	4985	
Piped water supply	299	

Source: Census 20011 census.

Rainfall and Climate

Koppal district is located in the northern maidan region of Karnataka state, which is drought prone and falls in the arid tract of the country. The climate of the district can be termed as mild to severe, with mild winters and hot summers. December is the coldest month with mean daily minimum of 17.7 degrees Centigrade, while May is the hottest month with mean daily maximum temperature of 39.8 degrees Centigrade. The day temperature in May often touches 45.0 degrees Centigrade. Relative humidity of over 75% is common during monsoon period. Wind speeds exceeding 15km/h are common during the months of June and July. The recorded annual potential evaporation is around 1950 mm with May registering over 220 mm and December around 120mm. The normal annual rainfall of the district is 621mm. The annual

number of the rainy days is about 49 days. Nearly 67% of the rain is received during the southwest monsoon period (June- Sept) and the northeast monsoon contributes about 24%, during the post monsoon period.

Comparison of Rainfall Data of Koppal District for 12 Years (2006 – 2018)(Rainfall in mm)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Situation
Dist.Normal	1.0	0.5	2.8	22.5	54.6	72.8	72.3	86.5	144.6	107.7	26.6	7.9	599.8	
2006	0.0	0.0	6.9	7.1	54.7	71.2	13.8	10.2	71.9	41.7	7.4	0.0	284.6	Drought
2007	0.0	0.0	0.0	20.7	53.0	185.6	38.2	61.1	222.2	80.4	0.0	0.0	661.2	Normal
2008	0.0	11.5	143.5	6.6	22.4	23.4	22.6	49.5	184.6	46.4	42.5	0.0	552.9	Drought
2009	0.0	0.0	0.7	14.0	101.9	85.0	19.0	125.3	259.2	0.0	0.0	0.0	604.9	Normal
2010	12.6	0.0	0.0	10.8	88.0	57.4	94.1	241.7	62.3	45.0	96.6	0.0	708.2	Excess
2011	0.0	0.0	0.0	40.4	51.2	47.4	94.0	104.4	39.0	34.2	0.7	0.0	411.2	Drought
2012	0.0	0.0	0.0	43.1	10.2	15.4	48.8	66.7	56.2	64.2	79.4	0.0	384.0	Drought
2013	0.0	2.0	0.0	13.2	54.0	73.5	74.0	47.9	148.0	127.4	0.0	0.0	539.8	Drought
2014	0.0	6.6	22.2	26.5	83.6	39.5	67.8	218.0	91.3	77.5	13.9	13.9	660.8	Excess
2015	0.8	0.1	17.4	69.1	36.5	57.5	14.3	86.7	184.5	38.8	4.8	2.0	512.5	Drought
2016	1.7	0.2	1.5	1.0	55.3	129.0	71.9	52.0	64.4	16.0	0.0	2.0	395.0	Drought
2017	0.2	0.2	10.9	10.3	41.7	95.0	46.0	126.0	222.0	133.0	1.0	0.0	686.3	Normal
2018	0.0	3.3	11.0	17.0	89.0	87.0	27.0	55.0	53.0	53.0	1.0	1.0	398.0	Drought

Sources: Karnataka State Natural Disaster Monitoring Centre Bangalore (KSNDMC)

Karnataka State Natural Disaster Monitoring Centre (KSNDMC Rainfall Pattern in Koppal As on 31-10-2019

District/Taluk/Hobli	South West Monsoon Rainfall 2019 (1st June to 30th Sept'19)			24 hrs_31102019			Last 7 Days RF (25th to 31st Oct'19)			October 2019			Cumulative Rainfall Pattern (1st Jan to 31st October 2019)		
	Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP
Koppala District	376	352	-6	2	1	-61	19	20	9	108	207	92	565	605	7
Gangavathi Taluk	375	305	-18	2	1	-44	22	29	33	106	196	85	548	533	-3
Gangavathi Hobli	386	254	-34	2	0	-98	23	16	-33	104	153	48	558	443	-21
Hulihaidar Hobli	367	316	-14	1	2	66	19	31	62	106	280	164	550	633	15
Kanakgeri Hobli	381	377	-1	2	3	73	23	30	31	99	272	176	545	691	27
Karatgi Hobli	406	294	-28	1	0	-100	20	55	175	119	201	69	593	521	-12
Marali Hobli	370	313	-16	2	1	-44	23	16	-30	102	136	33	538	460	-14
Nauli Hobli	381	330	-13	2	0	-100	23	21	-7	99	168	70	545	539	-1
Siddapur Hobli	327	281	-14	2	0	-99	23	39	66	118	163	39	516	461	-11
Venkatagiri Hobli	381	272	-29	2	1	-34	23	15	-36	99	179	82	545	495	-9
Koppala Taluk	379	379	0	2	1	-65	16	19	17	112	220	96	575	633	10
Koppala Hobli	410	408	-1	2	0	-76	15	18	18	114	221	94	600	659	10
Alawandi Hobli	328	370	13	1	0	-82	14	16	15	109	183	68	535	587	10
Hitnal Hobli	419	403	-4	4	0	-90	22	16	-25	121	279	130	623	700	12
Erakalgud Hobli	400	344	-14	2	2	0	17	25	50	111	239	116	586	634	8
Kushtagi Taluk	377	385	2	1	1	-54	18	19	4	110	212	94	576	665	15
Kushtagi Hobli	367	380	3	1	1	-41	18	22	20	108	236	119	559	690	23
Hanumanhal Hobli	405	514	27	1	0	-58	16	16	-3	116	207	79	619	792	28
Hanamsagar Hobli	383	361	-6	1	1	-48	19	10	-46	110	185	69	591	621	5
Tavaragera Hobli	363	337	-7	1	0	-81	18	27	49	108	219	104	551	605	10
Yelbarga Taluk	375	340	-9	3	1	-69	19	16	-15	103	201	96	562	590	5
Yelbarga Hobli	388	357	-8	4	1	-72	20	12	-41	100	184	84	570	585	3
Hire Wankalkunti Hobli	363	369	2	1	2	53	18	30	64	108	282	163	551	705	28
Kuknur Hobli	359	321	-11	3	0	-85	17	12	-27	104	201	93	552	569	3
Manglur Hobli	389	321	-17	4	1	-81	19	14	-25	101	157	55	571	531	-7

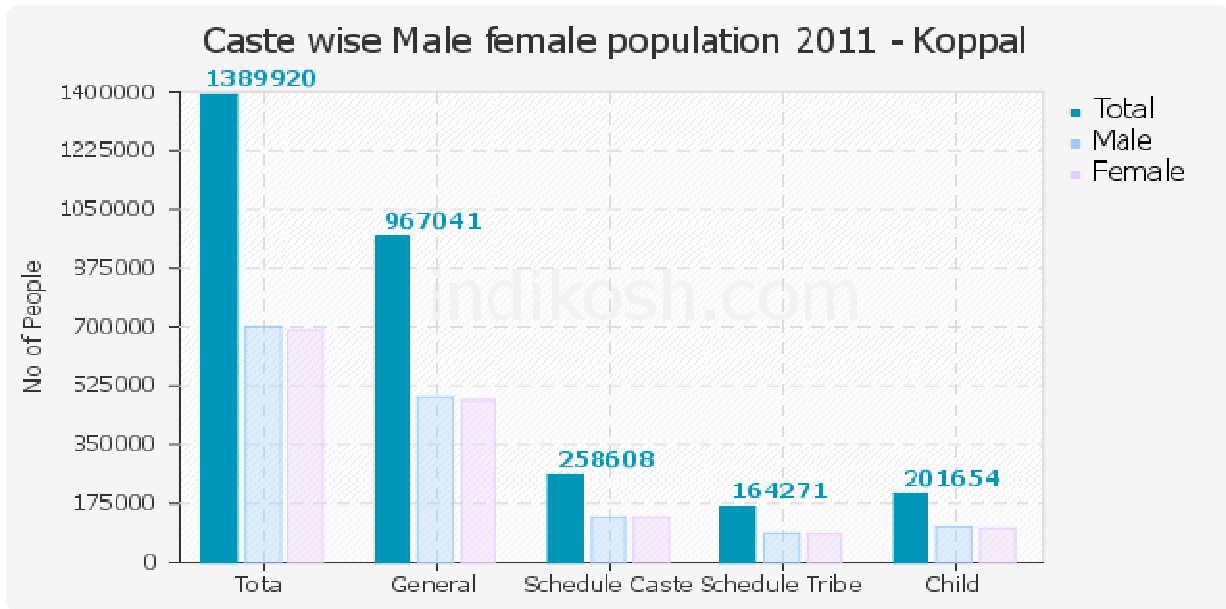
Household Details

Taluk	No of BPL Households						No of APL Households					
	SC		ST		GEN		SC		ST		GEN	
	Card	Memb	Card	Memb	Card	Memb	Card	Memb	Card	Memb	Card	Memb
Gangavati	11702	36092	11173	34649	140	384	34	95	47	152	21	53
Koppal	10413	33918	5391	17734	76	183	55	183	26	91	7	21
Kushtagi	5357	17170	6396	20780	31	72	10	28	26	86	0	0
Yelburga	7898	26406	5234	17480	29	73	24	94	34	119	4	10
Total	35370	113586	28194	90643	276	712	123	400	133	448	32	84

Koppal District Population Details

The social setup in Koppal district is mainly of traditional style. There are people practicing different religions like Hinduism, Islam, Christianity, Jainism and Buddhism. The main feature of the social climate of the district is optimized with religious tolerance and social harmony and peaceful co-existence. Quite natural to the backwardness, Koppal district has the woman population that is still in the grip of illiteracy, blind beliefs, evil practices like Devadasi & Child marriage. These social and economical factors certainly contribute to lack of demand for education in the district. Major occupation of the district is Agriculture and Major crops are Sugarcane, cotton, Rice and cereals.

Koppal Caste wise Male Female Population-2011



Koppal Literates as per 2011 Censuses

10. ಶಿಕ್ಷಣ / Education										
10.1 ಅಕ್ಷರಸ್ಥರು / Literates (As Per 2011 Census)										
ಕ್ರಮ. ಸಂಖ್ಯೆ. SI.No.	ತಾಲ್ಲೂಕುಗಳು Taluks	ಅಕ್ಷರಸ್ಥರು / Literates								
		ಗ್ರಾಮೀಣ / Rural			ಹಗರ / Urban			ಒಟ್ಟು Total		
		ಗಂಡಸರು Male	ಹೆಣ್ಣರು Female	ಒಟ್ಟು Total	ಗಂಡಸರು Male	ಹೆಣ್ಣರು Female	ಒಟ್ಟು Total	ಗಂಡಸರು Male	ಹೆಣ್ಣರು Female	ಒಟ್ಟು Total
1	2	536	537	538	539	540	541	542	543	544
1	Gangavathi ಗಂಗಾವತಿ	109179	81994	191173	41300	33622	74922	150479	115616	266095
2	Koppal ಕೊಪ್ಪಳ	101394	71276	172670	30017	25458	55475	131411	96734	228145
3	Kushtagi ಕುಷ್ತಗಿ	85529	57541	143070	9437	7976	17413	94966	65517	160483
4	Yelburga ಯೆಲಬುರ್ಗಾ	86168	57920	144088	5761	4513	10274	91929	62433	154362
	Total ಒಟ್ಟು	382270	268731	651001	86515	71569	158084	468785	340300	809085

Koppal Literacy rate as per 2011 Censuses

10.2 ಸಾಕ್ಷರತಾ ಪ್ರಮಾಣ (%) / Literacy Rat (%) (As per 2011 Census)											
ಕ್ರಮ. ಸಂಖ್ಯೆ. SI.No.	ತಾಲ್ಲೂಕುಗಳು Taluks	ಸಾಕ್ಷರತಾ ಪ್ರಮಾಣ / Literacy Rat									
		ಗ್ರಾಮೀಣ / Rural			ಹಗರ / Urban			ಒಟ್ಟು Total			Rank
		ಗಂಡಸರು Male	ಹೆಣ್ಣರು Female	ಒಟ್ಟು Total	ಗಂಡಸರು Male	ಹೆಣ್ಣರು Female	ಒಟ್ಟು Total	ಗಂಡಸರು Male	ಹೆಣ್ಣರು Female	ಒಟ್ಟು Total	
1	2	545	546	547	548	549	550	551	552	553	554
1	Gangavathi ಗಂಗಾವತಿ	74.23	55.17	64.65	83.26	67.16	75.17	76.51	58.19	67.30	3
2	Koppal ಕೊಪ್ಪಳ	78.67	56.70	67.82	87.28	74.31	80.91	80.48	60.48	70.58	1
3	Kushtagi ಕುಷ್ತಗಿ	77.25	53.16	65.34	88.16	75.50	81.33	78.21	55.08	66.76	4
4	Yelburga ಯೆಲಬುರ್ಗಾ	79.04	53.93	66.58	88.58	70.90	79.94	79.58	54.88	66.32	2
	Total ಒಟ್ಟು	77.12	54.85	66.05	85.48	70.90	78.03	78.54	57.55	68.09	24

Socio- Economic and Cultural Characteristics

The social setup in Koppal district is mainly of traditional style. There are people practicing different religions like Hinduism, Islam, Christianity, Jainism and Buddhism. The main feature of the social climate of the district is optimized with religious tolerance and social harmony and peaceful co-existence. Quite natural to the backwardness, Koppal district has the woman population that is still in the grip of illiteracy, blind beliefs, evil practices like Devadasi & Child marriage. These social and economical factors certainly contribute to lack of demand for education in the district. Major occupation of the district is Agriculture and Major crops are Sugarcane, cotton, Rice and cereals.

Land Utilisation

4.1 ಭೂಮಿಯ ಬಳಕೆ / Land Utilisation (in Hectares)										
ಕ್ರಮ ಸಂಖ್ಯೆ Sl.No.	ತಾಲ್ಲೂಕುಗಳು Taluk	ಭೂಮಿಯ ಬಳಕೆ / Land Utilisation 2016-17								
		ಭೌಗೋಳಿಕ ಪ್ರದೇಶ Geo-graphical Area	ಅರಣ್ಯ Forest	ಸಾಸಣಕ್ಕೆ ಲಭ್ಯವಿರುವ ಭೂಮಿ Land not available for cultivation			ಸಾಸಣಕ್ಕೆ ಲಭ್ಯವಿರುವ ಇತರ ಭೂಮಿ Other Uncultivated Land			
				ವ್ಯವಸಾಯಕ್ಕೆ Land put to Non-Agricultural Uses	ಬಯಲು Barren & Un Cultivable land	ಒಟ್ಟು Total	ಸಾಸಣಕ್ಕೆ ಯೋಗ್ಯವಾದ Cultivable waste	ಪ್ರಾಣಿ ಸೇವಕ Pamanant Pasture	ವೃಕ್ಷ ಮತ್ತು ತೋಟಗಳು Trees Groves	ಒಟ್ಟು Total
1	2	156	157	158	159	160	161	162	163	164
1	Gangavathi ಗಂಗಾವತಿ	132131	14482	13498	5682	19180	560	8134	0	8694
2	Koppal ಕೊಪ್ಪಳ	136755	10779	11611	5291	16902	430	1486	210	2126
3	Kushtagi ಕುಷ್ತಗಿ	135779	4110	13889	7200	21089	811	6124	0	6935
4	Yelburga ಯಲಬುರ್ಗಾ	147830	80	10630	5462	16092	767	2098	0	2865
	Total ಒಟ್ಟು	552495	29451	49628	23635	73263	2568	17842	210	20620

ಭೂಮಿಯ ಬಳಕೆ / Land Utilisation 2016-17 (in Hectares)							
ಕ್ರಮ ಸಂಖ್ಯೆ Sl.No.	ತಾಲ್ಲೂಕುಗಳು Taluk	ಬೀಜಭೂಮಿ Follow Land			ಬಿತ್ತನೆ ಮಾಡಿದ ಪ್ರದೇಶ Area Sown		
		ಜಾರ್ಜಿ Current	ಇತರೆ Other	ಒಟ್ಟು Total	ನೆಟ್ Net	ಒಂದಕ್ಕಿಂತ ಹೆಚ್ಚು More than once	ಒಟ್ಟು Total
1	Gangavathi ಗಂಗಾವತಿ	13093	19679	32772	57003	23894	80897
2	Koppal ಕೊಪ್ಪಳ	7374	6047	13421	93527	10694	104221
3	Kushtagi ಕುಷ್ತಗಿ	1852	5254	7106	96439	11731	108170
4	Yelburga ಯಲಬುರ್ಗಾ	8489	8501	16990	111809	11690	123499
	Total ಒಟ್ಟು	30808	39481	70289	358778	58009	416787

Gross and Net Irrigated area under different sources 2016-17 (in Hectares)

Taluk	Canals		Tanks		Wells		Bore wells		Lift Irrigation		Other resource			Total
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Gangavai	31919	28489	0	0	0	0	16485	14315	100	100	0	0	48504	42904
Koppal	3652	3000	0	0	0	0	30106	25890	52	38	0	0	33810	28928
Kushtagi	0	0	0	0	0	0	13215	11443	0	0	0	0	13215	11443
Yelburga	0	0	0	0	0	0	18004	16198	0	0	0	0	18004	16198
	35571	31489	0	0	0	0	77810	67846	152	138	0	0	113533	99473

Source: Koppal District at a Glance, 2016-17.

Thungabhadra Dam

The Tungabhadra river is formed by union of two rivers, viz., the Tunga and Bhadra, both of which rise at Gangamula in the Varaha Parvata of the Western Ghats. This is also a perennial river, very deep in certain places and almost unaffordable even in the dry season. This river enters the district near Kesalapur village at the south-western tip of Koppal taluk. The general slope of the land in the district being north-west to south-east, the Tungabhadra has a large number of rivulets and streams serving as tributaries. However, none of these streams of any great importance by itself and they generally dry during the summer. There is Tungabhadra reservoir at Munirabad, which is in the border of Koppal taluk. Downstream of Tungabhadra Dam, Tungabhadra river flows in the south-east border of Gangavathi taluk. Yelburga taluk does not have river.

Salient Feature of Tungabhadra Dam			
Attribute	Value	Attribute	Value
Name of Dam	Tungabhadra Dam	Min Draw Down Level (MDDL)(m)	497.74
Nearest City	Hospet	Gross Storage Capacity (MCM)	3766
District	---	Live storage capacity (MCM)	3700
State	Karnataka	Design Flood (cumec)	18406
River Name	Tungabhadra	Type of Spillway	Ogee
Basin	Krishna	Length of Spillway (m)	701
Type of Dam	Earthen + Gravity	Type of Spillway Gates	---
Purpose of Dam	Irrigation, Hydroelectric	Number of Spillway Gates	33
Year of Completion	1953	Size of Spillway Gates (m*m)	18.29 x 6.10
Catchment Area (Th ha)	2818	Land affected- Total (Th ha)	---
Length of Dam (m)	2443	Land affected- Culturable (Th ha)	---
Max Height above foundation (m)	49.39	Land Affected- Forest (Th ha)	---
Max Water Level (m)	497.74	Land Affected- Others (Th ha)	---
Full Reservoir Level (m)	497.74	Number of Villages Affected	90

Forest:

Forest area of the district is very insignificant due to rocky hills and mountains. There is no wild life in the district. The major types of species found in the forest are Neem, Tamarind, Eucalyptus, Honge, Acacia arculiforms, Casium species etc. The Gangavathi taluk possesses forest area of 14482 hectares which is about 10.96% of the total geographical area; the Yelburga taluk possesses forest only area of 80 hectares which is very meager about 0.05% of the total geographical area (see table-5.5).

Agriculture:

Agriculture is the main resource of the Koppal district. Agriculture has played an important role in the economic development of the district and it is bound to be a prominent sector in the overall development of the district. Agriculture in the district is dependent upon rainfall, irrigation tanks, wells, streams etc. Agriculture in Gangavathi taluk is dependent mainly on Tungabhadra canal irrigation; while in Koppal, Kushtagi and Yelburga taluk is dependent mainly on rainfall, tanks, wells etc.

In Gangavathi taluk, Paddy is the prominent crop occupying 43.14% of total sown area due to availability of irrigation facilities. During Kharif season major crops like Paddy, Jowar, and Maize are grown. During Rabi season major crops are Paddy and Jowar. In summer season crops like Groundnut,

Sunflower and Vegetables are grown with the help of irrigation.

In Yelburga taluk during Kharif season major crops like Wheat, Jowar, Maize, Paddy, Pulses are grown. During Rabi season Jowar, Bajra, Sunflower, Groundnut and Cotton are grown. In summer season crops like Groundnut, Sunflower and Vegetables are grown with the help of irrigation. Cotton is the cash crop grown in the taluk. Agriculture in Yelburga taluk is mainly dependent on rainfall, wells etc. Low level of ground water and alkaline are the major obstacle for the agriculture in the taluk. There is restriction for new bore wells and the entire taluk is declared as “Grey Area” for agriculture.

Horticulture:

The district comes under northern dry zone; the climatologically factors are very much suitable for growing the horticulture crops. Nowadays horticulture plays prominent role in the local occupation of the district. The data available during the 2003-04 the district is having an area of about 14329 hectare with production of 2.3 lakhs tones of horticulture crops.

Gangavathi taluk falls under north dry zone with black soil is favorable for growing horticultural crops like Mango, Pomegranate, Banana, Sapota, Grapes etc. There is wide scope for growing horticulture produce unless marketing conditions and cold storage facilities have to be improved. The horticultural crops like Mango, Banana, Pomegranate, Watermelon, Sapota, Grapes, Tomato, Ladies finger, Onion, Gourd varieties are grown in the taluk. Fruits are grown in an area of 622 hectares and Vegetables are grown in an area of 3046 hectares during the 2003-04.

As for Yelburga taluk, the farmers are not coming forward to increase (774 hectares during 2003-04) the area under horticultural crops due to the absence of suitable marketing and cold storage facilities. The horticultural crops like Pomegranate, Lemon and Grapes are grown in the taluk. Fruits are grown in an area of 362 hectares and Vegetables are grown in an area of 412 hectares during the 2003-04. The farmers of the district are very much interested in adopting hi-tech horticulture. Specially, green house cultivation of vegetables and growing flowers under controlled conditions, keeping export point in mind. In addition, the farmers are adopting hi-tech water management facilities specially, drip irrigation and sprinkler irrigation. The district is having an area of 435 hectares under oil palm crop distributed at Kavalur, Hirebidnal, Hiresindogi and Irkalgad villages.

Administrative Structure

Koppal District is a handy district having four revenue taluk as well as educational Blocks Viz. Koppal, Gangavati, Kustagi and Yelburga. According to Panchayath Raj Act three tire system of administrative in koppal is actively working at present. Zillah Penchant, Taluka Panchayath and Grama Panchayath are working in co-Ordination with each other. The number of members in each area are given in the below table.

Administrative Structures

Block	ZP Member	TP Member	No of GPs	No of GPMs
Gangavati	8	32	39	792
Koppal	7	26	36	660
Kustagi	6	23	29	599
Yelburga	6	23	33	571
Total	27	104	137	2622

Source: DC Office Koppal.

CHAPTER-3

HAZARD, RISK, VULNERABILITY, CAPACITY (HRVC) ANALYSIS

This chapter deals with potential hazards which may have to be faced by the district, probable time of occurrence, vulnerability of the district to different disasters its analysis and analysis of the risk involved. This acts as a reference, upon which mitigative measures, rescue, restoration and rehabilitation plan etc. are planned successfully. Any error in HRV analysis will compound the problems / effects of a disaster. Therefore a careful attempt has been made to achieve the realistic analysis of hazard, risk and vulnerability pertaining to Koppal district.

HAZARD ANALYSIS

The Hazard may be termed as any event/object/rivers/industries/earthquake /fire/building/excess or deficit of rainfall which can cause a potential damage to a population/Animals/property/environment etc., an analysis involving occurrence magnitude, volume of hazards and the impact caused by such hazards gives a proper direction to prepare a plan to deal with such eventualities. Hazard analysis of Koppal district comprises of seasonality of different hazards, history, and area affected etc. with a special emphasis on hazard due to breach of dams.

Flood:

Almost all the districts in Karnataka are facing the brunt of moderate to severe floods. Floods are associated with cloud bursts, cyclones or depressions in the Bay of Bengal and Arabian Sea. The floods are quite common in the districts of Belgaum, Bijapur, Bagalkote, Raichur, Gulbarga, Shimaoga, Chikkamagalur, Udupi, Coorg, Bellary, Dakshina Kannada, Dharwad, Davanagere, Gadag, Hassan, Uttara Kannada, **Koppal**, Bidar, Bangalore (R), Bangalore (U), Kolar, Mandya, Mysore, and Chamarajanagara. Koppal district also flood affected from some areas in Thunga Bhadra River.

Drought:

Karnataka stands Second only to Rajasthan in terms of Drought Affected areas. The state is highly vulnerable to drought as compared to its neighbouring states. Every year, more than 50% of the talukas are declared as drought affected. About 152.1 Lakhs ha (80%) out of 190.238 Lakh ha is affected by drought in Karnataka. Groundwater levels are depleting due to successive droughts and quality of water is getting deteriorated in terms of Fluoride, Nitrate and Salinity. Although, drought may not pose great danger immediately within a few minutes as could happen in case of a severe earthquake, it has huge impact on the occurrence of loss of livelihoods, exodus, poverty, unrest, terrorism, robbery etc.

Drought may occur due to:

- Deficit of rainfall
- Depletion of ground water
- Inadequate supply of water through surface water bodies like rivers, streams, canals, tanks etc.
- Insufficient moisture in the sub surface layer of the soil and

- Increase of demand for water as compared to availability

Heat Wave

What is Heat wave

There is no universally accepted definition for heat wave, it is generally defined as a prolonged period of temperature above normal (excessive heat). As per World Meteorological Organization (WHO) heat wave is defined as “when the daily maximum temperature of more than five consecutive days exceeds the average maximum temperature by 5°C.”

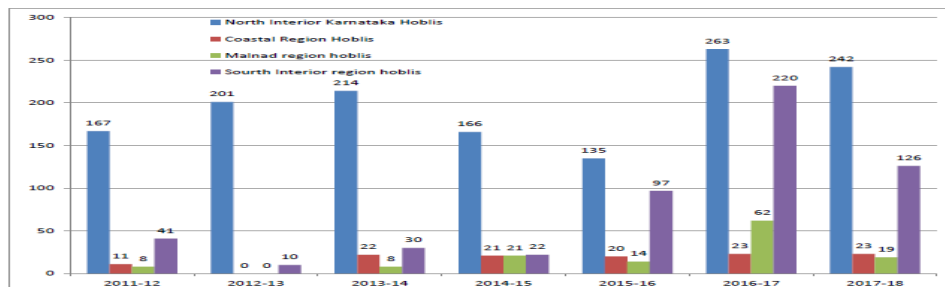
As per India Meteorological Department (IMD) for heat wave to be declared, following criteria to be met:

Heatwave in Koppal District

The Koppal District comes under North Interior Karnataka Region (NIK). As shown in the below map depicted that, the Koppal District is likely affected by Heatwave.



The below given temperature maps clearly depicts North Interior Karnataka are prone to high temperature for a longer duration from 2011 to 2018. As a part of North Interior Karnataka Koppal District is also more prone to high temperature which leads to Heatwave. However, temperature is not the sole criteria for heatwave, relative humidity and other other meteorological factors determine the heatwave conditions. Threshold values of temperature and relative humidity is to be determined for each district of Karnataka to take specific action plan.



Graph depicting no of hoblis recorded temperature greater than 40 degrees from 2011-18

Need for Heat wave Action Plan

The Heatwave Action plan is intended to protect the population from heat-related harm to health, thus reducing heatwave related morbidity and mortality among population in Koppal district.

It aims to create awareness, prepare, alert, and prevent avoidable impacts of heatwave on health during periods of severe heat in Koppal district. The Heatwave Action Plan brings about coordinated approach by synergies with existing plans and strategies of concerned departments and engages all stakeholders to reduce heatwave related health impact by identifying vulnerable groups and creating awareness in Koppal district.

Main components of Heat Wave Action Plan

Main componants of the Koppal District Heatwave Action Plan-2019 are as follows,

1. Building Public Awareness about heat wave, do's and don'ts and management through innovative IEC activities focusing mainly on vulnerable communities. Community Outreach Program at ward level and panchayat level.
2. Dissemination heat wave alert to community using Early Warning System
3. Capacity Building among Health Care Professionals and community.
4. Reducing Heat Exposure and Promoting Adaptive Measures.

Industries:

Koppal district have famous for Iron manufacturing and other products. It is one type hazards in the district in future days. Some industries in Koppal district have following below table:

DETAILS OF WORKING LARGE INDUSTRIES FOR THE QUARTER ENDING ON 31.12.2018 OF KOPPAL DIST.

S No.	Name of the unit	Address	Product manufactured	Investment (In Crores)	Employment
1	Kirloskar Ferrous Industries Ltd	Bevinahalli, Tq & Dist: Koppal	Pig Iron, Grey Iron castings	231.00	803
2	Hospet Steels Ltd (Comprises Kalyani Steels & Mukund Ltd)	GinigeraTq & Dist: Koppal	Pig Iron, Hot Metal, Billets, Blooms, Alloy Steels & 8 MW Electric Power	590.00	936
3	Bhoruka Power Corporation Ltd	Shivapura, Tq.Koppal	Hydro Electric Power	30.48	35
4	Sri Indra power Energies Ltd.	Chikkajanthakal, Tq: Gangavathi,	Bio Mass Electric Power	24.00	49
5	Koppal Green Power Ltd.	Karatagi, Tq: Gangavathi, Dist: Koppal	12.6 MW Biomass Based Thermal Power	25.70	49
6	M/s.Ravikiran Power Projects Ltd.	Kampli Road Gangavathi,	Bio Mass Electric Power	35.00	125

7	Dhruv Desh Metasteels Pvt Ltd	No. 502, Ranka Apartments, Richmond Circle, Bangalore, Hirebaganal Village Tq;Koppal	Sponge Iron 1 Lakh MTPA & 8 MW Power Generation	48.40	72
8	Vanya Steels, & Engineering Pvt. Limited, Changed from,	12/7C, South Tuko Ganj, Nath Mandir, Chouraha, Indora, Madhya Pradesh, Hirebaganal Village Tq;Koppal	Sponge Iron of Capacity 200 TPD	24.50	100
9	Harekrishna Metalics Pvt. Limited	Crescent Towers 229, A.J.C. Bose Road, 6th Floor, Kolkata West Bangal, Hirebaganal Village Tq;Koppal	M.S. Billets 150000 TPA and Rolled Steel Productions	85.00	176
10	Praxiar India Pvt.Limited	Post Box No. 4251, No. Ulsoor Road, Bangalore-560042, Ginigera Village Tq;Koppal	Industrial Gases (Expension Programme)	134.00	26
11	Baba Akhila Saijyothi Indstries Pvt. Limited	Chikkabaganal Village, Tq & Dist: Koppal.	Sponge Iron of Capacity 30000TPD	16.60	105
12	Ultra Tech Cements Limited	A.P. Cement Works, Bogasamundra Village, Tadapatri Mandal, Anantpurta District, Andhra Pradesh., Ginigera Village Gangavathi Road, Tq: koppal	Cement Grinding	150.00	42
13	Trivista Steel & Power Pvt. Ltd.	No. 169, Indiranagara, Mohan Nagara (Po) Salem-, Hirebaganal Village, Tq: Koppal	Sponge Iron Plant 2 x 100 TPD & 4 MW Captive Power Plant	46.60	242
14	Bhadrashree Steel & Power Limited	# 4638/21, Upper Ground Floor, Ansari Road, Dary Ganj, New Delhi, Kunikeri Village, Tq;Koppal	Sponge Iron of Capacity 200 TPD	24.13	155
15	M.S.P.L Ltd. / Pellet Plant	BaldotaEnclave Abheraj Baldota Road Hospet. Halwarthi Village Tq;Koppal	Pellet Plant	318.37	306
16	ILC Iron and Steels Private Ltd.,	Kunikera Village Tq/Dt:Koppal	Sponge Iron	67.00	101
17	M S Metals Private Ltd.,	Door No.324, Ward No.31, Nehru Co-Operative Colony Hospet	Sponge Iron	48.86	42
18	Madhava Solar Pvt Ltd	Sy No- 128/A, 128/AA,128/E/N Kolihal Village Tq: Yelburga Koppal District	Solar Power	42.24	10
19	Madhava Solar Pvt Ltd	Sy No- 128/A, 128/AA,128/E/N Kolihal Village Tq: Yelburga Koppal District	Solar Power	42.24	10
	TOTAL			1984.12	3384

**DETAILS OF WORKING MEDIUM INDUSTRIES FOR THE QUARTER ENDING ON
31.12.2018 OF KOPPAL DIST**

S.No	Name of the unit	Address	Product manufactured	Investment (In Crores)	Employment
1	M.S.P.L Ltd. (Vijaya Oxygen)	Baldota Mansion, Dam Road, Hospet.	Oxygen & Nitrogen (Liquid & Gas)	8.02	112
2	Tungabhadra Fertilisers & Chemicals Pvt Ltd	Munirabad RS Tq & Dist: Koppal	Powdered & Granual Single Super Phosphate	5.44	54
3	RPG Telecom Ltd.	Hanumasagar Tq. Kushtagi	Wind Power	8.98	40
4	ILC Industries Limited	No. 6/7, Dam Road, Hospet, Marlanhalli, near Kartagi	Rice Mill 50,000 MTPA Capacity	7.10	50
5	K.P.R. Agrochem Ltd., Changed Name from, 21/09/2015	Halavarthi village, near kunikera tanda, koppal	SSP & DCP	25.00	215
6	SNC Foods	Sy. No. 97, Chandanahalli Road Kartagi Tq:Gangavathi Dt: Koppal.	Rice	20.27	32
7	NYS Granites Impex Pvt Ltd	Sy. No. 35/2/5, Bandargall Village Tq:Kushtagi Dt: Koppal.	Granite Cutting & Polishing	13.41	30
8	Dodla Diary Limited	Sy No.163, 164 Indra Nagar Indargi Village Tq:Koppal	Milk & Milk Products	19.61	98
9	Abhay Solvents Pvt Limited	Hospet Road Koppal	Refined Rice Bran Oil, Deoiled Bran Acid Oil, Fatty Acid Wax	15.67	79
10	M/s: Hiranmayi Granites & Mineral Private Limited,	Sy No-52/3, Bhandargal Village, Tq: Kushtagi	Granite Cutting and Polishing	7.72	28
11	M/s: B K Industries, Sy No- 74/1, 75/6 R G Road Karatagi Tq: Karatagi	Sy No- 74/1, 75/6 R G Road Karatagi Tq: Karatagi	Rice	8.59	30
	TOTAL			139.81	768

OCCURRENCE OF DISASTERS IN THE PAST IN KOPPAL DISTRICT

Disasters	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Earthquake	-	-	-	-	-	-	-	-	-	-	-
Floods	-	-	-	-	-	-	Yes	-	Yes	Yes	Yes
Cyclones	-	Yes	-	-	-	-	-	-	-	-	-
Droughts	-	-	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes
Industrial accidents	-	-	-	-	-	-	-	-	-	-	-
Fire	-	Yes	-	-	-	-	Yes	-	-	-	-
Road/rail accidents	-	-	-	-	-	-	-	-	-	-	-
Boat capsized	-	-	-	-	-	-	-	-	-	-	-
Mine accidents	-	-	-	-	-	-	-	-	-	-	-
Heat Wave											

Seasonality of hazards in Koppal district:

Type of hazard	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flood						√	√	√	√	√		
Drought			√	√	√					√	√	√
Cyclone				√	√	√	√	√	√	√	√	
Fire	√	√	√	√	√	√	√	√	√	√	√	√
Land Slide						√	√					
Accident	√	√	√	√	√	√	√	√	√	√	√	√
Food poisoning	√	√	√			√	√	√	√	√	√	√
Earthquake	√	√	√	√	√	√	√	√	√	√	√	√
Heat Wave			√	√	√							

Likelihood Occurrence Of Natural Disaster

Hazard Type	Likelihood Occurrence Likely/Unlikely	Estimated Impact on Public Health & Safety Limited/Moderate/Major	Estimated Impact on Property Limited/Moderate/Major
Drought	Likely	Limited	Moderate
Earthquake	Unlikely	Limited	Limited
Flash Flooding/Heavy Rains	Likely	Moderate	Moderate
Flooding River/Tidal	Likely	Limited	Limited
Wildfire	Unlikely	Moderate	Moderate
Winter storm	Unlikely	Moderate	Moderate
Heat Wave	Likely	Moderate	Limited

Likelihood occurrence of Technological Disaster

Hazard Type	Likelihood Occurrence	Estimated Impact on Public Health & Safety	Estimated Impact on Property
Dam Failure	Unlikely	Limited	Limited
Energy/Fuel Shortage	Occasional	Limited	Limited
Hazmat/Oil Spill (Transport)	Likely	Major	Moderate
Major Structural Fire	Likely	Moderate	Major
Water System Failure	Unlikely	Moderate	Moderate

Risk

The probability of harmful consequences, or expected loss (of lives, people injured, property, livelihoods, economic activity disrupted or environmental damaged) resulting from interactions between natural or human induced hazards, and vulnerable / capable conditions. Conventionally risk is expressed by the equation

$$\text{Risk} = \text{Hazards} \times \text{Vulnerability} / \text{capacity}$$

Beyond expressing a probability of physical harm, it is crucial to appreciate that risks are always created or exist within social systems. It is important to consider the social contexts in which risks occur and that people therefore do not necessarily share the same perceptions of risk and their underlying causes.

Risk Assessment / Analysis

A process to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability / capacity that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend.

The process of conducting a risk assessment is based on a review of both technical features of hazards such as their location, intensity and probability, and also the analysis of the physical, social and economic dimensions of vulnerability, while taking particular account of the coping capabilities pertinent to the risk scenarios.

Flood Effects on 2009 in Koppal District:

Human Lives Lost	22 People
Loss of Livestock	685
House Damaged	75,088
Agriculture Crops loss	1,66,962 Hector
Horticulture Crop Damaged	13,799 Hector
Roads Damaged	646 Kms
Bridge Culvert	348
Tank Damaged	06
Major Irrigation Damaged	92
Minor Irrigation Damaged	17
Water Supply Damaged	530
Power Supply Damaged	6,835
Govt Building Damaged	34
Fishery Damaged	71
Health Hospital Damaged	154

Sources: Govt of Karnataka Report on 20th October-2009

VULNERABILITY AND RISK ASSESSMENT

There are instances of many man-made disasters such as strikes and incidents of fire and burning of buses and vehicles at the time of strikes, Road accidents are common. A few rail accidents have taken places.

Proneness to different Disasters:

Type of hazard	Time of occurrence	Potential impact	Vulnerable area
Floods	June – August	Loss of crops, damage to infrastructure such as roads, houses, bridges, etc.	Along the river courses, entire district.
Heavy Rainfall	June – August	Loss of crops.	Entire district.
Drought	Aug – Oct	Burning of crops, scarcity of drinking water, fodder, etc.	Partly in Koppal, Kustagi and Yalburga Taluka
Fire accident	Jan - May, any time	Loss of life and property	Entire district especially during festivals/jathre, etc.
Earthquake	Any time	Loss of life and damage to dam, property, houses, buildings, etc.	Entire district.
Chemical disasters	Any time	Loss of life and damage to dam, property, houses, buildings, etc.	Chemical industries, petroleum tanks, chlorine.
Cyclonic indirect effect	June – Aug	Heavy rainfall, loss of crops	Entire district.
Heat Wave	Mar-May	Burning Crops, Scarcity of drinking water, fodder Health problems with Human and animals, Chance of Fire accidents.	

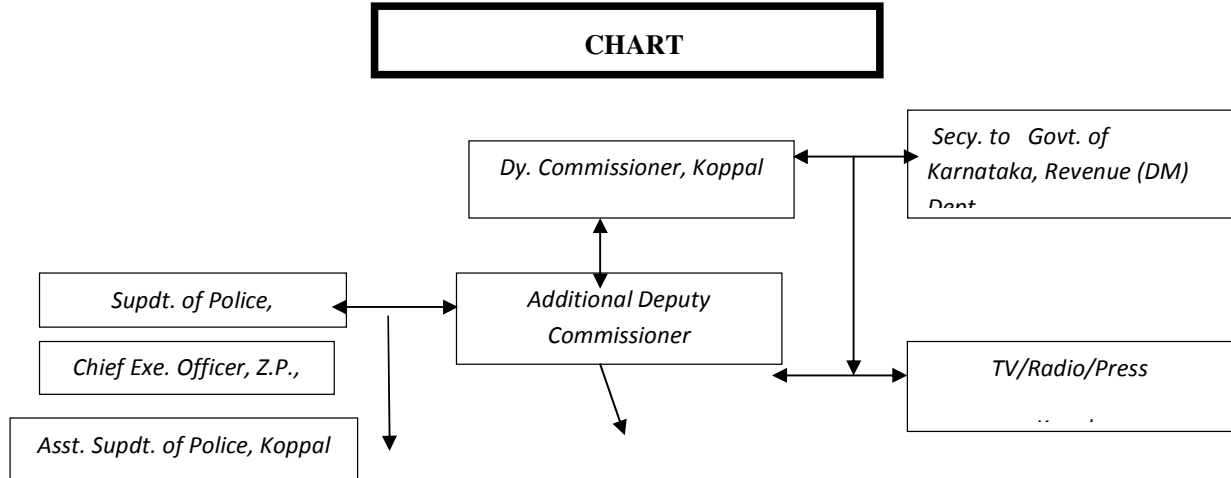
During rainy season, rivers and its tributaries in the district may pose threat of floods. Things get worse as the flood devastates the crops in the affected area and is also a source of epidemics. The district had never experienced any earthquake except minor tremors from time to time. Since the district falls under seismic zone II and III, i.e., less risk to moderate risk zones, the possibility & can never be ruled out as it can happen any time. Drought may occur due to want of rain at proper time. or sometimes heavy rainfall may damage the crops. Cyclonic effect in the eastern coast and Bay of Bengal may cause excessive rainfall which would result in crop damage and other loss. Fire accidents and incidents such as strikes, burning of vehicles are frequently happening in the district particularly fire accident occurs during the summer season.

Capability Analysis

The existing capacity in terms of human resource, materials and machines necessary for disaster preparedness before, during and after the disasters are listed.

Human Resource: Authorities & agencies involved in Disaster Management.

OFF SITE EMERGENCY PLAN AT A GLANCE



Asst. Comr, Koppal	Asst. Comr, Gangavathi	Dvl. Fire Officer, Hubli	Dist. Surgeon, Koppal	Dist. Health Officer, Koppal	Dy. Director of Factories Gulbrga	Pollution Control Brd Koppal
Asst. Dir. of Factories, Koppal	Senior Geologist (M), DMG, Koppal	RTO, Koppal	Dy. Dir. Animal Husbandry Koppal	Supdt. Engineer, Koppal	Exe. Engr, PHE, Koppal	Bus/taxi Owners' association
Dist. Comdt., Home guards, Koppal	Dist. Agrl. Officer Koppal	Dy. Dhier Controller of Explosives, Gulbrga	Executive Engineer, KEB.	Dir. Controller, KSRTC.		Dist. Information Officer
Tahsildar, Koppal	Tahsildar, Yalburga	Tahsildar, Kustagi	Tahsildar, Gangavathi	Dy Tahsildar,	Dy Tahsildar,	Dy Tahsildar,
Gen. Mgr. Telecom, Koppal	Mutual Aid Industries	Voluntary Organization	Private Hospitals, Koppal	Govt. Hospitals, Koppal	Truckers Association Koppal	Dy. Dir. Public Instr, Koppal

Storage of food

All the Gram Panchayat offices are being used as storage points when need arises. Secretaries of Gram Panchayats and Asst. Directors and Deputy Directors are the contact persons. Adequate quantity rice/ragi has been kept for distribution to the victims in the godowns. These locations could also be used as storage points for medicines, blankets etc.

Important Departments and Organsation

All the departments working under the D.C. such as S.P., A.C., Tahsildar, S.E/E.Es of PWD/Irrigation, Commandant, Home Guards/Fire Force Officer, DHO, Municipal Commissioner/Chief Officers, etc., are connected with telephone (both external and internal), VHF's will be installed. All the line departments are directed to keep themselves ready as per the guidelines mentioned in this plan. NGOs and private sector agencies including private firms and industries are asked prepare them with disaster management plans. The resources available with different agencies are identified.

The resources available in the district with both private and Government have been compiled. The list of vital installations such as Dam, transformers, telecommunication centres, wireless relay stations etc., have been provided with protection and security and the same will be intensified during disaster.

Resource	Capability			Availability		
	Group of villages level	Taluk level	District level	Group of villages level	Taluk level	District level
Police		Yes	Yes		Yes	Yes
Fire Brigade		Yes	Yes		Yes	Yes
Home Guards		Yes	Yes		Yes	Yes
Power supply		Yes	Yes		Yes	Yes
Defence			Yes			Yes
Water supply	Yes	Yes	Yes	Yes	Yes	Yes
Civil Supply and Food	Yes	Yes	Yes	Yes	Yes	Yes
Engineering service		Yes	Yes		Yes	Yes
Health service	Yes	Yes	Yes	Yes	Yes	Yes
NGOs		Yes	Yes		Yes	Yes
Private Hospitals	Yes	Yes	Yes	Yes	Yes	Yes
Railways	Yes	Yes	Yes	Yes	Yes	Yes
Colleges student/ Volunteers		Yes	Yes		Yes	Yes
Airways			Yes			Yes
Safe shelters	Yes	Yes	Yes	Yes	Yes	Yes
CBOs	Yes	Yes	Yes	Yes	Yes	Yes

Police Department Koppal District

Statement Showing the Station wise Allotted Present Staff Position and Allotted Vehicle Details

Name of the Police Station	Present Available Staff (in number's)							Allotted Vehicles	
	CPI	PSI	ASI	CHC	CPC	WHC	WPC	JEEP	M' CYCLE
Koppal town	1	1	5	15	29	0	8	3	9
Koppal rural	1	1	4	14	24	0	5	2	3
Koppal Traffic	0	0	4	9	35	0	2	2	
Alwandi	0	1	2	6	15	1	4	1	2
Munirabad	0	1	3	8	22	0	5	1	0
Yelburga	1	1	2	9	21	0	4	2	0
Kukanoor	0	1	3	9	13	0	5	1	2
Bevoor	0	1	3	8	17	0	3	1	2
Gangavati Town	1	1	5	16	35	1	6	2	5
Gangavati Rural	1	1	5	14	26	0	4	2	2
Gangavati Traffic	0	0	4	13	26	0	0	2	4
Kanakagiri	0	1	1	9	17	0	2	1	4
Karatagi	0	1	3	11	15	0	2	1	0
Kushtagi	1	1	4	18	24	0	9	2	4
Hanamasagar	0	1	4	9	17	0	2	1	1
Tawaragera	0	1	2	8	15	0	5	1	0
CEN Police station	1	2	2	8	18	0	8	1	0
Women PS	0	0	2	6	9	1	12	1	1
Total	7	16	58	190	378	3	86	27	27

Department of Home Guards

CONTACT DETAILS OF THE HOME GUARDS DEPARTMENT.

S.NO	NAME	DISIGNATION	CONTACT DETAILS	
			OFFICE	RESIDENCE
01	Sri Hanamantrao.A.M	Commandant	08539-225533	9480715589
02	Shivasharanappa	F.D.A	08539-225533	9632034828

The number of Home Guards in the Koppal District is as follows

S.NO	Name of the taluka	Men Home Guards	Women Home Guards	Total Home Guards
01	Koppal	172	40	212
02	Gangavathi	175	09	184
03	Kushtagi	81	06	87
04	Yalburga	97	-	97
	Total	525	55	580

HOME-GUARDS PERSONNEL TRAINED IN DIFFERENT ASPECTS OF CIVIL DEFENCE.

ಬೇಸಿಕ್ ಮತ್ತು ಅಡ್ವಾನ್ಸ್ ಫೈರ್ ಫೈಟಿಂಗ್ ತರಬೇತಿ ಪಡೆದ ಗೃಹರಕ್ಷಕರ ವಿವರ.

ಕ್ರ.ಸಂ	ಗೃಹರಕ್ಷಕರ ಹೆಸರು	ಮೆ.ಸಂ	ದಿನಾಂಕದಿಂದ	ದಿನಾಂಕದವರೆಗೆ	ಘಟಕದ ಹೆಸರು.
01	ವಿಜಯಮಹಾಂತೇಶ	492	02.03.2016	15.03.2016	ಗಂಗಾವತಿ
02	ಬುದ್ದಿವಂತಪ್ಪ.	56	22.11.2016	24.12.2016	ಕೊಪ್ಪಳ
03	ನಾಗರಾಜ ಮಂಜುನಾಥ	103	22.11.2016	24.12.2016.	ಕೊಪ್ಪಳ
04	ಗವಿಸಿದ್ದಪ್ಪ ಕಲಾದಗಿ	1223	03.02.2017	15.02.2017	ಕುಕನೂರು
05	ಈರಪ್ಪ ಶೀಳಗಣ್ಣವರ್	1231	03.02.2017	15.02.2017.	ಕುಕನೂರು
06	ಮೊಹಮ್ಮದ್ ರಫಿ ಕುದರಿ	1234	15.11.2017	21.12.2017.	ಕುಕನೂರು
07	ಈರಪ್ಪ ಶೀಳಗಣ್ಣವರ್	1231	15.11.2017	21.12.2017.	ಕುಕನೂರು

ಪ್ರಥಮ ಚಿಕಿತ್ಸೆ ತರಬೇತಿ ಪಡೆದ ಗೃಹರಕ್ಷಕರ ವಿವರ

ಕ್ರ.ಸಂ	ಗೃಹರಕ್ಷಕರ ಹೆಸರು	ಮೆ.ಸಂ	ದಿನಾಂಕದಿಂದ	ದಿನಾಂಕದವರೆಗೆ	ಘಟಕದ ಹೆಸರು.
01	ಮೋಹಿನಿಪಾಷಾ	631	22.06.2016	02.07.2016	ಕನಕಗಿರಿ
02	ಶ್ರೀಧರ ಸೂಡಿ	635	22.06.2016	02.07.2016	ಕನಕಗಿರಿ
03	ಡಿ.ಹೆಚ್.ರೇಣುಕಾ	572	11.07.2016	21.07.2016	ಗಂಗಾವತಿ
04	ಗೌರಮ್ಮ	559	11.07.2016	21.07.2016	ಗಂಗಾವತಿ
05	ವಿನಾಯಕ ಎಂ ಹೆಚ್	502	05.06.2017	17.06.2017	ಗಂಗಾವತಿ
06	ಕೆ. ಮಲ್ಲಿಕಾರ್ಜುನ.	513	05.06.2017	17.06.2017.	ಗಂಗಾವತಿ
07	ಈರಮ್ಮ.ಎಂ	190	24.10.2017	04.11.2017	ಕೊಪ್ಪಳ

ಲಘು ರಕ್ಷಣಾ ತರಬೇತಿ ಪಡೆದ ಗೃಹರಕ್ಷಕರ ವಿವರ

ಕ್ರ.ಸಂ	ಗೃಹರಕ್ಷಕರ ಹೆಸರು	ಮೆ.ಸಂ	ದಿನಾಂಕದಿಂದ	ದಿನಾಂಕದವರೆಗೆ	ಘಟಕದ ಹೆಸರು.
01	ಶಾಂತಕುಮಾರ ತಳಕಲ್ಲ	203	02.02.2016	12.02.2016	ಮುನಿರಾಬಾದ
02	ವಿರುವಾಕ್ಷಪ್ಪ ಕಟಂಬಲಿ	313	02.02.2016	12.02.2016	ಅಳವಂಡಿ
03	ಶಕೀಲಪಾಷಾ	503	20.02.2017	03.03.2017	ಗಂಗಾವತಿ
04	ಮಲ್ಲಿಕಾರ್ಜುನ ಎಂ	513	20.02.2017	03.03.2017	ಗಂಗಾವತಿ
05	ಹನುಮಂತಪ್ಪ ತೋಟದ	849	20.10.2016	16.11.2016	ಕುಷ್ಟಗಿ.

ಗೃಹರಕ್ಷಕರ ಬೋಧಕರ ತರಬೇತಿ ಪಡೆದ ಗೃಹರಕ್ಷಕರ ವಿವರ

ಕ್ರ.ಸಂ	ಗೃಹರಕ್ಷಕರ ಹೆಸರು	ಮೆ.ಸಂ	ದಿನಾಂಕದಿಂದ	ದಿನಾಂಕದವರೆಗೆ	ಘಟಕದ ಹೆಸರು.
01	ಅಮರೇಶ	22	01.01.2009	28.01.2009	ಕೊಪ್ಪಳ
02	ಎಸ್. ತಿಮ್ಮಣ್ಣ	478	01.01.2009	28.01.2009	ಗಂಗಾವತಿ

ಯು ಎಕ್ಸ್ ಬಿ ತರಬೇತಿ ಪಡೆದ ಗೃಹರಕ್ಷಕರ ವಿವರ

ಕ್ರ.ಸಂ	ಗೃಹರಕ್ಷಕರ ಹೆಸರು	ಮೆ.ಸಂ	ದಿನಾಂಕದಿಂದ	ದಿನಾಂಕದವರೆಗೆ	ಘಟಕದ ಹೆಸರು.
01	ಹುಲ್ಲಣಸಾ ತುಳಸಿಕಟ್ಟೆ	652	10.12.2008	22.12.2008	ಯಲಬುರ್ಗಾ
03	ಗೋಪಾಲಶಾಸ್ತ್ರಿ	334	28.01.2009	07.02.2009	ಗಂಗಾವತಿ

The list of Home Guards obtained training in the Koppal District is as follows

S.NO	Name of the taluka	Men Home Guards	Women Home Guards	Total Home Guards
01	Koppal	05	01	06
02	Gangavathi	10	02	12
03	Kushtagi	01	-	01
04	Yalburga	05	-	05
	Total	21	03	24

Health Facility in Koppal District

Taluk wise Number of Hospitals, beds and Blood Banks available in District

S.No	Taluks	Alopathy Hospitals (Govt+Pvt)		Indian System of Medicine Hospitals		Pvt Hospitals (including Homes)	Primary Health Centres		Community Health Centers		Blood Bank
		Nos	Beds	Nos	Beds	No	No	Beds	Nos	Beds	
1	Gangavathi	15	250	1	10	11	11	60	3	90	1
2	Koppal	19	694	4	22	0	15	84	2	60	1
3	Kushtagi	11	184	0	-	1	9	54	1	30	0
4	Yelburga	18	278	0	-	26	14	88	3	90	0
	Total	63	1406	5	32	38	49	286	9	270	2

Source: District Health and Family Welfare Department and K.A.G-2016-17

CHAPTER-4

MITIGATION PLAN

Mitigation, Definition

Mitigation and Prevention are used as synonyms. Some prefer to drop the term Mitigation and use only Prevention. The term Mitigation can be comprised in the term Prevention. Mitigation means to reduce the severity of the human and material damage caused by the disaster. Prevention is to ensure that human action or natural phenomena do not result in disaster or emergency. Primary prevention is to reduce -avert-avoid the risk of the event occurring, by getting rid of the hazard or vulnerability, e.g. to avoid overcrowding, deforestation and to provide services. Healthier people in a healthy environment will be less vulnerable to most hazards. E.g. immunizing people against smallpox made them less vulnerable to the virus, and slowly eradicated the disease. Secondary prevention means to recognize promptly the event and to reduce its effects, e.g. by staying alert to possible displacements of population; by being ready to provide immunization, food, clean water, sanitation and health care to refugees. Healthier people in a healthy environment will also be more capable to overcome the emergency. Mitigation plan involves preventive measures, preparedness and immediate relief eruptions to be carried out when a disaster is struck. The response time is the most crucial element in minimizing of damages. Therefore putting in place of teams and materials at a right place and at a right time is the main objective of a mitigation plan.

Principal Objectives of Mitigation

- Save lives
 - Reduce economic disruption
 - Decrease vulnerability/increase capacity
 - Decrease chance/level of conflict
- } RISK REDUCTION

Mitigate measures to be taken in case of natural Disaster.

- Slowing down the spreading of mine, industrial and forest fires and their mitigation
- Damage due to earthquake, landslides and other mass movements can be minimized through early warning systems and timely evacuation of population. Drainage, sub surface drainage, embankments, strengthening of slopes, raising vegetation on sloppy surfaces, constructing of culverts etc. helps mitigating the damage.
- In case of earth quakes emergency evacuation, scratch resume and relief from important action plan in disaster management
- Programs of disaster management/ mitigation encompass a wide range of options ranging from issuance flood warnings to reduction of flooding to actual evacuation.

Synopsis of Mitigation plan: -

Phase-Pre-Disaster

Activities	Officials involved
Identification of disaster prone major accident hazard units and	Dept. of Factories

industries involving hazardous processes periodically and update.	
Hazard, risk and vulnerability (HRV) analysis has to be identified and reviewed periodically.	Management, CDC
All the identified major accident hazard units and industries involving hazardous process are required to develop a comprehensive on site emergency plan coordinating the resources available at the site against the HRV	Management, Dept. of Factories and Boilers
Mock rehearsals shall be schemed to assess the strength and weaknesses in the mitigation procedure.	Management Dept., District Crisis Group
Hording showing the Do's and don'ts in the event of emergency shall be displayed at all strategic location around the plant to sensitize the public around the plant.	Management of Industries
Periodical training on first aid fire fighting and casualty handling during emergencies shall be programmed.	Management Police, Fire Services, Dist. Commandant
Identification of resources against the HRV	Management
The vulnerability area shall be periodically checked for its integrity and safe working conditions.	Management, Directorate Fire Services, Factories
Preparation of Resource directory showing the resources available in and around the industry.	Directorate of Factories, DCG
Community awareness programmed shall be designed by distributing pamphlets, classes highlighting about the hazards and do's and don'ts in the event of emergency.	Management Police, Fire Services, Dist. Commandant
Duties and responsibilities of 1 st responders' viz., Fire Services, Police, Health, Home guards, shall be clearly defined and shall be informed.	CDC, Police, Fire, Revenue
Periodical evaluation of resources at the control room	CDC, Fire Services
Identification of shelters, temporary shelter camps with accessibility and infrastructures	Revenue department
Identification of routes, rallying posts, parking places	Police, Fire Services
Listing and documenting the home guards required for law order, assistance to the police assistance at the temporary shelters	Dist. Commandant, Home guards
Preparation of list of experts to seek their opinion during emergency mitigation	CDC, Dept. of Factories
Ensuring proper functioning of warning and communication system. Updating of telephone numbers at the control room.	CDC, Revenue
Identification and listing of hospital - infrastructure facilities	DHO
Identification and listing of blood banks, medical shops, stockiest	DHO
Identification and listing of vehicles required for immediate requisition	RTO
Identification of listing of earth moving equipment, vehicles for transportation and documenting	RTO
Identifying resources for temporary electricity and lighting arrangement, identification and listing of personnel and support system for immediate action	KPTCL
Identifying NGOs for deployment to work at the rehabilitation centers and to derive resources	Revenue, CDC
Identification of any pollution effects due from the disasters and to advice CDC on the next course of action	KSPCB
Identification and supply of availability of potable water sources, water purification tablets, construction of temporary shelters and maintenance	PHE, Commissioner
Identification of safe shelters for animals	Veterinary Dept.

Prevention and response strategies:

Officers are responsible to ensure proper preventive and response measures before the disaster (in anticipation), during the disaster (concurrent stage) and after disaster (post disaster stage). These measures are integrated into the preparedness and response plan. The mechanism for co-ordination, monitoring and supervision of prevention, rescue and relief operations are clearly specified.

The respective sugar cane industries and other industries and all the private factories have prepared their on-site disaster management plan as per the Factories Act. Weak points in the river embankments which require constant watch at the time of monsoon. The irrigation Department is ready with the plan to face any eventuality of breaching of reservoirs, embankments, etc., which may result in flood. EE has been instructed to keep the channels/nalas clean for free flow of water before the onset of monsoon.

The Department of Agriculture is ready with contingency plan for crop loss or drought situations. Pests and fertilizers are available during any disaster situation. Field staffs are alert to help the farmers to protect their crop.

The Forest Department has got plan for prevention of forest fire or any kind risks due to vulnerability of any kind to forest in the district.

Administrative preparedness

All the Tahsildars Koppal District have been inspired and instructed to form groups of Village Accountants, Revenue Inspectors, Deputy Tahsildars, wherever nodal officers are available and to identify the vulnerable areas and also to plan for the local publicity at the time of such incidents. The taluk level officers like Executive Officer, Asst. Executive Engineers, Block Educational Officers and all other departments are also asked to be in our team to provide necessary help to provide shelter, food, repairs of roads, culverts, etc., wherever required. Karnataka Power Transmission Corporation Ltd., GESCOM, Medical Staff and Municipality or Panchayat Staff has been asked to extend their services, within their limits. Almost all the social workers, NGOs and the likeminded people have been asked to provide their services in times of need.

All the officers were kept in touch with the DDMA Heads, both in taluk and district level. Police, Home guards were kept in red alert especially in project areas and on river banks. And also to identify the places where rehabilitation camps are to be opened, facilities to provide drinking water, food providing facility and areas available resources are to be identified. Medical facilities, NGO assistance, maintenance of cattle, open space for all their activities are also to be kept in mind in identifying the mitigation plan. The slum areas, the people living in low line areas, backwater level areas were kept in mind, and high alert and wide publicity arrangements were also made.

Drought Mitigation Plan

Drought is a normal, recurrent feature of climate and characterized in terms of its spatial extension, intensity and duration. Conditions of drought appear when rainfall is deficient in relation to the statistical

multi-year average for a region, over an extended period of a season or a year, or even more. Drought is a temporary aberration unlike aridity, which is a permanent feature of climate. Drought produces wide-ranging impacts that span across many sectors of the economy and are felt far beyond the area experiencing physical drought. Direct or primary impacts of droughts are usually associated with reduced agricultural production; depleted water levels; higher livestock mortality rates and damage to wildlife and fish habitats. When direct impacts have multiplier effect through the economy and society, they are referred to as indirect impacts in terms of reduced income for farmers and agri-business, increased prices for food and timber, unemployment, reduced purchasing capacity and demand for consumption, default on agricultural loans, and reduction in agricultural employment leading to migration etc.

Drought Mitigation

Mitigation measures are initiatives undertaken to reduce the incidence or minimize impacts of drought. Besides drought proofing, these measures help in adapting to climate change, restoring ecological balance and bringing development benefits to the people. However, drought mitigation programmes are not to be construed stand-alone interventions that are to be implemented only in the wake of a drought; but must form part of developmental planning in the domain of soil conservation, watershed development and forestry. As such, drought mitigation measures are to be mainstreamed in regular development programmes of Central and State Governments.

Government's policy towards drought management has changed considerably over the years and now rests upon early warning & preparedness, crisis management response, medium and long-term drought mitigation measures with greater application of state-of-the art technology and scientific tools. A number of Central Governments Schemes/ Programmes have evolved over time to address the need for medium and long-term drought mitigation requirements. Notable among them are Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Integrated Watershed Management Programme (IWMP), subsuming erstwhile Drought Prone Area Programme (DPAP), National Rural Drinking Water Programme (NRDWP), Swarna-jayanthi Grameen Swarozgar Yojana (SGSY), Rashtriya Krishi Vikas Yojna (RKVY), Fodder & Feed Development Scheme etc. Besides, various area development programmes by State Governments either through their own resources or with Government of India's support like Backward Region Grant Fund (BRGF), Rural Infrastructure Development Fund (RIDF) are contributing significantly to enhance drought resilience. Central and State Governments continue to consider further possibilities of reorienting/synergizing regular development programs for achieving a robust drought resilient regime.

Structural Mitigation for Drought

- a) Artificial recharging of ground water, watershed programmes in privately owned small/marginal farms, laying of pipes/channels for exclusive transportation of water to dry areas;

- b) Programme for reconstruction and preservation of traditional water harvesting structures, construction of canals for transportation of water from surplus to non-surplus areas, establishment of cost-effective drip /sprinkle irrigation practices etc.
- c) Construction of watershed structures at the right place where water recharge can be enhanced/will be used for life saving irrigation at critical stages of crop growth and during drought situations.
- d) Construction of “Community Ponds” through Panchayat Raj Institutions (PRI) and maintenance by levying user charges.
- e) Augmentation of agro-based food processing industries in rural areas for sustenance of employment,
- f) Establishing chain of cold storages to minimise post-harvest losses along with adaptation of appropriate post-harvest management practices like pre cooling, cold storages and refrigerated transport. Pre-harvest losses due to diseases and pests can also be minimized through better management practices;
- g) Construction of shelters for cattle and development of infrastructure for storage and transportation of dry and green fodder etc.;
- h) Ensuring provision of medicines and critical health care in the risk prone areas during drought for humans and animals;
- i) Ensuring efficient functioning of the PDS in drought affected areas;
- j) Provision of adequate infrastructure for dissemination of weather based advisories to the farming community on real-time basis in regional languages through extension machineries;
- k) Providing credit promptly in the drought affected areas and extending marketing and price support to farmers;
- l) Insurance products need to be developed for different agro-climatic zones providing coverage against drought. The Central/State Governments need to promote, agricultural insurance programmes and ensure that farmers are informed about the availability of insurance products and educate them about the need for managing their yield and income risks through insurance coverage;
- m) Identifying, procuring and keeping in readiness drought proofing materials in required quantities before the onset of monsoon season such as :- Seed & fodder Plan (including alternative varieties, mini kits etc. keeping in view the impending drought);

Non-Structural Mitigation Measures for Drought

For creating an enabling environment for the mitigation measures existing laws including the following (illustrative) would need to be considered/reviewed/updated:-

- I. Revisiting Mahatma Gandhi National Rural Employment Guarantee Act/Operational Guidelines of MGNREGS to include/strengthen drought mitigation measures;
- II. Updating of State Scarcity Relief Manuals which replaced the erstwhile famine codes on the lines of Manual for Drought Management at National level;

- III. Establishing a definite procedure and fixing of time frame for attending to drought relief measures;
- IV. Establishing an appropriate water regulatory regime in consultation with the States;
- V. Empowerment of Panchayats, Municipalities, Local bodies and inclusion of drought mitigation measures as part of their role in Eleventh and Twelfth Schedules of Constitution of India.

Mitigation measures for Road Accidents:

Road Accident is a major killer and takes place without warning. Rate on road accidents, are ported indicate that 70% of road accidents, areas from drivers negligence. Some other reasons are poor road condition, heavy traffic, poor vehicle maintenance possible impacts of accident of individuals are loss of life, Trauma Care & burns.

1. The provisions of Motor Vehicles Act and other related legislation's and regulations are strictly enforced.
2. Adequate Highway and traffic Aid post will be created.
3. Trauma Care Centers shall be established at every 100 kms. On the National and State Highway.
4. Speed monitoring equipments and computerization of movement of vehicles with adequate checkpoints on the National Highway will be introduced.
5. Fixation of timings to the passenger vehicles to avoid and traffic fan. Identify and designate routes and fixing the time for transportation of hazardous chemicals and other materials.
6. Prohibit the parking of vehicles on National Highway and State Highway.
7. Excavation on roads will be protected well particularly in the night with barricades fluorescent signs and red lights.
8. PWD and National Highway department should concentrate on removal of bottlenecks on National and State Highway.
9. Efforts will be made to provide road dividers on National and State Highway on priority basis.
10. Arrangements will be made adequate embankments/reflector/proper signs on curves.
11. Arrangements will be made information signs boards giving the local of the nearest village Police Station, Hospital, Ghat Traffic Position, Petrol pump, etc. at every traffic aid post.
12. All two-wheeler drivers including pillion riders must always wear the right kind of helmet.
13. Overtaking in vehicles is regulated.
14. Frequently accidents occurring spots will be identified and precautionary measures will be taken.
15. Lanes will be marked for pedestrians/Cyclists.

Since accidents general result in injuries, burns or loss of life providing emergency medical facilities is of utmost importance. Relief teams comprising medical personnel and transport authorities have to be rushed to the spot provide first aid and shifting the injured to the nearest hospital. Upon arrival at the accident spot the team should immediately provide first aid to the victims and look for persons trapped inside the vehicle. Assistance of the local police should be sought to disperse any crowds that may hinder effective relief measures. If the magnitude of the accident is high help of

local NGOs and volunteers may be taken.

In case of major building collapse the major role is to be played by the Fire Department with the assistance of the Police and Health Authorities. Shifting victims to the nearby hospital should be done after providing necessary first aid. Necessary equipment to remove debris should be kept readily available to save victims who may be buried inside. Volunteers and NGOs must be trained properly to handle such so that emergency relief is carried on smoothly. Fire disasters occur mainly due to carelessness or mischief by miscreants. Preventive measures such as avoiding storage of large quantities of combustible materials in one place, firefighting equipment in petrol filling stations, textile, plastic, paper and wood industries should be insisted upon during inspection by the concerned authorities. Personnel of the fire brigade are well equipped to handle any fire hazards and regular drills and training sessions are held.

Earthquake Mitigation Plan:

The recent devastation in Gujarat has been an eye-opener as regards the magnitude of loss to human life and property. Hence, the District Administration has geared up the various Departments to effectively meet the challenge of an earthquake.

Since, earthquakes strike without forewarning and generally any measurement on the Rector scale is usually a post operative measure, prevention in respect of earthquakes is imperative.

The main hurdles as regards planning are as follows:

- Structural planning of individual buildings.
- Communication lines.
- Electricity and water supply.
- Health hazards.
- Loss of life, property and employment.

Preventive steps are required in the following areas:

- Public structures.
- Dams.
- Roads.
- Maintenance of health and prevention of epidemic diseases. Since, earthquakes are natural calamities dissemination of proper information, awareness, stocking of proper machinery and equipment are the prerequisites to tackle such a situation.

Earthquake Mitigation

General steps to be taken for maintaining calm in case of earthquake

1. Public to be educated to remain calm and not to panic.
2. Not to enter or exit from buildings when tremors are felt.
3. If indoors, take protection/shelter under a heavy object, which can sustain weight Of heavy objects.
Ex. A heavy desk, a study table, a strong cot etc.
4. Protect the head with covering such as books, pillows, blankets etc.

5. If outdoors to stay away from buildings, walls, tress, etc, as they are likely to collapse or get uprooted.
6. If driving, it is safe to stay inside the vehicle, as it is likely to provide protection from falling objects.

EARTHQUAKE MITIGATION		
Before the Disaster	During the Disaster	After the Disaster
<ul style="list-style-type: none"> • Check for hazards in the home • Identify safe places in each room • Locate safe places outdoors • Ensure all family members know how to respond after an earthquake • Teach children when and how to call Emergency • Have disaster supplies on • Develop an emergency communications plan in case of separation during the earthquake 	<ul style="list-style-type: none"> • If indoors: Take cover under a piece of heavy furniture or against an inside wall and stay inside • If outdoors: Move into the open, away from buildings, street lights, and utility wires and remain there until shaking stops • If outdoors: Move into the open, away from buildings, street lights, and utility wires and remain there until shaking stops • If in a moving vehicle: Stop quickly, stay in vehicle, move to a clear area away from buildings, trees, overpasses, or utility wires 	<ul style="list-style-type: none"> • Be prepared for after shocks • Help injured or trapped persons and give first aid where appropriate • Listen to a battery operated radio for emergency information • Stay out of damaged buildings and return home only when authorities say it is safe

Mitigation Plan for the forest fire

Fire plays a very critical role in the habitat management. Forests are very valuable in this district and form a major portion of the area .One of the main factors that have accelerated the degradation of forest cover is the occurrence of fire which has almost become an annual feature. The glaziers, firewood and MFP collectors and tourists tend to set fire deliberately or by accident. Smugglers and poachers also set fire to the forest to divert the attention of field staff. Due to the forest fire the natural regeneration is lost and the forests are deprived of rich humus. Wild animals particularly herbivores and reptiles are the worst sufferers for want of green foliages while innumerable soil fauna will be destroyed , which play a very important role in maintaining the ecological balance by decomposing and releasing energy from dead plant and animals. Hence preventive and fire control measures have been given much importance in the habitat development.

Probable causes for forest fires

The forest areas are susceptible for fire in the months of January to end of June i.e. the summer season. Considerable damage takes place every year due to the ground fire that occurs in the forests. The leaves which fall on the ground is the fuel for fire. Also the grass dries because of sunlight & becomes fuel to the fire. Also dried bamboos in the forests act as fuel to the fire. Plantation which are raised are also susceptible to the fire and at the initial stages if there is fire then the plantation itself fail and causes heavy loss. In the high forests the regeneration is severely affected. The humus is also burns & causes losses of Carbon & fertility of soil, there is also resultant compaction of soil and consequent poor porosity. Further forest regeneration is also affected. The fire also affects the former and the young regeneration of the forest and destroys. Medicinalplants & rare herbs. Normally the fire occurs

intentionally by the villagers for the purpose of getting fresh grass for the purpose of grazing. There are accidental fires due to negligence of the nearby villagers & Poachers. The fires are controlled immediately by fire watchers & staff with the assistance of villagers.

Existing practice to tackle the forest fires are as follows

Prior to the fire season the fire lines of 3.2 m. width are created to stop the fire from entering from one block to another, these fire lines are created near roads, around plantations, along forest boundaries, D'lines and strips within forest areas. Forest camps are established at sensitive points and forest staffs stay round the clock & rush to the spot in groups as soon as they get the fire occurrence information over wireless and extinguish the fire.

WILDFIRE MITIGATION		
Before the Disaster	During the Disaster	After the Disaster
<ul style="list-style-type: none"> • Learn and teach safe fire practices • build fires away from nearby trees or bushes, always have a way to extinguish a fire, never leave a fire unattended • Obtain local building codes and weed abatement ordinances for buildings near wooded areas • Use fire-resistant materials when building, renovating, or retrofitting structures • Create a safety zone to separate home from combustible plants and vegetables • Install electrical lines underground, if possible • Prune all branches around residence to a height of 8-10 feet • Keep trees adjacent to buildings free of dead or dying wood and moss • Remove all dead limbs, needles, and debris from rain gutters • Store combustible / flammable materials in approved safety containers and keep away from home • Keep chimney clean • Avoid open burning, especially during dry season Install smoke detectors on every level of your home • Make evacuation plans from home and neighborhood and have back up plans • Avoid using wooden shakes and shingles for roofing • Use only thick, tempered safety glass in large windows and doors • Have disaster supplies on hand (flashlights, extra batteries, portable radios, first aid kits, emergency food and water, nonelectric can opener, essential medicines, cash and credit cards, and sturdy shoes) • Develop an emergency communication plan in case of separation • Ask an out-of-state relative to serve as the "family contact" 	<p>If trapped in a wildfire, you CANNOT outrun it:</p> <ul style="list-style-type: none"> • Crouch in a pond or river and cover head and upper body with wet clothing • If a body of water is unavailable, look for shelter in a cleared area or among a bed of rocks and lie flat and cover body with wet clothing or soil. • Listen to radio for emergency information • Remove combustible items (outdoor furniture, umbrellas,) tarp coverings, and firewood) from around the home • Take down flammable drapes and curtains and close all Venetian blinds or non combustible window coverings • Close all doors and windows inside home to prevent draft • Close gas valves and turn off pilot light • Turn on a light in each room for visibility in heavy smoke • Place valuables that will not be damaged by water, in a pool or pond • If hoses and adequate water are available, leave sprinklers on roofs and anything that might be damaged by fire • Be ready to evacuate all family members and pets when fire nears or when instructed to do so by local officials. 	<ul style="list-style-type: none"> • Be cautious when reentering a burned wild land area - hot spots can flare up without warning • Check the roof immediately and extinguish any sparks or embers and the attic for hidden burning sparks • Re-check for smoke and sparks throughout the home for several hours afterward • Breathe the air close to the ground through a wet cloth to avoid scorching lungs

Mitigation in case of Floods:

Floods caused extensive damage to human, animal and plant life. Flood result in rendering many people homeless leading to devastation and total chaos to lack of communication and means of

transportation. Koppal district is vulnerable to floods due to breach of dams. There is a major dam of **Thunga Bhadra Project** and **Herehalla** situated in the district.

These dam and Herehalla sites are thoroughly studied by the scientist and Engineers and ensured the safety of the construction at the time of foundation. Still precautionary measures have to be taken to mitigate the disaster.

Existing facilities

Facilities available in the villages in the flood plain zone and also villages on higher elevations nearby have been identified. These facilities are in the form of school buildings, panchayat buildings and temples. In case of emergency such buildings will be mobilized to serve as shelters temporarily. In addition requirement of tents has also been assessed. Sources who can supply tents at a very short notice have been identified. Depending upon the need of the hour external relief will be mobilized.

Time of travel of flood wave from the time of occurrence of disaster is assessed in the Study of Dam breaks analysis. The minimum time available at the nearest habilitation is about ½ hour. Transport requirement for emergency evacuation has been assessed. Keeping in view, the time available at respective locations, required transport facilities can be mobilized through transport department.

Number of boats and coracles available and their locations have been identified and are enlisted in chapter-logistics. These can be put to service at short notice. In case of extreme emergency, machine boat services will also be mobilized. Such facilities are available and can reach the spots within about 3 hours. During such situations maintenance of law and order is very important. Help of police and home guards will be taken. There are number of police stations and police out posts in the nearby areas. District administration will be informed to keep some additional force during the monsoon season. If need be help will be taken of the reserve police force, stationed at district head quarters. As evacuation during emergency has to be carried out immediately, the flood reaches a particular village such operation may be required to be done round the clock. For operation during night, illumination in the villages is very important. There are a surety of uninterrupted power supply. Therefore, alternate lighting arrangements are necessary. It is proposed to mobilize, LPG lanterns, petromaxes, etc., in addition, advantage will be taken of the head lights of transport vehicles.

In the nearby taluk head quarters, there are fair price shops. The Revenue Department will be requested to keep extra stock of food grains and kerosene, so as to mobilize the same for the affected villages in case of emergency. From the taluk headquarters transportation can be done within a period of 2 hours.

At the taluk headquarters there are primary health centers and so also in big villages. During the monsoon season and in case of emergency medical facility and help can be mobilized. The distances are such that within two hours site can be reached. In addition there are private medical practitioners in almost all the villages. These can be mobilized for providing first aid in case of an emergency.

Action before flood: Pre-Flood arrangement

- DDMA to meet at regular intervals
- To keep the Control Rooms functional
- Repair of river and canal embankments and guarding of weak points.
- Keep rainfall reports.
- To publish rain gauge-readings and preparation of maps and charts.
- Assigning charge of flood circles.
- Dissemination of weather reports and flood bulletins issued by the metrological centers, Central Water Commission. Flood Forecasting Organization.
- Deployment of boats at strategic points.
- Use of power boats.
- Installation of temporary Police Wireless Stations and temporary telephones
- In flood-prone areas.
- Arrangement for keeping telephone and telegraph lines in order.
- Storage of flood in interior, vulnerable, strategic and key area.
- Keep the drainage system de-silted and properly maintained.
- Agricultural measures.
- Health services.
- Veterinary services.
- Identify flood shelters.
- Training in flood relief work.

Emergency Measures to be taken.

It is imperative that rescue and evaluation operations are taken up by the district administration without any loss of time. People living in low-lying areas are forewarned to evacuate the place and are shifted to a safe environment. Relief centers are to be set up to provide adequate food, clothing, shelter and water to the persons shifted. For shifting people and animals rafts and boats are to be kept ready and services of ex-service men and sports persons who are good swimmers are employed for relief measures.

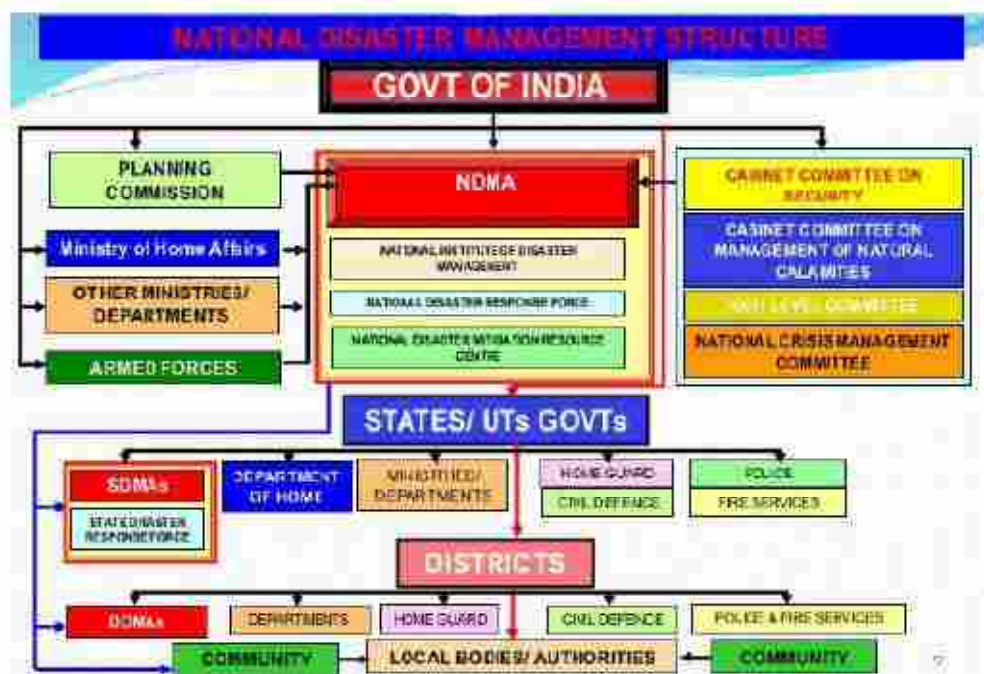
Members of the flood relief committee will work in accordance with the action plan and press into service the NGO's and other youth who are trained to meet the exigency. At the village level, the panchayat members and the volunteers are requested to identify members of the families especially children and ensure that evacuation is done in-groups, which will make the task re-location easier. Adequate stock of food grains, rafts, boats and other equipment for shifting affected persons and animals. Alternate shelters for communities headed by coordinator, to ensure that proper medical facilities are provided to the affected families. In case of deaths, proper documentation to be done after identifying the deceased and necessary steps taken to dispose the corpse to prevent health hazards. NGO's and other volunteers to set up kitchens in the shelters for providing food to the evacuees.

Necessary food grains to be provided by the district administration.

FLOOD MITIGATION		
Before the Disaster	During the Disaster	After the Disaster
<ul style="list-style-type: none"> • Learn warning signs and community alert systems • Stockpile emergency building materials • Install check valves in sewer traps to prevent flood waters from backing up in sewer drains • Plan and practice an evacuation route • Have disaster supplies on hand • Develop an emergency communication plan in case of separation • Ask an out-of-state relative to serve as the "family contact" • Teach family members how and when to turn off the gas, electricity, and water and teach children how and when to call 9-1-1 • Ask your insurance agent about flood insurance 	<p>During a flood watch: If indoors:</p> <ul style="list-style-type: none"> • Turn on battery operated radio to get latest emergency information • Get pre-assembled emergency supplies • If told to leave, do so immediately. <p>If outdoors:</p> <ul style="list-style-type: none"> • Climb to high ground and stay there • Avoid walking through any floodwaters. • If in a car, turn around and go another way; if your car stalls, abandon it immediately and climb to higher ground. <p>During an evacuation:</p> <ul style="list-style-type: none"> • If advised to evacuate, do so immediately to avoid flooded roads, being sure to follow recommended evacuation routes and listen to radio for evacuation instructions 	<ul style="list-style-type: none"> • Be cautious when reentering a burned wild land area - hot spots can flare up without warning • Check the roof immediately and extinguish any sparks or embers and the attic for hidden burning sparks • Re-check for smoke and sparks throughout the home for several hours afterward • Breathe the air close to the ground through a wet cloth to avoid scorching lungs

CHAPTER-5 INSTITUTIONAL MECHANISM

A. National Disaster Management Authority (NDMA)



National Disaster Management Authority has been constituted with the Prime Minister of India as its Chairman, a Vice Chairman with the status of Cabinet Minister, and eight members with the status of Ministers of State. Each of the members has a well defined functional domain covering various states as also disaster specific areas of focus and concern to carry out the mandated functions, NDMA has evolved a lean and professional organization which is IT-enabled and knowledge based. Skills and expertise of the specialists are extensively used to address all the disaster related issues. . A functional and operational infrastructure has been built which is appropriate for disaster management involving uncertainties coupled with desired plans of action. The concept of the organization is based on a disaster divisions-cum-secretariat system. Each member of the Authority heads disaster-specific divisions for specific disaster and functional domains. Each member has also been given the responsibility of specified states and UTs for close interaction and coordination. The NDMA Secretariat, headed by a Secretary is responsible to provide secretarial support and continuity. It is proposed to have two Disaster Management Wings under the Secretariat. They are:-

- DM I wing dealing with mitigation, preparedness, plans, reconstruction, community awareness and dealing with financial/administrative aspects.
- DM II wing is proposed to be composed of the National Disaster Management Operations Centre with the state-of-the-art multi-redundant communication systems, to carry out the tasks of capacity development, training and knowledge management.

B. Karnataka State Disaster Management Authority

THE DISASTER MANAGEMENT ACT, 2005 (NO53 / 2005) DATED 23rd Dec 2005 received the ascent of the President, Government of India.

- Based on the provisions contained in the Disaster Management Act 2005, the Karnataka State has adopted the DM Act 2005 and as per the section 14(1) the state has established State Disaster Management Authority. The Chief Minister of Karnataka is the Ex-officio Chairperson of the Karnataka State Disaster Management Authority and 8 Cabinet Ministers are members to the Authority.
- As per the DM Act 2005, the State Government has constituted the District Disaster Authority in each of the district with Deputy Commissioner's of the district as the chair person of the authority and concern department as its members (including ZP).
- The State Executive Committee (SEC) is chaired by the Chief Secretary, Government of Karnataka and Principal Secretaries of Agriculture, Home, Rural Development and Panchayat Raj and Director General of Fire & Emergency Services (permanent invitee) are members of the SEC. SEC meets every quarter or whenever there is emergency situation to take stock of the situation and give necessary instructions to all stakeholders to address the situation. The Chief Secretary and SEC Chairperson is the Commander (Incident Command System) at the State level.
- Government has constituted the State Crisis Management Committee under the Chairmanship of Chief Secretary of Government of Karnataka and other stake holders as its members, vide G.O number RD 61 ETC 2007(P-1) dated 27-04-2010.
- The Administrative structure in the Government for Disaster Management is under the Revenue Department and is being headed by the Secretary to Government, Revenue Department (Disaster Management), the Deputy Secretary, Under Secretary and DM section with supporting staff.
- The KSDMA co-ordinates with all departments of the state to effectively implement the DM Act 2005. It has got responsibility to address Disaster Management issues and Disaster Risk Reduction programs.
- KSDMA has prepared Disaster Management Guidelines, Policies, Standard Operating Procedures for 11 key departments, State Disaster Management Plan and District Disaster Management Plan.

State Disaster Management Authority (SDMA) has been constituted by the State Govt. under the chairmanship of Hon'ble Chief Minister and Hon'ble Revenue Minister as Vice chairperson. Composition of Karnataka SDMA is as follows.

S.No	SDMA Members	Designation
1.	Chief Minister of Karnataka	Chairman, Ex-officio
2.	Minister for Revenue	Vice-Chairman
3.	Minister for Home	Member
4.	Minister for Agriculture	Member
5.	Minister for Health and Family Welfare	Member
6.	Minister for Rural Development and Panchayat Raj	Member

7.	Minister for Public Works	Member
8.	Minister for Animal Husbandry	Member
9.	Minister for Housing	Member
10.	Minister for Energy	Member
11.	Chief Secretary (Chairman of SEC)	Chief Executive Officer
12.	Secretary, Dept. of Revenue(D M)	Member Secretary

Cabinet Sub-Committee On Disaster Management

Cabinet Sub-committee on Disaster Management is formed under the Chairmanship of Revenue Minister. The Cabinet Sub-Committee meets regularly to take stock of situation especially drought situation gives necessary guidance and directions. The composition of SEC is as follows:

Sl. No	Cab. Sub-Committee Members	Destination
1.	Minister for Revenue	Chairman
2.	Minister for Law and Parliamentary affairs	Member
3.	Minister for Rural Development and Panchayat Raj	Member
4.	Minister for Horticulture and Agriculture Marketing	Member
5.	Minister for Co-operation and Sugar	Member
6.	Minister for Agriculture	Member
7.	Minister for Food and Civil Supplies and Consumer Affairs	Member
8.	Minister for Minor Irrigation	Member

State Executive Committee

State Executive Committee (SEC): has been constituted under the chairmanship of Chief Secretary. SEC has the responsibility for coordinating and monitoring the implementation of the National Policy, the National Plan and the State Plan as provided under section 22 of the Act. The composition of SEC is as follows:

Sl. No	SEC Members	Designation
1	Chief Secretary to Government of Karnataka	Chairperson, Ex-officio
2	Addl. Chief Secretary/Principal Secretary to the Government, Home Department	Member
3	Principal Secretary/Secretary to the Government, Rural Development and Panchayat Raj Department	Member
4	Principal Secretary/Secretary to the Government, Agriculture Department	Member
5	Director General of ATI	Member
6	Director KSNDMC	Member
7	Secretary to the Government, Revenue Department (Disaster Management)	Member Secretary
8	Director General of Police and Director General of Fire and Emergency Services, Home Guards, and Civil Defence	Permanent Invitee

State Disaster Response Force (SDRF): Karnataka is raising 4 companies of SDRF. SDRF is a hybrid force which consists of personnel from state police, reserve police, and fire and emergency personnel. This force is raised exclusively for rescue and relief operations in times of disasters.

The Disaster Management function at district level is assigned to the district disaster management authority (DDMA), headed by the deputy commissioner.

The Koppal district comprises of members from various govt. Department, major industries & institutions in the district.

The District Disaster Management Authority

- | | |
|--|-------------------------|
| 1. Deputy Commissioner, Koppal. | Chairperson |
| 2. President Zilla Panchayath, Koppal | Co-Chairman |
| 3. Chief Executive Officer, Zp, Koppal | Member |
| 4. Superintendent Of Police, Koppal | Member |
| 5. District Health Officer, Koppal | Member |
| 6. Executive Engineer, ZP, Koppal | Member |
| 7. Joint Director, Agriculture Dept Koppal | Member |
| 8. Addl. Deputy Commissioner, Koppal | Chief Executive Officer |

The District Crisis Management Committee Koppal

- | | |
|---|-------------------|
| 1. Deputy Commissioner, Koppal. | Chairperson |
| 2. Additional Deputy Commissioner, Koppal | Emergency Officer |
| 3. Superintendent Of Police, Koppal | Member |
| 4. Chief Executive Officer, Zp, Koppal | Member |
| 5. District Forest Officer, Koppal. | Member |
| 6. Assistant Commissioner Koppal Sub-Divisions. | Member |
| 7. District Commandant, Home Guards, Koppal | Member |
| 8. District Fire Officer, Koppal | Member |
| 9. District Health Officer, Koppal | Member |
| 10. Deputy Chief Controller Of Explosives, Koppal | Member |
| 11. Regional Environmental Officer, Koppal | Member |
| 12. Commissioner, CMC, Koppal | Member |
| 13. Regional Transport Officer, Koppal | Member |
| 14. Information & Publicity Officer, Koppal | Member |
| 15. Joint Director Of Agriculture, Koppal | Member |
| 16. Trade Union Leader, Koppal | Member |
| 17. DD Animal Husbandry & Veterinary Services | Member |
| 18. Senior Inspector Of Factories, Koppal | Member |
| 19. Station Director, All India Radio, Koppal. | Member |

Incident Response System (IRS) at District level

Effective response planning requires realistic likely identification of response functions, assigning specific taska to individual agencies and supply of goods commodities and services to given agencies this crisis response plan requires incident command system in place. The RS is an on scene management system to deal with wide variety of disasters the IRS management function includes following 4 functions,

- Command
- Operations
- Logistics
- Planning

Incident Response System teams forms an important component of IRS.

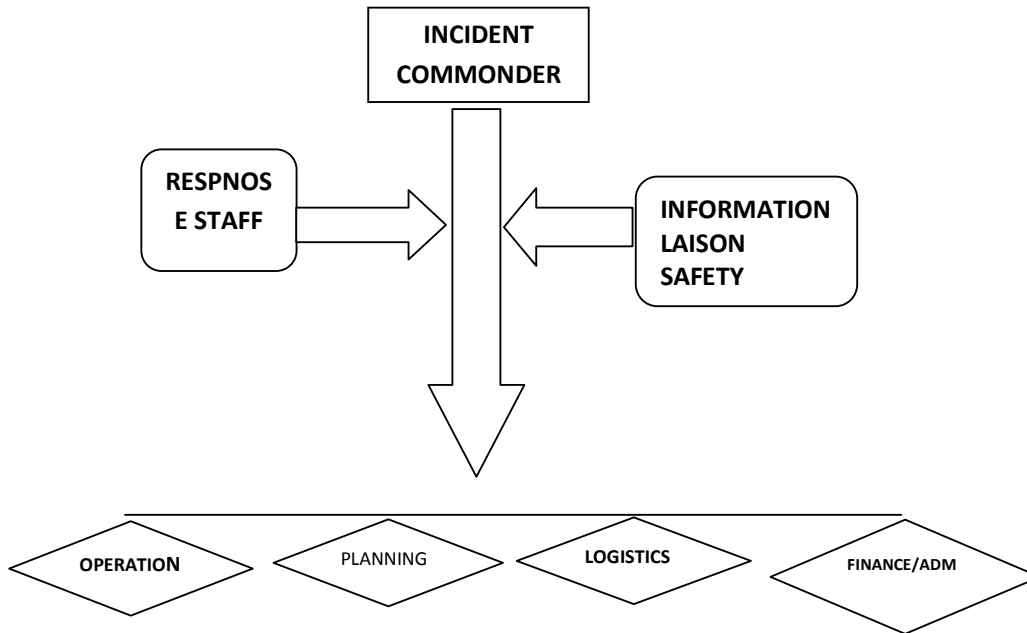


Chart showing command flow in IRS

The Deputy Commissioner as a district incident commander does the following;

1. Assessment of situation
2. Determine objectives and formulate strategy
3. Establish immediate priorities
4. Establish incident command post
5. Set up organizational structure & response
6. Overall planning
7. Approve & authorize implementation of actions by different agencies
8. Ensure public safety measures
9. Co-ordinate between incident command post & general staff
10. Co-ordinate between people & officers.
11. Approve request for additional resources
12. Approve the use of students NGO's etc
13. Authorize the release of information to the media
14. Order the demobilization of teams at appropriate times.

The following officers act as Deputy to the district incident Response.

1. Information officer (district information officer) – Keep a close watch & organize media briefings.
2. Liaison officer- (ADC)
3. Safety officer (sub-division/ taluka police officer)

Functions of IRS

1. Operation functions – to mobilize
 - a. Ground or surface based tactical resources
 - b. Aviation resources
 - c. Staging areas (temporary location)
2. Planning function – collects evaluate processes and disseminates information to manage an incident. Involves the activation of following
 - a. Resources unit
 - b. Situation unit
 - c. Documentation unit
 - d. De-mobilization unit
3. Logistic function.- responsible for facilities transportation, communication, supplies, equipment maintenance food services, medical services & ordering services. This involves following 6 units
 1. Supply unit
 2. Facilities unit
 3. Ground support unit
 4. Communication unit
 5. Food unit
 6. Medical unit
4. Finance/ administrative functions- to manage all financial aspects of an incident. Comprises following units
 1. Time unit
 2. Procurement unit
 3. Compensation/claim unit
 4. Cost unit

Duties and responsibilities of key functionaries in the district

- The emergency responsibilities of key persons in the district are listed below. These duties and responsibilities are common to all types of major emergencies or disasters,(i.e., Natural or Manmade). The Emergency Organization Members will prepare, maintain and be guided by

these during any major disaster in the district. Individuals assigned to these functions are expected to co-ordinate their actions with the Deputy Commissioner, who is the District Disaster Manager, will co-ordinate the overall action with all other agencies involved including the District Administration.

- It may be noted that depending on the type of emergency and also availability of staff and resources, functions of various agencies may vary. At times, each person may be required to assume additional responsibilities in addition to their normal duties. This would be the prerogative of Deputy Commissioner to assign the additional responsibilities to the members of the emergency organization.
- It may be necessary to develop agreements with neighboring districts or other organizations if resources are not available within the district for some of these functions
- Following are the duties and responsibilities of the members of the Emergency Organization. These are general in nature and applicable to all types of emergencies.

District Disaster Manager (Deputy Commissioner)

Deputy: Additional Deputy Commissioner

The Deputy Commissioner prepares, maintains and keeps updated the District Disaster Management Plan for prevention and minimization of injury and damage caused by a major emergency or disaster. Prompt and effective response to a major emergency or disaster, relief and recovery, is in consonance with the District Disaster Management Plan. The responsibility includes initiating and maintaining co-ordination and co-operation with various agencies involved , provide prompt information, take decisions and providing infrastructure facilities as requested, to mobilize, direct, and co-ordinate the emergency management staffs during emergency.

Following are the main functions of the Dy. Commissioner during any emergency

- Declaration of emergency after confirming the magnitude of the disaster.
- Activate the Emergency Control Room at Deputy Commissioner's office and make it functional.
- Co-ordinate and establish contact with all agency involved in the emergency actions.
- Ensure setting up of Local Emergency Control Room close to the scene of accident or at Taluk headquarters where the disaster has struck.
- Ensure actions have been initiated to contain the emergency.
- Have overall supervision of all the emergency relief operations.
- Initiate evacuation of people from affected area with the assistance of police, fire and other agencies.

- Depending on type of emergency, mobilize additional resources like heavy lifting gears line cranes, bulldozers for rescue and mitigation operation.
- Set-up safe shelters for evacuated people and ensure they are provided with food and medical attention as the need be.
- Monitor progress or disaster especially in case of natural disasters like cyclone or floods by getting information from various agencies involved and mobilize additional support to mitigate the effects of disaster.
- Keep the State Administration informed regarding the disaster and the steps taken to contain the same.
- Issue statement to the press (both print and electronic media) on the prevailing conditions and the steps being taken by the District Administration to mitigate effects of the disaster.
- Get mutual aid from neighboring districts the Major Hazard Industries or seek the assistance of voluntary organization.
- If required, set-up mobile first aid centre or temporary health centres in the affected area or in the safe shelters.
- Visit the scene of the disaster to have first hand information about the rescue or mitigative operations that are being carried out.
- In case of floods, carry out aerial survey of the affected area to have preliminary estimates of the extent of damage caused.

District Disaster Manager (Deputy Commissioner)

Deputy: Additional Deputy Commissioner

The Deputy Commissioner prepares, maintains and keep updated the District Disaster Management Plan for prevention and minimization of injury and damage caused by a major emergency or disaster. Prompt and effective response to a major emergency or disaster, relief and recovery, is in consonance with the District Disaster Management Plan. The responsibility includes initiating and maintaining co-ordination and co-operation with various agencies involved , provide prompt information, take decisions and providing infrastructure facilities as requested, to mobilize, direct, and co-ordinate the emergency management staffs during emergency.

Following are the main functions of the Dy.Commissioner during any Emergency

- Declaration of emergency after confirming the magnitude of the disaster.
- Activate the Emergency Control Room at Deputy Commissioner's office and make it functional.
- Co-ordinate and establish contact with all agency involved in the emergency actions.

- Ensure setting up of Local Emergency Control Room close to the scene of accident or at Taluk headquarters where the disaster has struck.
- Ensure actions have been initiated to contain the emergency.
- Have overall supervision of all the emergency relief operations.
- Initiate evacuation of people from affected area with the assistance of police, fire and other agencies.
- Depending on type of emergency, mobilize additional resources like heavy lifting gears line cranes, bulldozers for rescue and mitigation operation.
- Set-up safe shelters for evacuated people and ensure they are provided with food and medical attention as the need be.
- Monitor progress or disaster especially in case of natural disasters like cyclone or floods by getting information from various agencies involved and mobilize additional support to mitigate the effects of disaster.
- Keep the State Administration informed regarding the disaster and the steps taken to contain the same.
- Issue statement to the press (both print and electronic media) on the prevailing conditions and the steps being taken by the District Administration to mitigate effects of the disaster.
- Get mutual aid from neighboring districts the Major Hazard Industries or seek the assistance of voluntary organization.
- If required, set-up mobile first aid centre or temporary health centres in the affected area or in the safe shelters.
- Visit the scene of the disaster to have first hand information about the rescue or mitigative operations that are being carried out.
- In case of floods, carry out aerial survey of the affected area to have preliminary estimates of the extent of damage caused.
- To co-ordinate with the state government through Principal Secretary, Dept. of Labor, Govt. of Karnataka and mobilize the help of Army/Navy/Air force or other agencies are requires.
- Call off emergency after confirming that all the actions have been taken to normalize the conditions and it is safe for people to re-enter the affected areas.

Disaster Manager (Assistant commissioner)

Alternate: - Tahsildar

The concerned Assistant Commissioner is Disaster Manager and he would rush to the Local Emergency Control Room (LECR) which is set up at the taluk headquarter of the affected

taluk. He would function as the link between the affected area and the District Disaster Manager based at the main ECR located in the Deputy Commissioner office at Koppal.

Following are the main functions during any emergency

- Set up the LECR at the concerned Taluk headquarters or at a safe place close to the scene of the disaster.
- Depending on the nature of emergency, co-ordinate with the various agencies at local level.
- Initiate the rescue operation with the help of local police, fire or other voluntary organizations and mutual aid members.
- Have close interaction with the Site Controller to ensure proper actions have been taken.
- Visit the affected area to gain first hand information of various steps being taken to mitigate the effects of the disaster.
- Keep the main Emergency Control Room at district head quarters informed about the developments on a regular basis and request for additional help by way of resources or specialized manpower or equipment

TASK FORCE FOR DISASTER MANAGEMENT DURING EMERGENCIES

Assistant Commissioner: To communicate with core committee, supervise and co-ordinate between Depts)

AEE, PWD	Dy. SP/CPI	Tahasildar	Taluk Medical Officer	AEE, ZP	Animal Husbandry & Veterinary Services
To provide transport to evacuees and Undertake repairs to roads And buildings.	To maintain law and order and provide free passage to evacuees	To provide food, drinking water and milk	To co-ordinate with PHCs and provide Medical relief.	To provide clean drinking water, temporary shelters (school buildings etc.,)	To provide fodder and veterinary services

SITE CONTROLLER (Tahasildar of affected Taluk)

Alternate: - Deputy Tahasildar

The Site Controller would be at the scene of the disaster or accident and would be reporting to the Disaster Manager located in the Local Emergency Control Room. He is the person who is dealing with the disaster directly in association with the various other emergency services. He would be in direct contact with the Disaster Manager based at the Local Emergency Control Room (LECR).

His responsibilities vary widely depending on the type of emergency. It could be a natural disaster like flood the effects are wide spread where rescue work would be of main concern. It

could be a road accident involving a tanker carrying hazardous chemical where quick action has to be taken to arrest the leakage, if any, followed by evacuation of people if required.

Following are the main functions any emergency: -

- Take measures to mitigate the emergency in association with various emergency services like fire and police.
- Keep in constant touch with the Local Emergency Control Room at taluk head quarters with available means of communication and keep Disaster Manager informed about the developments on regular basis.
- Request for additional help like specialized manpower or equipment to effectively handle the emergency.
- Rescue and evacuate the people from affected area and shift them to safe shelters.
- Ensure setting up of safe shelters with basic amenities for food sanitation.
- Mobilize medical professional with the help of ECR or LECR and ensure the affected persons are given medical attentions.
- Arrange to shift the injured or sick to specialized hospitals if need be.

Law and order function: Superintendent of Police

Alternate: - Sub-divisional Police Officer (SDPO)

It is observed that the police are the first agency to reach the site during any emergency. The local police initiate the emergency action even before the declaration of emergency and setting up of the ECR at Deputy Commissioner Office, Hassan. Even though the main function of the Police is to maintain law and order, it is observed that most of the rescue and relief operation is initiated by the police before arrival of full-fledged rescue teams.

Following are the main functions of Police (at various) levels during any emergency

Superintendent of Police (SP)

After receiving instructions from Deputy Commissioner, the Superintendent of Police will rush to the ECR and establish contact with the local police station. He would then direct implementation of the action plan through the police station nearest to the scene of disaster. Depending on the type of disaster, ensure cordoning off the affected area by the local police.

- Mobilize additional police force from various sources depending on the requirement.
- Ensure co-ordination with various police and other agencies involved in handling the disaster.
- If necessary mobilize the home guards.

SDPO of the concerned Sub Division:

The SDPO of the sub-division where the disaster has struck would get in touch with the nearest police station and ensure the police team is rushed to the scene of the emergency. His

main function would be to act as link between scene of the accident and the Emergency Control Room at Koppal.

- On receiving information from the Emergency Control Room, he would rush to the site, assess the situation, obtain first hand information, take control of the overall situation.
- Alert district administration to mobilize Reserve Police personnel for deployment for traffic regulations, supervision of evacuation and security duties.
- Alert area District Commandant of Home guards to mobilize home guards, as necessary (and keep the SP informed).
- Arrange for necessary transportation vehicles for rescue operation in consultation with RTO.
- Arrange for necessary ambulances and other medical facilities for the affected persons in co-ordination with various government and non-governmental agencies.
- Arrange for removal of the dead bodies, identifications and proper preservation.
- Prepare list of missing persons and take immediate steps to trace them.
- Communicate the information to other agencies through police control room.
- Keep in constant touch with ECR to ascertain latest status and intimate police personnel with up to date information regarding response actions and further instructions.
- Arrange for relief to policemen handling the emergency situation.

Circle Inspector:

The Circle Inspector of the concerned area would also rush to the scene of the accident and direct the various operations like maintaining law and order, barricading and diversion of traffic away from the scene of accident. His main functions would include:

- Maintain direct contact with the local police station through the police mobile van.
- Keep monitoring the progress of various mitigative and rescue measures being undertaken.
- Ensure police personnel are given updated information for announcement during the emergency.
- Mobilize government and private buses through RTO for evacuation.
- Ensure that the bus/vehicle drivers are properly instructed regarding areas to be visited and routes to be taken during evacuation.
- Ensure security duty personnel are at their posts and that only authorized personnel/vehicles are allowed to enter the emergency/affected area with proper identity cards.

Police Sub Inspector of nearest Police Station

The local police station plays an important role during any Industrial disaster in the industrial area around concerned area as well as during any road accident in the district involving a tanker carrying hazardous chemicals.

- Divert traffic away from the scene of accident on major roads. Set up barricades and regulate crowd in affected area.
- Warn and advice people about emergency using vehicle mounted with Public Address system in the affected area.
- Evacuate people and livestock in affected areas using rescue routes identified in advance (depending on wind direction in case of gas leak),
- Provide relief to victims till arrival of rescue team.
- Maintenance of law and order at the scene of emergency and prevention of anti social elements from taking advantage of the situation.
- Ensure law and order and maintain security in evacuated areas.
- Assist in rendering first aid medical help to those in need,
- Ensure police personnel on emergency duty receive proper briefing about possible hazardous effects and are provided with personal protective equipment.

Traffic Police:

Depending on the type of disaster, the traffic police would take control of the traffic movement in the district. During a natural disaster like cyclone or floods the roads may be cut off for a longer period and hence traffic police play a very important role in handling any such emergencies. Their duties would include

- Stop traffic approaching the affected area and advise the crew regarding the impending danger.
- Ensure tankers containing hazardous chemicals are parked in safe places.
- Check for alternate routes and divert the traffic in a controlled manner to prevent congestion in diversions.
- Keep close liaison with other police agencies and assist in crowd control around the affected area.
- Make way for emergency and relief vehicles on priority basis.
- Monitor the condition of the blocked road and resume normal traffic only when the affected area is declared safe.

Rehabilitation function: Chief executive officer & Project Director(DUDC)

Alternate; Executive Officer, Tq. Panchayath & Chief Officer of affected town

The first and the foremost challenge after a relief operation is rehabilitation of victims. The CEO & PD sits in DCR and co-ordinates with officers of line departments and local bodies.

Main functions:

- Takes position in DCR and ensure the presence of their officers at sites of operation

- Receives directions of the dy.commissioner and provides him the required feedback about rehabilitation arrangements
- Prepare the list of govt. /pvt. Buildings which may be used as temporary shelters in advance.
- Put up temporary sheds if buildings are not available
- To ensure sanitary operations through local bodies
- To ensure repair and reconstruction of infrastructure in case of damage
- To mobilize local men and materials if required.

Factory Inspectorate: Dy. Chief Inspector of Factories

Alternate: - Senior Inspector of Factories.

Factory Inspectorate plays an important role during any industrial and transportation disaster in which there is large-scale release of hazardous chemicals. In case of such disaster, the Dy. Chief Inspector of Factories or Sr. Inspector of Factories would position themselves in the ECR and help the District Administration by providing expert advice for minimizing the effect of such a disaster.

Main functions:

- Ensure the on-site emergency management plan of the affected industry (in case of an industrial disaster) has been activated and the mitigate measures are taken to safeguard the people present in the premises.
- Visit the site of accident to ensure proper measures are taken to control the situation.
- Speed up help from mutual aid members, if required to contain the emergency.
- Mobilize the technical experts for advice if required.
- Inspect the area along with the tech. Co-coordinators and report to Deputy Commissioner for giving all clear signals.

Fire fighting function: District Fire Officer

Alternate: - Station Fire Officer

The Divisional fire Officer/Station Officer will place himself in the main Emergency Control Centre and maintain continuous contact on VHF with the Station Officer at the site. Depending on the need, the Divisional Fire Officer will place himself at the site and maintain contact with the Deputy Commissioner in the Main Emergency Control Centre. The Station Officer/ Sub-Officer/Asst. Sub-Officer of the fire station closest to the scene of disaster will direct fire-fighting operations at the site and keep the Divisional fire officer/station officer informed of the developments at the site.

Main functions:

- Initiate rescue and fire fighting operation with available means. Ensure that all fire fighters use proper personnel protective equipment while fighting a fire or controlling gas leak.
- Help the District Administration in evacuation of people from affected zones using escape routes decided in advance depending on the wind direction.
- Continuously evaluate the situation and decide the necessity to call in additional Fire Engines from neighboring taluks/district.
- Mobilize the services of the home guards for firefighting through the police.
- He will advise the Deputy Commissioner on the extent of evacuation necessary.
- Preserve valuable evidences, which may be useful for investigation later on.
- Ensure availability of water and make arrangement for private water tanker carriers.
- When the emergency is over, carry out joint inspection of affected areas along with site controller and Technical experts to ensure the emergency is under control.
- Send the message of “SAFE” to DC/SP etc to enable him to officially call off the emergency.

Civil defence function: District Commandant, (Home Guards)

Alternate: - Dy. District Commandant

District Commandant/Dy. Commandant will position themselves in the Emergency Control Room and assist the District Administration in mitigating the emergency. They would be continuous in contact with the field officer/units.

Main functions:

- Assist the Police or Fire personnel in carrying out their duties.
- Carry out rescue and evacuation operation in close association with other emergency agencies.
- Evacuated areas would need to be guarded against looting.

Public works/highway function: Superintendent Engineer

Alternate: - Executive Engineer

Depending on type and location of the disaster, the in-charge of the PWD/Highway or Irrigation department representatives would make them available at the ECR and maintain close contact with their engineers who would be at the scene of the disaster.

Main functions: -

- Help the police to divert traffic away from the scene of accident along the entire major roads.
- Ensure diversion routes are in good condition and traffic does not get jammed.
- Exhibit proper diversion signs conspicuously at suitable places.

Provide the mobile crane/heavy earthmoving equipment for the purpose of salvage operation.

- Provide necessary assistance as required and directed by Deputy Commissioner/Superintendent of Police.

Transportation function: Road transport officer (RTO)

Alternate: Asst.RTO

The transportation department plays an important role during any type of disaster as it would involve large-scale evacuation of people in the affected area. RTO/ARTO would be based at ECR and assist the District Administration in mitigating the emergency.

Main functions:

- Deploy required number of buses with drivers to evacuate people to safe shelters.
- Mobilize various earth moving equipment and other heavy machinery from different sources required for rescue operation.
- Provide mobile workshop if required for urgent repairs/breakdown.
- Provide assistance as required and directed by Superintendent of Police/Deputy Commissioner.

Health function: District Health Officer (DHO)

Alternate: Taluk Health Officer.

The DHO/THO would be based in the ECR and assist District Administration in ensuring prompt health care to all affected people through their network in affected areas.

Main functions:

- On receiving the information about the emergency DHO will mobilize all the available medical & paramedical Staff for handling emergency.
- Rush medical teams from the nearby hospitals to the scene of the disaster or safe shelters nearby.
- Set up first aid centre at the affected area and rescue shelters.
- Mobilize all the available ambulances and assist in shifting the injured/affected persons requiring the additional attention to hospitals.
- Alert all government & private hospitals to meet any emergency and line of treatment to be followed.
- Alert blood banks to maximize their stock.
- Set up temporary emergency wards with medical facilities to receive the affected victims.
- Inform all the doctors/para medicals regarding the nature of emergency as per the message received from the ECR and also inform about the line of treatment to be followed.
- Ensure sufficient stock of drugs and other medical facilities are available.

- Keep in touch with the district Emergency Control Room and Deputy Commissioner and appraise him of the situation and advice him on additional help required from outside agencies.

Welfare function: Dy. Director, Food and Civil Supply

Alternate: - Assistant Director, Food and civil Supply

The DD/AD, F&CS, would be based in the Emergency Control Room and assist the District Administration in running the safe shelters and relief centres set up during the disaster.

Main functions:

- Will be overall in-charge of Relief and Rehabilitation activities.
- Identify the rehabilitation centre in advance and establish them in shortest possible time.
- Arrange for orderly transportation of population from the emergency zone and adjacent villages in case evacuation has been ordered by Deputy Commissioner.
- Co-ordinate with the other departments connected with relief measures.
- Provide basic amenities such as food, drinking water and sanitation at the rehabilitation centers.
- Distribute food packets at the affected areas to the people, emergency services agencies such as police, fire fighting personnel and others.
- Exercise any other powers to seek any assistance from the local authorities' in achieving this objective.
- Establish contact with the voluntary organizations for assistance.
- To ensure that necessary arrangements are made for the orderly return of all villagers to their respective places once the Deputy Commissioner informs about the termination of the emergency.

Information function: District Information Officer

Alternate: - Assistant Information Officer.

The District Information Officer would be based in the Emergency Control Room during any disaster and assist the district authorities in smooth operation.

Main functions: -

- Upon receiving the information from District Administration, the information officer should co-ordinate with media for giving information regarding emergency.
- Co-ordinate with the affected victims' families for giving information of their dear ones if missing/dead/injured.

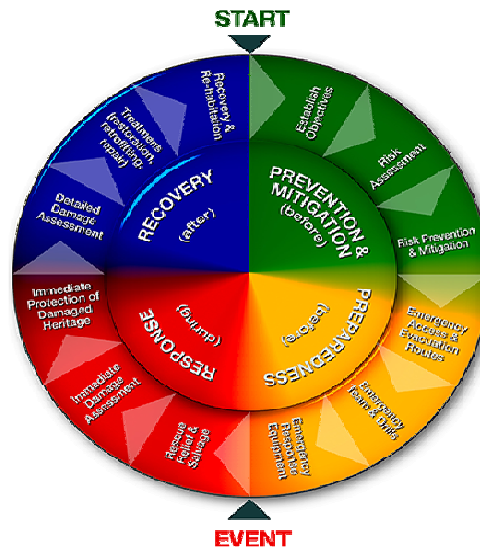
Pollution control function: Dy. Environment Officer

Alternate: - Assistant Environment Officer

The representative of the Pollution Control Board would be based in the Emergency Control Room during any disaster and ensure the environmental damage is kept minimum.

Main functions: -

- Mobilize all possible resources at his disposal and keep the laboratory functioning for analysis of pollutants and emissions.
- Rush the team to the affected area for collection of samples and analyze the same.
- Keep the Emergency Control Room informed about the possible effect on human life as well as environment and corrective actions taken to minimize the same.



CHAPTER-6

RESPONSE PLAN

The response plan has been prepared with an aim of reducing to a great extent the response time to any disaster. This in turn will minimize the extent of damage and sufferings to human/animal life and infrastructure considerably. The plan enables all those involved in rescue and relief to know exactly their roles, about available resources, structure etc. and with whom they have to co-ordinate.

Inter departmental co-ordination weekly meetings are planned to reduce field level problems and to impart knowledge on standard operating procedures. Local engineers of PWD PRED, irrigation dept. have been asked to be in red alert to assess the damage and to immediately repair/ make alternate arrangements in their area without waiting for procedural aspects. Logistics arrangements for rescue operation has been put in place, including animal care and management of the deceased.

Relief and Rescue Operation

Rescue work will be taken up by the local police, home-guards, fire force along with local villagers and volunteers.

In case severe distress due to natural calamities like high flood or earthquake, emergent relief such as temporary shelter, rice, dal, potato, salt, kerosene, matchboxes, toothpaste soap, milk, clothing, blanket, etc., will be arranged from the identified traders and sources.

Immediate response acts

- Inform the core committee members to swing into action.
- Summon the fire brigade.
- Inform Road Transport Authorities to stop movement of vehicle.
- Mobilize volunteers, youth, sportsmen, social service workers, Ex-servicemen, Medical personal.
- Make shift arrangements for temporary shelters to displaced persons
- Providing water and food to the affected.

Synopsis of Response Plan: -

Phase	Activities	Officials involved
During disaster	Disseminating information 1 st Responders.	CDC
	Keeping the control room active round the clock.	CDC
	Arrangement of vehicle and public address system for information dissemination.	Police
	Distributing of duties to the district level officials, field functionaries on need basis.	CDC
	Asking the people in the vulnerable areas to move to the shelters and to move their domesticated animals to shelter places and to co-operate with the volunteers and other officials engaged in similar activities.	Fire services, Police, Revenue, Veterinary Dept.
	Informing the hospitals to be ready to receive the injured persons for immediate medical aid, and	Health Dept.

	arrangement of special medical need if required.	
	Constituting of mobile health teams to visit shelters.	Health Dept.
	Arrangement and deployment of Fire Services, emergency response vehicles, first aid fire fighting personnel.	Fire services
	Arrangement and deployment vehicles for evacuation of persons.	RTO
	Arrangement and deployment of Home guards for law and order to work in association with Fire services and police.	Commandant Home guards
	Arrangement of specialized equipment for mitigation .	RTO Management
	Arrangement and deployment of Police for maintaining law and order.	Police
	Traffic management and patrolling to the disaster site.	Police
	Provision of security at the shelter.	Police
	Arrangement for evaluation of water and air pollution due to the disaster.	KSPCB
	Management of deceased.	Revenue, Health

Response Plan for different Disasters.

DROUGHT:

Task force for Disaster management during Drought.

AEE, PWD	AEE, ZP	Tahasildar	Taluk Medical Officer	AEE, MI	Animal Husbandry & Veterinary Services
To generate employment to the needy victims	To provide drinking water to affected areas	To provide food, drinking water and milk	To co-ordinate with PHCs and provide medical relief and set up medical camps if necessary	To generate employment to the needy victims	To provide fodder and veterinary services for live stock.

Koppla, Gangavathi, Kustagi and Yalburga taluk face drinking water problem in case of rainfall deficit. panchayat and municipalities in the district are advised to repair the bore wells and pipelines which are not in good condition. New bore wells are drilled in such areas under Auxillirated drinking water supply scheme through ZP engineering dept. Awareness should be created in the public not to waste the water and bore wells points to dig the new borewells have been identified . Places to open the ghoshalas in holbi head quarters have been identified. If need be the fodder will be procured from Bellary district. Food grains are stored in the KSFC and FCI gowdons. The list of such gowdons in the district and storage capacity has been worked out already by the district administration. Usually the people from Kustagi, Yalaburga Koppal taluk will leave the villages in search of employment at the time of drought. Hence the list of tanks which are to

be desalted, the amount required, number of labors to be employed has been prepared. The Grama Panchayats are advised to get the list of the laborers that usually will go in search of employment.

Drought Monitoring

Since the District is prone to frequent droughts, emphasis is laid on monitoring the situation during droughts. Identification of drought-prone villages and taluks has been done and contingent plans have been worked out.

The following steps have been taken on a regular basis by the District Administration through Panchayat Offices to combat the menace of drought:

- Digging of bore wells.
- Providing hand pumps and motor pumps wherever required.
- Repair of existing hand pumps and motor pumps.
- Digging of wells.
- De-silting of wells, tank beds.
- Providing pipelines for supply of water.
- Providing water to problems areas through water tankers and other means.
- Providing water storage facilities at all block levels.

Since water contamination and water borne diseases can cause health hazards precautions are taken to ensure that drinking water is properly purified before consumption. The District Health officials and the ZP Department monitor supply of drinking water and ensure that there is no scope for water contamination.

PROVIDING FOOD AND FODDER DURING DROUGHT

Since drought has a cyclic effect there is a drain on resources such as food, water, employment, etc., as there is inadequate soil moisture there is shortage of food and fodder.

The focus during drought would be on the following vital areas:

- Water conservation.
- Supply of essential commodities.
- Employment generation.
- Early warning systems.
- Health care.
- Water supply to remote areas by tankers etc.
- Emphasis on the poorer classes of society.
- Priority to drinking water over irrigation.
- Training to NGO's Volunteers and youth.

The following Action Plan has been formulated by the District Administration to deal with the situation of drought.

Contingency plan prepared in co-ordination with the Water Supply Department, ZP, TP, Municipal Corporations, Irrigation Department and Health Department to ensure availability of adequate quantity of drinking water.

Food: Department of Food and Civil Supplies is in readiness to face any situation of drought and has maintained stock register of availability of food grains.

Health: Department of Health has trained personnel on its rolls to deal with situation of drought and forms an important organ of the Core Committee.

Fodder: An adequate step taken to ensure that fodder for cattle is stored in case of impending drought.

Veterinary Facilities: Veterinary Department has been instructed to store adequate stock of medicines to save lives of cattle and live stock.

Supply of Drinking Water During Drought 2018

Government of Karnataka by Order four talukas of Koppal district declared as a drought affected talukas namely Koppal, Gangavati, Kushtagi and Yelburga. Among these Gangavati and Yelburga are declared as severe drought affected talukas of Koppal District and remaining talukas are classified as a partially drought affected those are Koppal and Khustagi.

Rural Water Supply during drought 2018

in Koppal District among 737 villages 282 villages are identified as drinking water problematic villages. By Preparing Action Plan of Rs.3.21 crores providing drinking water through tanker to drinking water problematic villages by repairing and flushing bore wells.

in Koppal district from November 2018 to May 2019 drilled 2472 bore wells among these 1408 are successful and remaining 1064 are failure.

Details of Private Bore Wells Hired for supply of Rural Drinking Water (As on 27.06.2019)

S.No	Taluk	No of Villages	No of Private Bore Wells Hired	Expenditure (In Lakhs)
1	Koppal	17	17	3.31
2	Gangavati	8	10	2.15
3	Karatagi	4	7	1.60
4	Kanakagiri	16	16	4.13
5	Yelburga	21	25	9.81
6	Kukanur	4	4	0.70
7	Kushtagi	63	92	30.98
Total		133	171	52.68

Details of Taluk/Village wise Supply of Drinking Water through Tanker (As on 27.06.2019)

S.No	Taluk	Villages water supply through Tankers	Name of the Village	Expenditure (In Lakhs)
1	Koppal	0	--	0.00
2	Kanakagiri	4	Neeraluti	3.81
3	Gangavati	0	--	0.00
4	Karatagi	0	--	0.00

5	Kushtagi	8	Guddada Devlpur,Hanumanal, Ryavanaki, Chandragiri,Kumbalavati, Madikeri,Huliyapur , Chikkamurkatihal	12.42
6	Yelburga	4	Guntamadu,Hunasihal Tanda, N. Jarakunti, Muradi	14.51
7	Kukanur	1	Mangalur	19.77
Total		17		50.51

**Drought Emergency Supply of Rural Drinking Water During 2018-19, Under Deputy
Commissioners P D Account (1st Phase Expenditure)**

S.No	Name of Assembly	Sanctioned Works	Sanctioned Amount	Amount Released	Expenditure	No of Works		Completed Works
						Flushing /Redrilling	Pipe Line/Motor Repair	
1	Koppal	116	28.60	21.45	21.79	112	4	116
2	Gangavati	56	29.00	21.75	21.75	41	15	56
3	Kanakagiri	16	29.00	27.56	21.75	0	16	16
4	Khustagi	24	29.00	24.41	24.41	16	8	24
5	Yelburga	18	29.00	25.54	19.97	0	18	18
Total		230	144.60	120.71	107.01	169	61	230

**Drought Emergency Supply of Rural Drinking Water During 2018-19, Under Deputy
Commissioners P D Account (2nd Phase Expenditure)**

S.No	Name of Assembly	Sanctioned Works	Sanctioned Amount	Amount Released	Expenditure	No of Works		Completed Works	Works under Progress
						Flushing /Redrilling	Pipe Line/Motor Repair		
1	Koppal	52	40.00	30.00	26.10	99	8	46	6
2	Gangavati	66	39.80	29.85	29.56	193	2	66	0
3	Kanakagiri	57	40.00	30.00	29.86	100	9	57	0
4	Khustagi	13	40.00	30.00	29.87	0	13	13	0
5	Yelburga	23	40.00	30.00	17.11	4	19	13	10
Total		211	199.80	149.85	132.50	396	51	195	16

**Drought Emergency Supply of Rural Drinking Water During 2018-19, Under Deputy
Commissioners P D Account (3rd Phase Expenditure)**

S.No	Name of Assembly	Sanctioned Works	Sanctioned Amount	Amount Released	Expenditure	No of Works		Completed Works	Works under Progress
						Flushing /Redrilling	Pipe Line/Motor Repair		
1	Koppal	6	29.00	21.75	0.00	0	6	0	6
2	Yelburga	8	21.70	6.45	0.00	0	8	0	8
3	Kanakagiri	120	40.00	0.00	0.00	100	20	0	120
4	Kushtagi	115	40.00	0.00	0.00	200	0	0	200
Total		249	130.70	28.20	0.00	300	34	0	334

Drought Emergency Supply of Rural Drinking Water During 2018-19, Under ZP Taskforce (1st Phase Expenditure)

S.No	Name of Taluk	Sanctioned Works	Sanctioned Amount	Expenditure	Completed Works	Works under Progress
1	Koppal	111	50.00	49.83	111	0
2	Gangavati	73	50.00	49.87	73	0
3	Kushtagi	52	50.00	29.92	52	0
4	Yelburga	28	50.00	29.34	28	0
Total		264	200.00	158.96	264	0

Drought Emergency Supply of Rural Drinking Water During 2018-19, Under ZP Taskforce (2nd Phase Expenditure)

S.No	Name of Taluk	Sanctioned Works	Sanctioned Amount	Expenditure	Completed Works
1	Koppal	56	50.00	24.46	56
2	Gangavati	71	50.00	49.58	71
3	Kushtagi	59	50.00	40.12	59
4	Yelburga	23	50.00	0.00	23
Total		209	200.00	114.16	209

Drought Emergency Supply of Rural Drinking Water During 2018-19, Under ZP Taskforce (3rd Phase Expenditure)

S.No	Name of Taluk	Sanctioned Works	Sanctioned Amount	Expenditure	Completed Works	Works under Progress
1	Koppal	121	55.00	0.00	0	121
2	Gangavati	78	45.00	0.00	0	78
3	Kushtagi	46	50.00	0.00	0	46
4	Yelburga	91	50.00	0.00	0	91
Total		336	200.00	0.00	0	336

Drought Emergency Supply of Rural Drinking Water During 2018-19,

Expenditure Under ZP SDRF for Bore well drilling, Pipe line and repair works

S.No	Name of Taluk	Sanctioned Works	Sanctioned Amount	Expenditure	Completed Works	Works under Progress
1	Koppal	68	30.00	29.90	68	0
2	Gangavati	67	29.90	29.81	67	0
3	Kushtagi	67	40.00	39.90	67	0
4	Yelburga	60	30.00	29.84	60	0
Total		262	129.90	129.45	262	0

Urban Water Supply

Expenditure Under SFC for Urban Drinking Water in Koppal District During 2018 up to April

S.No	Name of ULB	Grant Released	Sanctioned Works	Sanctioned Amount	Expenditure	Completed Works	Works under Progress
1	Karatagi	35.14	3	35.14	0.00	0	3
2	Yelburga	18.08	4	18.08	13.08	0	4
3	Kukanur	58.86	14	58.86	18.52	9	5
4	Tawaragera	40.72	23	40.72	7.50	0	11
5	Kanakagiri	57.54	7	57.54	11.00	0	6
6	Bhagyanagar	18.38	3	18.38	18.38	3	0
Total		228.72	54	228.72	68.48	12	29

Expenditure Under SFC for Urban Drinking Water in Koppal District During 2019 up to January

S.No	Name of ULB	Grant Released	Sanctioned Works	Sanctioned Amount	Expenditure	Completed Works	Works under Progress
1	Karatagi	20.00	4	20.00	0.00	0	3
2	Yelburga	15.00	6	15.00	5.00	1	5
3	Kukanur	15.00	4	15.00	0.00	0	4
4	Tawaragera	15.00	1	15.00	0.00	0	1
5	Kanakagiri	15.00	3	15.00	0.00	0	3
6	Bhagyanagar	15.00	6	15.00	11.00	6	0
7	Kushtagi	20.00	5	20.00	1.89	1	4
8	Koppal	25.00	11	25.00	8.75	2	9
9	Gangavati	25.00	17	25.00	0.00	0	17
MIAO		165.00	57	165.00	26.64	10	46

Expenditure Under SFC for Urban Drinking Water in Koppal District During 2019 up to May

S.No	Name of ULB	Grant Released	Sanctioned Works	Sanctioned Amount	Expenditure	Completed Works	Works under Progress
1	Karatagi	16.00	3	16.00	0.00	0	0
2	Yelburga	12.00	3	12.00	0.00	0	0
3	Kukanur	12.00	3	12.00	0.00	0	0
4	Tawaragera	12.00	3	12.00	0.00	0	0
5	Kanakagiri	12.00	2	12.00	0.00	0	0
6	Bhagyanagar	12.00	1	12.00	0.00	0	0
7	Kushtagi	16.00	10	16.00	0.00	0	0
8	Koppal	20.00	13	20.00	0.00	0	0
9	Gangavati	20.00	0	0.00	0.00	0	0
Total		132.00	38.00	112.00	0.00	0	0

Expenditure Under Deputy Commissioner PD Account for Urban Drinking Water in Koppal District During 2018-19

S.No	Name of ULB	No of Total Wards	No of Wards Water Supply through Tanker	Released Amount (In Lakhs)	Expenditure(In Lakhs)
1	Karatagi	23	0	0.00	0.00
2	Yelburga	15	4	0.00	0.00
3	Kukanur	19	4	3.00	0.00
4	Tawaragera	18	8	10.00	8.00
5	Kanakagiri	17	0	2.00	0.78
6	Bhagyanagar	19	4	0.00	0.00

7	Kushtagi	23	12	2.00	2.00
8	Koppal	31	0	0.00	0.00
9	Gangavati	35	0	0.00	0.00
Total		200	32	17.00	10.78

Employment Generation during drought 2019

Mahatma Gandhi National Rural Employment Guarenty Act Progress from 01.04.2019 to 12.10.2019 (MGNREGA)

S.No	Name of the Taluka	Generation of Man-days		
		Annual Target	Cummulative Achievement	Percent of Achievement
1	Gangavati	15.14	14.21	94%
2	Koppal	12.25	5.36	44%
3	Kushtagi	15.37	14.12	92%
4	Yelburga	8.24	3.08	37%
Total		51.00	36.76	72%

Maintenance of Cattles and Fodder During Drought-2018

Agriculture Department is entrusted with a task of developing drought resistant varieties, alternate cropping pattern, fodder reserves (dry) and information dissemination mechanism. Urban local bodies and Gram panchayaths are equipped with assured drinking water supply systems. Food go-downs have been identified at reachable distances. Medical and Veterinary officers are included in mitigation teams to deal with issues related to health and nutrition. List of vehicles to be used for supply of food, fodder and medicines is kept prepared. Auxiliary nursing matrons are entrusted with a task of preparing a list of vulnerable groups like women, children, senior citizen, infants and nursing mothers.

ಉಪ ನಿರ್ದೇಶಕರು, ಪಶುಪಾಲನಾ ಮತ್ತು ಪಶುವೈದ್ಯಕೀಯ ಸೇವಾ ಇಲಾಖೆ ಕೊಪ್ಪಳ								
Koppal Taluka wise Fodder Availability as on 12-07-2019 (ಮೆ.ಟನ್ ಗಳಲ್ಲಿ)								
ಕ್ರ.ಸಂ	ತಾಲ್ಲೂಕು	ಜಾನುವಾರುಗಳ ಸಂಖ್ಯೆ			ಮೇವಿನ ಲಭ್ಯತೆ	ವಾರದ ಮೇವಿನ ಬೇಡಿಕೆ @ 8 ಕೆಜಿ/ದಿನ/ರಾಸು	ಲಭ್ಯತೆ ಇರುವ ಮೇವು ಎಷ್ಟು ವಾರಗಳವರೆಗೆ ಸಾಕಾಗುತ್ತದೆ.	ಷರಾ
		ದನ	ಎಮ್ಮೆ	ಒಟ್ಟು				
1	ಕೊಪ್ಪಳ	59231	13413	72644	53247.79	4068.064	14	ಲಭ್ಯವಿರುವ ಮೇವು ಒಟ್ಟು 12 ವಾರಗಳಿಗೆ ಮಾತ್ರ ಸಾಕಾಗುತ್ತದೆ. ಜಿಲ್ಲೆಯಲ್ಲಿ 2018-19 ನೇ ಸಾಲಿನ ಹಿಗಾರು ಹಂಗಾಮಿನಲ್ಲಿ ಉಳಿದ ಮತ್ತು ಬೇಸಿಗೆ ಹಂಗಾಮಿನಲ್ಲಿ ಬಿತ್ತನೆಯಾದ ನೀರಾವರಿ ಪ್ರದೇಶದ ಭತ್ತ ಮತ್ತಿತರ ಬೆಳೆಗಳಿಂದ NIANP ಮಾರ್ಗಸೂಚಿ ಹಾಗೂ ಸೂತ್ರಗಳನ್ವಯ ಮತ್ತು ಜಿಲ್ಲೆಯಲ್ಲಿ ಕಳೆದ 15 ದಿನಗಳಿಂದ ಬಂದ ಮಳೆಯಿಂದ ಜಿಲ್ಲೆಯ ಗೋಮಾಳ/ಖಾಲಿ,ಖರಾಬು/ಅರಣ್ಯ ಭೂಮಿಯಲ್ಲಿ ಲಭ್ಯವಾಗುತ್ತಿರುವ ಅಂದಾಜು ಮೇವನ್ನು ಗಣನೆಗೆ ತೆಗೆದುಕೊಂಡಿದೆ..
2	ಗಂಗಾವತಿ	60032	29232	89264	121912.7	4998.784	24	
3	ಕುಷ್ತಗಿ	51778	9515	61293	14872.812	3432.408	5	
4	ಯಲಬುರ್ಗ	50902	8987	59889	12605.566	3353.784	4	
ಒಟ್ಟು		221943	61147	283090	202638.87	15853.04	12	

ಷರಾ : ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಟ್ಟು 7 ಗೋಶಾಲೆಗಳು ಮತ್ತು 7 ಮೇವು ನಿಧಿಗಳನ್ನು ನಿರ್ವಹಿಸಲಾಗುತ್ತಿದೆ.

Parihara: (Input Subsidy)

Drought declaration signifies the beginning of Government response to conditions representing a drought conditions. The drought is declared using Taluk as a unit guided by objective parameters

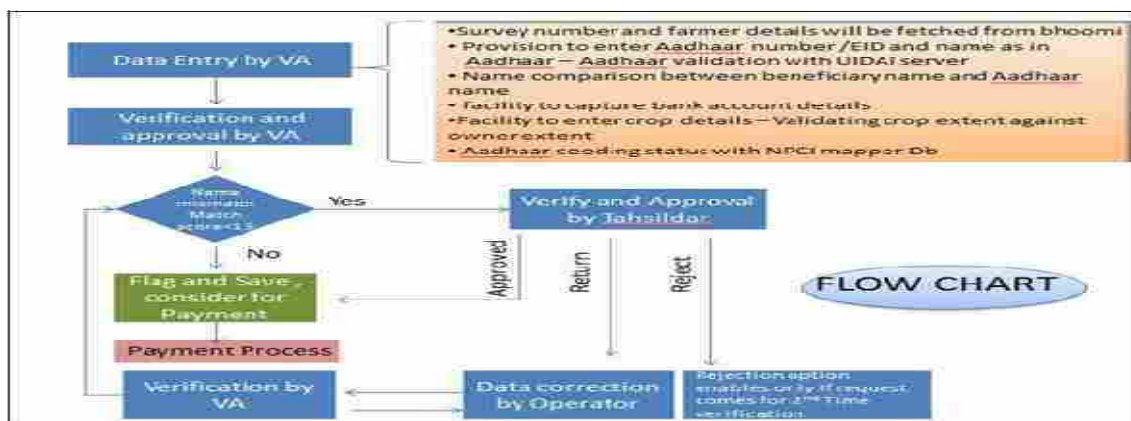
prescribed by the Drought Manual of Government of India that is in vogue during that period. The relief operation such as supply of drinking water, supply and transportation of fodder and employment generation, etc, are mounted in drought declared taluks using funds available in State Disaster Response Fund (SDRF) and State Fund. In most of the cases the drought is wide spread and is beyond the coping capacity of the State and memorandum is submitted to the Government of India seeking financial assistance from National Disaster Response Fund (NDRF). The Department of Agriculture, Cooperation and Farmers Welfare, Government of India will constitute and dispatch inter-ministerial central team (IMCT) to the drought affected area. The IMCT will visit drought affected areas in the State and interact with district and local officers, farmers and other concerned stakeholders. The IMCT will submit a report to subcommittee of National Executive Committee chaired by Union Agriculture Secretary. The subcommittee of National Executive Committee (NEC) after studying the report will place its recommendation before High Level Committee (HLC) chaired by Union Home Minister. HLC approves

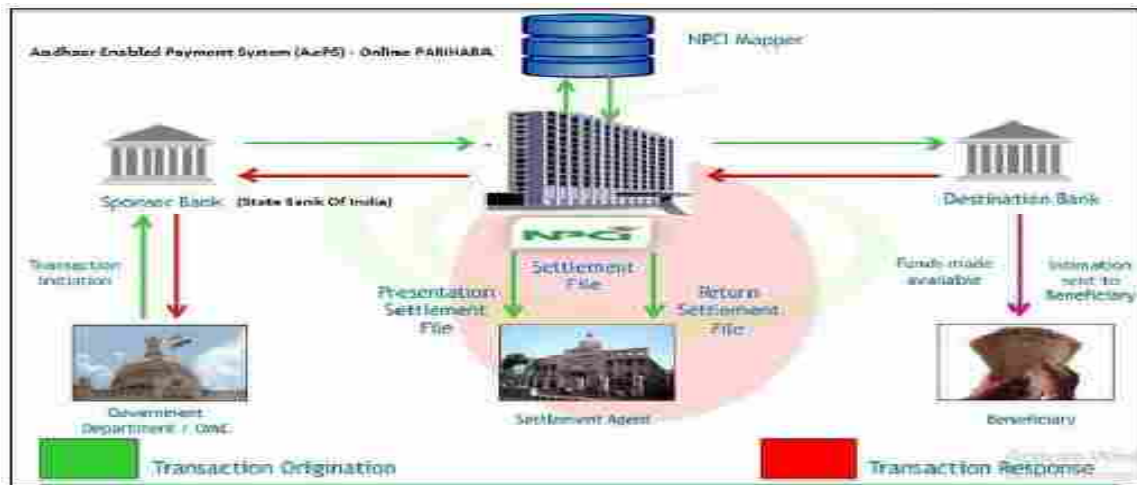


the quantum of financial assistance (as per the NDRF norms) to be released to the State.

Parihara Work flow

The work flow is depicted in the below given flowchart. Data entry of land details, extent of damage, Aadhar number, bank details, etc, is made by the data entry operator. This is verified by Village Accountant and approved. In case there is mismatch between name in RTC and Name in Aadhar database, the record is escalated to Tashildar to verify and approve. Once approved, XML file is created and digitally signed by respective Deputy Commissioners and uploaded for payment.





Salient features of Parihara Application

- The Parihara application fetches land details (survey no, extent, etc.), owner details from Bhoomi database. Bhoomi Database forms the backbone of this application.
- Crop details and extent of damage is validated using Bhoomi database, which ensures payment to intent beneficiaries, i.e., to farmers who really owns the land. This feature will eliminate unintended beneficiaries.
- Aadhaar number /Enrolment ID and name as in Aadhaar of the affected farmers after taking due consent from the farmers. Yes or no Aadhaar validation with UIDAI server to ensure Aadhaar no entered is a valid Aadhaar no. Aadhaar seeding status is checked with NPCI mapped Database, which enables intimating the beneficiaries about the linking status and taking remedial measures. This shall facilitate Aadhaar Enabled Payment System (AEPS), most secured, transparent financial instrument for disbursing input subsidy.
- Beneficiary can check the payment status by keying his/her Aadhaar No or user ID (unique ID assigned to farmers during data entry). Details such as input subsidy amount paid, to which bank, account no, extent of crop loss and name of the crop will be displayed on keying in above numbers. This enables eligible small and marginal farmers to approach the designated authorities with a sense of entitlement in case of non-receipt of input subsidy.

Input Subsidy Disbursement before the advent of DBT

The input subsidy amount released from NDRF to the State is released to the PD account of respective Deputy Commissioners as per the demand in the Memorandum. The Deputy Commissioners in-turn release the amount to drought affected taluk based as per the joint survey report. Tashildar in coordination with Revenue Inspector and Village account identifies beneficiaries and issues cheque or transfers money through RTGS/NEFT. This system was a protracted delivery process which invariably led to inordinate in providing timely input subsidy. There were instances in the past where input subsidy disbursement process took almost a year and a half. The major drawback of the systems is as follows:

- The process used to consume significant time and administrative resources as entire Revenue machinery in the taluk and district level are engaged in damage assessment and identification of beneficiaries, which used to impair other development works in the districts
- Process was riddled with high amount of discretion at every stage leading to inequitably and inefficiently distribution, invariably leading to input subsidy amount given to unintended beneficiaries.
- Rent seeking from beneficiaries, illegitimate commission seeking by cutting edge level officers who had power to stop, deny or delay the benefit to be passed.
- Pressure on local banks leading disrupting the day to day operations particularly rural cooperative bank which lacked wherewithal in terms of technology and manpower to scale up the operations during disbursement.

Evolution of Parihara Application

The above stated drawbacks were deliberated extensively with all stakeholders and decision was taken to direct transfer of input subsidy to beneficiaries' account which will eliminate intermediaries, weed out fictitious beneficiaries and discretion of government officials to stop, deny or delay the benefit to be passed.

What started as excel sheet format for data collection for crop damage evolved into a most sophisticated web application "Parihara" to ensure a better and timely delivery of financial assistance in terms of input subsidy directly into the accounts of beneficiaries thereby plugging leakages and enhancing financial inclusion.

Parihara is an innovative web based application was developed in-house by Revenue Department (Bhoomi Monitoring Cell and Disaster Management), Govt. of Karnataka to enable direct benefit transfer (DBT) through Aadhaar Enabled Payment Service, i.e., transferring of input subsidy amount directly into the Aadhaar seeded bank accounts of intended beneficiaries.

Payment Process in Parihara

Robust mechanism has been developed to ensure transparency and integrity in payment process and flow chart is as follows:



Payment Sample Report

ಕರ್ನಾಟಕ ಸರ್ಕಾರ/State Government										
ಕರ್ನಾಟಕ ಸರ್ಕಾರ/State Government										
ಕ್ರ. ಸಂಖ್ಯೆ Sl No.	ಜಿಲ್ಲಾ ಹೆಸರು District Name	ಬ್ಯಾಂಕ್ ಹೆಸರು Bank Name	ರೂಪಾಯಿ Amount (₹)	ಖಾತೆದಾರರ ಹೆಸರು Ac Holder Name	ಬ್ಯಾಂಕ್ ಖಾತೆ ಸಂಖ್ಯೆ Bank Account Number	ಪಾವತಿ ಸ್ಥಿತಿ Payment Status	ಪಾವತಿ ದಿನಾಂಕ Payment Date	ವ್ಯವಸ್ಥಾಪನಾ ವಿಧಿ Category Type	ಋತು Season	ವರ್ಷ Year
1	Gadag	STATE BANK OF INDIA	12000	MR PARVATAGOU SANGANAGOU SHAMNAGOUJAH	XXXXXXXX184	00 Success	25/Sep/2017	DROUGHT	RAB	2016-17

ಕರ್ನಾಟಕ ಸರ್ಕಾರ/State Government										
ಕರ್ನಾಟಕ ಸರ್ಕಾರ/State Government										
ಕ್ರ. ಸಂಖ್ಯೆ Sl No.	ಪರಿಹಾರ ಸಂಖ್ಯೆ Entry ID	ಆಧಾರ ಸಂಖ್ಯೆ Aadhar No	ಜಿಲ್ಲಾ ಹೆಸರು District Name	ತಾಲೂಕು ಹೆಸರು Taluk Name	ಗ್ರಾಮ ಹೆಸರು Village Name	ಸರ್ವೆ ಸಂಖ್ಯೆ Survey Number	ಕ್ರಮ ಹೆಸರು Crop Name	ಕ್ರಮ ವಿಧಿ Crop Category	ಕ್ರಮ ಹಾನಿ (ಅಂಶ/ಫುಟ್/ಗಂಟಾ) Crop Loss Extent (Acres/Guntas/Foots)	
1	5577979	XXXXXXXXXXXX	ಗದಗ	ಕುಮಟಾ	ಕುಮಟಾ	5577/5	ಬಿದಿ	ಹಾನಿ	5 - 3 - 80	

<http://landrecords.karnataka.gov.in/PariharaPayment/>

Advantages of Aadhar enabled payment through Parihara

- Electronic transfer of fund directly to farmers account from the State which minimizes intermediaries and will ensure timely payment.
- Accurate targeting and curbing pilferage by validating entries at multiple levels. Thus Parihara prevents malfeasance with input subsidy, which has been an biggest challenge for the governments.
- Robust MIS to monitor the progress and to provide quick and convenient method for grievance redressal.
- This is a onetime data entry, hence burden on district administration will reduce considerably for future disbursement of input subsidy. Thus there will not be disruption on developmental works.
- Pressure on banks, especially cooperative banks will reduce.

The Parihara has had positive spin-offs as well and these are as follows:

- Robust farmer-level data generated can be useful for planning purposes by all concerned agencies.
- Updation of crop details in the RTCs, which will facilitate accurate yield estimation.
- Success of Parihara has had cascading effect on other State Government schemes which involves disbursement of subsidies.

Bhoomi Parihara

Input subsidy provided to formers during drought through Parihara

1. Khariff Drought 2018-19

During Khariff 2018-19 Gangavati (Included with new talukas namely Karatagi and Kanakagiri) and Yelburga (Included Kukanoor Taluka) talukas declared as drought affected talukas in Koppal District and input-subsidy provided to formers due to croploss. The data entered in Parihara is as follows

Khriff Drought 2018-19 Data Entry Progress Report as on 20.11.2019

SINo	Taluk Name	Partial Entries	VA Pending Entries	VA Verified And Approved Entries	Operator Deleted Entries	Total Entries
1	Yelburga	6	9	27461	1	30886
2	Gangavathi	2338	1519	14403	32	20733
3	Karatagi	3	0	57	0	63
	koppal TOTAL	2347	1528	41921	33	51682

Khriff Drought 2018-19 Total Entry and Payment Details as on 04.07.2019

Total entries	Total Beneficiaries	Total payment
37601	27890	24.34 Crores

2. Rabi Drought 2018-19

During Rabi 2018-19 Koppal, Kushtagi, Gangavati and Yelburga declared as drought affected talukas in Koppal District and input-subsidy provided to formers due to croploss. The data entered in Parihara is as follows

Rabi Drought 2018-19 Rabi Data Entry Progress report as on 20.11.2019

SINo	Taluk Name	Partial Entries	VA Pending Entries	VA Verified And Approved Entries	Operator Deleted Entries	Total Entries
1	Kanakagiri	686	1	5756	247	6690
2	Kushtagi	33	2	21007	5112	26154
3	Kukanoor	242	10	22518	1260	24030
4	Karatagi	0	0	269	23	292
5	Koppal	60	6	22228	6061	28355
6	Yelburga	2	8	16338	1318	17666
	Koppal	1023	27	88116	14021	103187

Rabi Drought 2018-19 Crop loss Extent Covered Progress report as on 18.11.2019

S.No	Taluk Name	Memorandum Rainfed Area(Ha)	Parihara Rainfed Area(Ha)	Parihara Irrigated Area(Ha)	Parihara Perrinial Area(Ha)	Memorandum Total Crop Loss Area(Ha)	Parihara Total Crop Loss Area(Ha)	Percentage of Completion
1	Koppal	22460	21822	228	113	22460	22164	98.68
2	Kushtagi	31104	22474	94	13	31104	22582	72.6
3	Yelburga	54944	17694	115	14	54944	17824	75.87
4	Kukanoor	0	23813	46	4	0	23863	
5	Kanakagiri	0	6451	461	4	0	6917	55.08
6	Karatagi	0	298	0	0	13100	298	
7	Gangavati	13100	0	0	0	0	0	
	Total	121608	92552	944	148	121608	93648	77.01

Rabi Drought 2018-19 Total Payment Details as on 05.11.2019

Phase	Total Beneficiaries	Payment in 75%	Date as on
Phase-I	30198	214471345	09.10.2019
Phase-II	4139	56515906	16.10.2019
Phase-III	9528	26035486	23.10.2019
Phase-IV	2726	*122782186	05.11.2019
Total	46591	419804923	-

FLOOD:

Floods caused extensive damage to human, animal and plant life. Flood result in rendering many people homeless leading to devastation and total chaos to lack of communication and means of transportation.

Preventive steps:

Certain advance measures are taken to prevent extensive damages caused by floods.

- ◆ Embankments
- ◆ Flood ways and diversions of rivers.
- ◆ Protection of river banks.
- ◆ Community-cum-shelter buildings.

Emergency measures to be taken

It is imperative that rescue and evaluation operations are taken up by the district administration without any loss of time. People living in low-lying areas are forewarned to evacuate the place and are shifted to a safe environment. Relief centers are to be set up to provide adequate food, clothing, shelter and water to the persons shifted. For shifting people and animals rafts and boats are to be kept ready and services of ex-service men and sports persons who are good swimmers are employed for relief measures.

Facilities available in case of floods

1. Wireless communication with revenue authorities.
2. Motorized Boat of 12 members' capacity available at Munirabad
3. Police Wireless system, Fax, Telephone Facilities.
4. Tipper and Lorries are available in the office of the Executive Engineers located at Munirabad, Gangavathik, Kustagi and Koppal.
5. Inspection Bunglows, School and College Buildings are mainly available for shifting the affected peoples at Munirabad, Gangavathi, Kampli, and Kustagi.

Arrangements during and after floods:

- Organizing rescue operations.

- Relief measures by non-official and voluntary organization may be enlisted as far as possible.
- Organize relief camps.
- Provision of basic amenities like drinking water, sanitation and public health care and arrangements of cooked food in the relief camps.
- Organizing enough relief parties to the rescue of the marooned people within a reasonable time limit.
- Establish alternate communication links to have effective communication with marooned areas.
- Organizing controlled kitchens to supply foods initially at least for 3 days.
- Organizing cattle camps, if necessary and provide veterinary care, fodder and cattle feed to the affected animals.
- Grant of emergency relief to all the affected people.
- Submission of daily reports and dissemination correct information through mass media to avoid rumors.
- Rehabilitation of homeless.
- Commencement of agricultural activities desolation, resowing.
- Repairs and reconstructions of infrastructural facilities such as roads, embankments, resettlement of flood prone areas.
- Health measures.
- Relief for economic reconstruction.

Functions of chief emergency coordinator (CEC) in case of floods

The following functions are delineated for the Chief Emergency Coordinator. He will take various emergency decisions by convening the immediate meeting/conferencing of Emergency Planning, Group together they are responsible for the following.

- 1) Formulation and implementation of the plan.
- 2) Guidance/decision on matters of basic policy.
- 3) Activation of the emergency control center and convening the emergency meeting.
- 4) Declaring the emergency zones with the help of technical personnel and experts.
- 5) Control on emergency operations.
- 6) Review of operational preparedness of emergency machinery.
- 7) Holding periodic mock/training exercises to ensure optimum preparedness at operational level.
- 8) Development and updating hazard scenarios and cascading effects from time to time.
- 9) Mobilizing organizations, financial and human resources for the plan.
- 10) Liaison with external/Govt. agencies and assessment of whether any public assistance is required.
- 11) Furnishing information on the incident to District, State and National Level authorities and if needed competent bodies may be called for assistance.
- 12) Liaison with press/media, to report the emergency.
- 13) Declaring rehabilitation centers in case of evacuation if called for

14) Monitoring post emergency situation in terms of health care, first aid, habilitation etc.,

15) Declare all clear, once everything is normal.

The emergency control centre consists of the following;

- 1) At least two external telephones (one incoming and the others one out going fitted with simultaneous/selective boards casting systems) with a PABX.
- 2) Wireless/Radio equipment (VHF/mobile).
- 3) Inundation/vulnerability maps indicating risk zones, assembly points, alternate evacuation routes, safe areas, rehabilitation centers etc.,
- 4) Telephone directory of emergency response system.
- 5) List of all emergency equipment and personnel for evacuation, personnel protection, medical aid etc., under the plan as well as with Government agencies in the district.
- 6) List of ambulances, base medical facilities, hospitals, rehabilitation centers etc.,
- 7) Reference books/chemical dossiers.
- 8) Copies of Disaster Management Plan.

Input subsidy provided to formers during Flood through Parihara

During August 2019 kopapal and Gangavati declared as flood affected talukas in Koppal District and provided input subsidy to formers for croploss due to flood

1. Khariff Flood August 2019-20

Khariff Flood 2019-20 Croploss Data Entry Progress Report as on 20.11.2019

Koppal Khariff Flood 2019-20 Parihara Data Entry as on 18.11.2019						
S.No	Taluk Name	Partial Entries	VA Pending Entries	VA Verified And Approved Entries	Operator Deleted Entries	Total Entries
1	Gangavati	0	0	95	33	128
2	Karatagi	9	0	77	14	100
3	Koppal	0	0	26	11	37
	Koppal Total	9	0	198	58	265

Khariff Flood August 2019-20 Croploss Extent Covered as on 20.11.2019

S.No	Taluk Name	Memorandum Total Crop Loss Area(Ha)	Parihara Total Crop Loss Area(Ha)	Percentage of Completion
1	Koppal	17.29	10	57.84
2	Karatagi	119.8	75	62.60
3	Gangavati			
	Total	137.09	85	62.00

Khariff August Flood 2019-20 Payment Details Total as on 18.11.2019

Total Beneficiaries	Total Payment	Date as on
177	1774648	18.11.2019

Details of House Damaged during August-2019 Flood

S.No	Taluka	Fully damaged houses (75 above)	Severely damaged houses (75% to 26%)	Partially damaged houses (25%-15%)	Total
		“A” Category	“B” Category	“C” Category	
	Gangavati	0	0	0	0
	Koppal	0	0	3	3
	Total	0	0	3	3

Payment details of House Damage and drinking water during August-2019 Flood

Paid Amount by PD Account	Amount	Total Paid
“C” Category Houses	25,000	1,00,000
Total 150 Houses for Utensils	10000	1500000
Amount release by RGRHCL (2Houses)	25,000	50,000
20 Lakhs for drinking water works action plan approved	2000000	00.00
Grand Total		1650000

Flood September & October 2019

During September and October 2019 Flood Gangavati declared as flood affected talukas in the month of September. The losses occurred in Gangavati taluka is as follows

Croploss during Flood September and October 2019

S.No	Nsme of Taluka	Agriculture croploss	Horticulture croploss
1	Koppal	27.04	280
2	Gangavati	32.05	0.00
3	Karatagi		0.00
4	Kanakagiri		17.00
32.055	Kushtagi	20.76	18.90
6	Yelburga	0.00	56.80
7	Kukanoor	0.00	215
	Total	79.85	587.70

House damage during Flood September and October 2019

S.No	Name of Taluka	Total Houses damaged	Payment
1	Koppal	192	All Houses paid as per SDRF and NDRF norms as on 21.11.2019
2	Gangavati	81	
3	Khustagi	477	
4	Kanakagiri	101	
5	Karatagi	22	
6	Kukanoor	169	
7	Yelburga	336	
	Total	1378	

Human Loss during Flood September and October 2019

S.No	Duration	Taluka	No of Human Death	Payment in Lakhs	Note
1	September	Koppal	3	15.00	House damage
2	October	Kushtagi	1	5.00	River
3	October	Karatagi	1	5.00	House damage
	Total		5	25.00	

Animal loss during Flood September and October 2019

S.No	Duration	Taluka	Animal Death	Payment in Lakhs
2	October	Kukanoor	6 (Goats)	0.18

Infrastructure damage

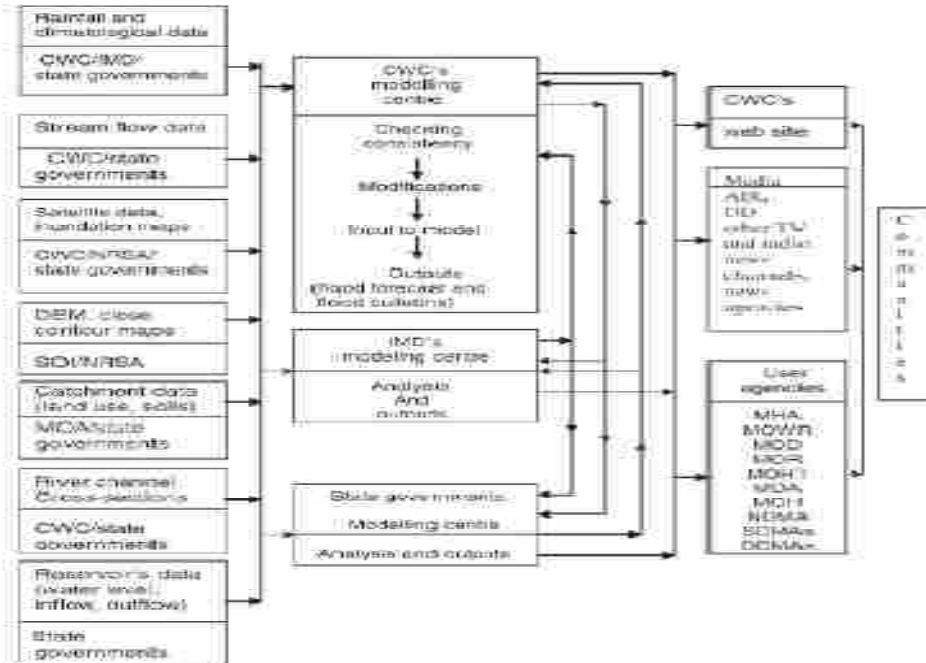
Roads and Culverts damages during Flood September and October 2019

S.No	Name of Taluka	CD Repair	Road Repair	Kilometer	Amount
1	Gangavati	-	2	2.20	8.00
2	Yelburga	-	-	3.50	7.50
3	Kushtagi	6	11	32.2	178.00
4	Koppal	1	8	20.0	48.00
Total		7	21	57.9	241.50

Koppal Electrical Infrastructure damage due to Flood September and October 2019

S.No	Name of Taluka	Poles		Transformers		Lines		Total Estimated Cost
		No of Poles	As per SDRF	No of Transformers	As per SDRF	Lines KMS	As per SDRF	
1	Gangavati	19	0.76	20	20.00	0.00	0.00	20.76
2	Kanakagiri	0	0.00	5	5.00	0.00	0.00	5.00
3	Karatagi	20	0.80	26	26.00	0.00	0.00	26.80
4	Kushtagi	51	2.04	36	36.00	1.00	0.50	38.54
	Total	90	3.60	87	87.00	1.00	0.50	91.10

Flowchart for Flood Forecasting and Early Warning



Fire Accidents:

The major portion of Koppal district is covered with forest which is susceptible to a fire hazard during summer and has a potential to inflict effects which are devastating. In addition, there are mines and two major hazardous industries in the district which are prone to fire accidents.

CHAPTER-7

RECOVERY AND RECONSTRUCTION PLAN

The biggest challenge thrown to the district administration after any disaster is recovery and rehabilitation. This has an array of activities like assessment of damage, construction of houses, provision for food, clothe, fodder, medical care, preventing the spread of contagious diseases, repair of damaged roads, bridges, culverts, dams, schools, hospitals, restoration of communication links, psycho-social counseling of survivors and economic support from the govt. , NGO's etc. District level functionaries have been identified to carry out these tasks in a rapid manner and their exact roles are defined.

Synopsis of recovery and rehabilitation: -

Post Disaster Activities	Officials involved
Assessment of damages and preparation of comprehensive damage report.	CDC, Revenue, Management, KSPCB
FIRE the disaster, the damages and the death cases.	Police
Maintenance of Law and Order.	Police
Emergency cleaning of debris to enable reconnaissance.	Management, Fire Service, Police
Deployment of earth moving vehicles, cranes.	RTO
Temporary supply of food and drinking water and medicines to the shelter.	Corporation, Health, Revenue
Arrangement of shelter for animals and other requirements.	Veterinary
Providing of temporary lighting facilities to the shelters and the disaster area.	KPTCL
Deployment of Home guards and constables to maintain law and order.	Police, Dy. Commandant, Home guards
Encouraging NGOs to carry restoration and reconstruction works.	Revenue
Supervising all the activities	CDC
Collection of progress reports and furnishing report to the Government.	CDC

Damage Evaluation:

Damage to public, Private properties, crops and other vital infrastructures /installations are assessed by the respective department officials at taluka level, is compiled by the tahsildar, scrutinized by the assistant commissioner of the area. DDMA priorities the relief and rehabilitation works to be taken up immediately by keeping in view of availability of resources.

Damage	Evaluating Authority
Human Lives and Injuries	THO/MO Asst.director, animal husbandry & Veterinary services Tahsildar & AEE, PWD.
Loss of Animals and Livestock	THO/MO Asst.director, animal husbandry & Veterinary services Tahsildar & AEE, PWD.
Damages to dwelling houses, public	AEE-PWD, ZP, DUDC&irrigation dept.

buildings	
Crops	ADA, SADH, AD sericulture
Power lines	AEE-KPTCL, CHESCOM
Communication lines	BSNL
Railway lines	Railway engg. Dept.

Assessment of crop damage:

District Agriculture Officer such as Joint Director or Deputy Director or Assistant Director will have to undertake immediate survey of the damages as outlined below;

- a. Area covered under different crops.
- b. Approximate extent of crop damage
- c. Soil reclamation requirements.
- d. Cropping pattern, Rabi or Khariff.
- e. Requirements of seeds, seedlings, fertilizers, pesticides, etc., to be assessed.
- f. It is to be examined if seeds/seedlings can be supplied to the affected cultivators at subsidized rates.
- g. Availability of seeds/seedlings etc. to be assessed and requirement of pump sets to be evaluated.
- h. Assessment of need, availability and additional requirement of funds.

Municipal authorities, Gram Panchayath, Town Panchayath Officials were asked to keep an eye view of buildings and to take precaution care of such weak buildings, to keep up the bad drainage works repaired and to identify the risk oriented infrastructure. All the PWD, PRED officers were asked to be in the red alert.

Rehabilitation of earthquake victims

The first and foremost requirement consequent upon the earthquake would be an alternate shelter that is capable of withstanding the next tremor. District Administration has taken steps along with the public works department to ensure that any new constructions that are taken up are capable of withstanding quakes according to requirement. Wherever possible old and dilapidated buildings are subjected to inspection by the Public Works Department and necessary reinforcements provided. Road and Rail network to be kept watch to ensure that people do not panic and desert their dwellings.

Control rooms with wireless, transportation and adequate food supplies to be set up at places affected by tremors to keep in constant touch with the District Administration.

First Aid and Medical facilities to be provided on war footing. Services of Jawans, NCC cadets, Scouts and Guides and other voluntary organization like Lions club, Rotarians to be sought.

Storage of food

All the Gram Panchayat offices are being used as storage points when need arises. Secretaries of Gram Panchayats and Asst. Directors and Deputy Directors are the contact persons. Adequate quantity rice/Johor has been kept for distribution to the victims in the god owns. These locations could also be used as storage points for medicines, blankets etc.

Supply of Fodder

Fodder of at least 1 kg/animal per day up to maximum of 3 days will be stocked and provided. The Revenue and Veterinary officers will be in charge

Post Disaster Measures

- 1) Damage assessment by the respective officers.
- 2) Immediate restoration of infrastructure facilities.
- 3) It is to be examined if labor intensive works are required be undertaken to provide labor in the affected pockets.
- 4) Disposal of carcasses to be immediately taken up to prevent epidemics by the Deputy Director/AD of Veterinary Department.
- 5) DHO will take immediate steps for disinfections of drinking water sources.
- 6) Supplying potable water will be taken up by the Local Bodies.

Rehabilitation.

House damage in the wake of major disaster in the rural areas presents a serious problem. As these houses are generally mud built with thatched roof, the worst sufferers are the economically backward people who normally reside in vulnerable prone areas of these villages. Rehabilitations schemes are undertaken to provide housing to as many people as possible after a devastating disasters. Such houses are either to be located on the land allotted by the government or in their own safe land.

- Taluk Panchayat Officer and Engineers could visit the sites suitable for housing purposes in a village during normal times and if the people living in vulnerable prone areas are willing to shift to new sites. They can obtain their willingness in writing and furnish such lists to the AC/DC.
- The house shall be built according to the requirement of beneficiaries and their pattern of living subject to financial limitation. The people must involve themselves in the housing programme.
- For this purpose, facilities available under Ashraya, Indira Awaas Yojana schemes etc., should be availed of.

STANDARD OPERATING PROCEDURES AND CHECKLISTS: -

Information team is kept on high alert in Deputy Commissioner's office to assist all around 24 hours. Search and rescue teams, Emergency Health Management Team, Relief Team (food, feed, fodder and civil supplies), transportation management Team, etc., have been formed and headed by the efficient officers as per the evaluation of situation. Nodal Officers have been authorized to release the funds to the victims at their level only, to save time, assess the needy and to overcome the situation. This process has given courage and leadership to the officers to face the situation at their work spot only. Periodical meetings to be held to assess the situation and to keep on high alert. This has also been clarified to the nodal officers to bring it to the knowledge of DDMA, the planned rescue operations they have conducted and to mitigate effectively. Media and information officers were in touch with the DDMA to highlight the various information from public to DDMA and from national and international organizations, plans were also sought to assess the situation.

CHAPTER-8

STANDARD OPERATING PROCERES (SOPs)

In order to effectively respond to a disaster, it is imperative to have a clear definition of roles & responsibilities as well as well defined operating procedures for all the organizations & officers involved. Such Standard Operating Procedures (SOPs) should be well understood and promptly followed to ensure effective execution of disaster management activities.

Functions of Assistant Commissioner

1. The Assistant Commissioner (AC) will be the overall in charge of Rescue shelter/Rallying post and parking yards.
2. The AC will ensure adequate food and clothing in co-ordination with Dy. Di- rector, Food and Civil Supplies, Voluntary Organizations, Individual Persons as deemed necessary in his option.
3. The AC will also ensure proper medical aid (first aid as well as shifting of affected persons to hospitals, etc) in co-ordination with District Health Officer and District Drug Controller.
4. The AC will ensure adequate security and safety in co-ordination with SP (Law & Order), Koppal and Dy. SP, Koppal as the case may be.

In addition t o these responsibilities, t h e AC will assist the CEC in all other matters as the case may be.

Functions of Revenue Authorities

1. Activating of various NGOs/Voluntary Organizations for necessary materials.
2. Providing adequate compensation to loss of life and property.
3. Declaration of all clear signals.

Functions of Tahsildars

1. He will look after all the facilities required at rescue shelter/rallying post like food, clothing, medical aid, water, electricity, sanitation and other basic necessities in co-ordination with respective Government Agencies, as well as voluntary organizations.
2. He will manage and arrange for any other requirements on need basic at that point of time in co-ordination with respective government authorities.
3. He will alert all his sub ordinates and utilize their services to manage the rescue shelter/rallying post.
4. His actions will be in concurrence from AC/DC.

Functions of Police Services

The main function of police authorities are,

- To maintain law and order
- Regular patrolling of affected areas

- Establishes rescue/safe routes in advance for timely response
- Cordoning off the area
- Control of traffic
- Shifting of all vehicles to the parking yards
- To render assistance in controlling and fighting disasters, salvage operations, rendering first aid and medical help
- Shifting of the affected to rallying posts/rescue shelters
- Another important function would be identification of the deceased, informing their relative, removal and disposal of dead bodies
- Finally, preparing the list of missing persons and take steps to trace them

The police authorities will also work with NGOs and other service organizations when needed.

Functions of Circle Inspector (Law and Order) For city limits

1. The office will be overall in charge of the functions of Police Department in case of offsite emergency. He will receive the communication and instructions from CEC from time to time.
2. On receiving the information about the emergency from CEC, the officer will rush to the incident spot and oversee law and order, organize for additional requirement of men and Home Guards if required.
3. Receive information from the site in charge and divisional fire officer or his deputy available at site for appropriate and necessary rescue operation.
4. Arrange for necessary transportation of vehicles in co-ordination with RTO and in charge of parking yard for evacuation of people as well as critical cases.
5. Ensure that adequate numbers of vehicle are provided, fitted with public address system and wireless to the convoy team.
6. Arrange for necessary ambulance/medical facilities in co-ordination with District Health Officer/Deputy Director, Animal Husbandry for evacuation of people and livestock respectively.
7. In confirmation with CEC, arrange for removal of dead bodies (if any) and will pass on the information to the relatives of the decease and will ensure disposal of dead bodies after conducting postmortem in co-ordination with DHO.
8. Arrange for maintaining law and order at the site of emergency, rescue shelter parking yards, main roads leading to emergency site, etc., pass on the information to the CEC about actions on various fields.

Functions of Industry Inspector

1. The officer will receive information from the SP or in charge of factory and immediately rush to the site along with maximum possible personnel. He shall help fire-fighting personnel in rescue operations.
2. In view of close proximity of police station to the industrial area, take immediate control of the site and rescue operation in co-ordination with site in charge.

3. Alert all the subordinate officers coming under his jurisdiction and ensure their availability at the site of emergency to maintain Law & Order, traffic, rescue, salvaging etc., till such time the full emergency operation comes into action.
4. Ensure that the information is passed on to the superior officers and necessary instructions are received and adhered to.
5. Ensure that all the anti social elements are identified and rounded off if required.

Functions of Police Inspector

1. The officer will receive information from SP, Koppal.
2. He will immediately rush to the site of incident and conduct on the spot inspection. Obtain first hand information.
3. Ensure that information is passed on to the superior officers and necessary instruction are received and adhered to.
4. Convey the message on the extent of leakage, extent of area affected, the ground situation, the scenario prevailing in and around the water works.
5. Ensure that, he himself and his personnel are equipped with necessary personal protective equipment. The recommended PPE are cartridge type respirators for short term exposure and the pressurized airline respirators for long term exposure.
6. Take immediate steps to inform the traffic police.
7. Alert all the sub ordinate officers and ensure their availability at the site of emergency to maintain law and order, traffic, rescue, salvaging, etc. Till such time, the full emergency operation comes into action.
8. Ensure that all the anti-social elements are identified and rounded up, if required

Function of Inspector (Traffic)

1. The SP, Traffic will be the overall in charge of traffic management who is assisted by Dy. SP, Traffic in case of offsite emergency.
2. Receive the communication of offsite emergency from CEC and disseminate the information to all the functionaries and mobilize required force and put them into action for managing various traffic points, routes, etc.
3. For each industry, separate routes are identified as normal route and emergency route.
4. Mobilize necessary police personnel/vehicles to man and control traffic on various roads identified as safe routes and also take measures to divert normal traffic away from the emergency routes identified.
5. Ensure available of adequate number of vehicles fitted with public address system/wireless etc. and directly supervise manning of routes and parking yards..3
6. Initiate action to ensure adequate number of skilled drivers in consultation with RTO, KSRTC, Home guards and Truckers Association etc.

7. The SP will initiate action on his own only under exceptional circumstances; however, his action shall be communicated to his superiors and should be confirmed with CEC.
8. Any other action as deemed necessary base on the circumstances.

Functions of Fire Services

1. The Regional Fire Office is located at Koppal.
2. The Regional Fire Officer and the Divisional Fire Officer are responsible to fight and control the fire, leakage, spillage, etc., with proper instructions and guidance.
3. Rush to the site of emergency immediate after the receipt of information from the site Controller or on emergency call.
4. Establish safe routes in advance for rushing to site and ensure best response time to minimize damage.
5. Workout advance plan for requirement of resources like fire tenders, trained personnel, protective equipment and the ways to meet extra requirements if any.
6. Assist the onsite emergency personnel in fighting emergency, rescuing injured/ affected people trapped in dangerous zones and participate in salvage operation.
7. Assist medical/police personnel in imparting first aid.
8. Ensure availability of adequate water supply through KIADB authorities.
9. Maintain constant contact and communicate the message to the CEC with regard to the control measures undertaken, salvage operation, rescue methods, etc. And any other information required by the CEC on continuous basic.
10. Take any other appropriate actions as deemed necessary in control of emergency.

Functions of Police Inspector/Sub Inspector

They will receive orders from the DSP and act accordingly the Police Inspector will assume the charge of DSP in the absence of the DSP till such time the superior officer arrives at the place of accident and takes control then onwards, he will continue to receive the orders from the superior officers and act accordingly.

Functions of Police (Traffic)

1. The officer will be overall in charge of parking yard and for managing, controlling and arranging sufficient number of vehicles.
2. Ensure that adequate number of trucks, buses and other mode of transport vehicles are arranged for rescue operation in co-ordination with RTO.
3. Ensure that adequate communication vehicles are arranged in coordination with various police authorities.
4. Motor Vehicle Inspector from RTO department will be assisting Inspector of Police (Traffic) in managing parking yards.
5. Assist the DSP, Police Inspector - Traffic in mobilizing adequate number of skilled drivers in consultation with RTO, KSRTC, Truckers Associations and Home guards etc., as the case may be.

Functions of Fire Station Officer

The Fire Station can cater to the immediate need of the plant, but certainly not adequate to manage the emergency assumed in this document. Therefore,

1. On receipt of fire call, rush to the site of incident with all crewmembers and equipment and start fighting the fire.
2. Immediately send distress call to all other fire stations for additional reinforcement. Contacts the Divisional Fire Officer and informs him about the severity of the fire, the kind of assistance required, etc.
3. Continue to receive the necessary information from his superior officers and the DSP and adhere to the instructions.
4. Assist the police, Home guards and other Rescue Team the rescue evacuation of persons, salvage, etc.
5. Continue to be in action till such times the divisional fire officer or his deputy arrives at the place of incident and takes charge. From there onwards, he will continue to assist the officials.

Function of Health and Medical Services

1. District Health Officer (DHO) will be overall in charge of health and medical services to be rendered at the site of emergency or at various rescue shelters, affected places, hospitals, pathology laboratories, etc.
2. On receiving the information from CED, he will contact all Hospital Superintendents, Drug Controller, Blood Banks for mobilization of required ambulances, Doctors, Nurses, Medicines, life saving drugs, blood,* etc.
3. Rush to the site, assess the extent of severity and establish adequate (Temporary Medical Centre). Ensure hygienic conditions at the rescue shelters cum rallying posts, temporary medical centers. Take appropriate action in shifting affected persons to proper hospitals in Koppal and provide appropriate treatment.
4. Arrange for removal of dead bodies, if any, after post-mortem and disposal of the same, in consultation with CEC and DCP.
5. Render advice to CEC on precautionary measures to be taken by public in affected sites/villages, rescue shelter cum rallying posts to prevent the outbreak of epidemic diseases.
6. If necessary, he should undergo training to handle the wireless apparatus for effective communications.

Functions of Veterinary Service:

1. Deputy Director of Animal Husbandry will be the overall in charge for treatment of affected animals at site/hospital in co-ordination with police/voluntary organizations and revenue authorities.
2. On receiving information from CEC, he will rush to the site and activate the Temporary Medical Centre (TMC) at appropriate places in consultation with CEC.
3. Dy. Director will also co-ordinate with Assistant Commissioner, RTO, DCP, Inspector of Police (Traffic), for arranging necessary vehicles for shifting of animals, if required.
4. The officer will be provided with one Police Officer with adequate number of Police Personnel and Home guards to ensure the orderly treatment and management of the Temporary Medical Center.

5. The officer will identify the drug stores and ensure the supply of adequate and necessary drugs through the Drug Control Authorities.

Functions of RTO

1. The RTO will be the overall in charge for providing number of rescue vehicles like trucks, buses, cars or any other type of transportation vehicles to emergency site, rescue shelter cum rallying post etc., for transportation of human beings as well as animals.
2. Receive information from CEC and act accordingly.
3. Mobilize all possible resources is arranging transportation vehicles in coordination with KSRTC, Truckers Association, Travel Agencies, etc, also ensure availability of adequate number of skilled drivers and advise the Inspector (Traffic).
4. Workout the requirement of heavy earth moving equipment like cranes etc., and mobilizes the same in coordination with such agencies/parties.
5. Depute adequate numbers of Motor Vehicle Inspectors for assisting Inspector of Police, Traffic (in charge of parking yard), and Rescue Shelter cum rallying post, at the site of emergency.

Functions of Karnataka State Pollution Control Board

1. On receiving information from CEC, the Environmental Officer will mobilize all possible resources at his disposal and keep the laboratory functioning for analysis of pollutants, emissions, etc.
2. Rush to the site, collect the samples, analyze the pollutants and the likely effect on human life/environment and inform the CEC about the same and the corrective actions to be taken to prevent further damage.
3. Act as an expert and advice the CEC about the kind of message to be disseminated to the public and press, etc, on pollution matters.

Function of Experts of District Crisis Group (DCG)

1. All the member of the DCG will be communicated about the emergency.
2. On receipt of emergency communication, they will immediately inform the control room about the place of their availability and simultaneously report to the CEC.
3. They will receive necessary instructions from the CEC and act accordingly.
4. They will render adequate and timely technical guidance and assist CEC and other agencies involved in the control of emergency.

CHAPTER-9

EQUIPMENTS AND RESOURCE AVAILABLE IN KOPPAL DISTRICT

Details of water Sources in Fire and Emergency Services

Resource Function	Source	Motor to Pump Water	Capacity	Collection point Motor able	Nearest Village
Fire Fighting	Boozer Tank	Electricity	16000	Motor able	Fire Station Koppal
Drinking Water	Tank	Electricity	30000	Motor able	CMC Water Supply
Fire & Emergency	Tank	Electricity	20000	Motor able	Fire Station Gangavati
Fire & Emergency	Water Tanker	Electricity	9000	Motor able	Fire Station Karatagi
Fire & Emergency	Water Tanker	Electricity	9000	Motor able	Fire Station Kushtagi
Fire & Emergency	Water Tanker	Electricity	9000	Motor able	Fire Station Kukanoor
Fire & Emergency	Water Tanker	Electricity	4500	Motor able	Fire Station Yelburga

Details of Equipments in Fire and Emergency Services

S.No	Item Name	Item Description	Unit/Quantity	Location	Mode of transport
1	Bolt Cutter	Cutting	03	Fire Station	Road
2	Axe	Cutting	12	Fire Station	Road
3	Inflatable Light	Lighting	08	Fire Station	Road
4	Generator	Power	04	Fire Station	Road
5	Lifebuoy	Water Rescue	55	Fire Station	Road
6	Life Jacket	Water Rescue	52	Fire Station	Road
7	BA Sets	Rescue	15	Fire Station	Road
8	BA Compressor	BA Cylinder	01	Fire Station	Road
9	Pump (pp)	Water	08	Fire Station	Road
10	Ladder	Rescue	15	Fire Station	Road
11	CoZ fire Extinguisher	First Aid	20	Fire Station	Road
12	Foam fire Extinguisher	First Aid	05	Fire Station	Road
13	DCP ire Extinguisher	First aid	10	Fire Station	Road
14	Fire Tenders	Fire Fight	15	Fire Station	Road

Details of Equipments in Department of Police

S.No	Item Name	Item Description	Unit/Quantity	Location	Mode of transport
1	Life Jacket	Water Rescue	06	Police	Road
2	Ropes	Any Disaster	01	Police	Road
3	Zeep	Any Disaster	03	Police	Road
4	Van	Any Disaster	03	Police	Road

Details of Equipments in Home Guard Department Koppal

S.No	Item Name	Item Description	Unit/Quantity	Location	Mode of transport
1	Mahindra Marshal Zeep	Diesel	01	Home Guard	Road
2	Swaraz Mazda Mini Bus	Diesel	01	Home Guard	Road
3	Alluminium Lader		06	Home Guard	Road
4	Life Jackets		10	Home Guard	Road
5	Life Boye (Rings)		04	Home Guard	Road
6	Structure		01	Home Guard	Road
7	PP ROPS 01 220 MTRS		01 BDL	Home Guard	Road
8	ROPS ½ 220 MTRS		01 BDL	Home Guard	Road

Number of Veterinary Hospitals in Koppal District

S. No	Taluka	District Polyclinic	Veterinary Hospital	Veterinary Dispens	Primary Wet.Cet	Mobile Dispens	Total
1	Koppal	01	03	13	01	01	19
2	Gangavati	00	07	12	02	01	22
3	Yelburga	00	04	16	01	01	22
4	Kushtagi	00	04	07	06	01	18
		01	18	48	10	04	81

Number of Industries in Koppal District

S.No	Taluka	No of Small Scale Industries	No of Medium Scale Industries	No of Large Scale Industries
1	Koppal	1160	05	22
2	Gangavati	2726	03	02
3	Kushtagi	1760	03	02
4	Yelburga	2287	00	00
Koppal District Total		7933	11	26

Source: District industrial Centre koppal

Taluka Wise No of Petrol Bunks in Koppal District

S.No	Taluka	No of Petrol Bunks
1	Gangavati	26
2	Koppal	25
3	Kushtagi	10
4	Yelburga	11
Koppal District Total		72

Details of JCB, Maxi Cabs and Tippers Available in Koppal District

Name of Vehicle	Registration Number	Owner Name	Current and Permanent Address	Fuel
Tipper	KA37B0663	MAHEBOOB SAB	Current Address D NO538 SHIVAPURA ROAD 3RD WARD,MUNIRABAD RS HULGI VILL,KOPPAL,Koppal,Karnataka,583234	DIESEL

			<u>Permanent Address</u> D NO538 SHIVAPURA ROAD 3RD WARD,MUNIRABAD RS HULGI VILL,KOPPAL,Koppal,Karnataka,583234	
Tipper	KA37B0670	SHANKRAPPA S/O HUNUMAPPA GUGINAMARI	<u>Current Address</u> HIREBOGANHAL,KOPPAL,,Koppal,Karnataka,583228 <u>Permanent Address</u> HIREBOGANHAL,KOPPAL,,Koppal,Karnataka,583228	DIESEL
Tipper	KA37B0679	GAVI CRANE AND JCB SERVICES	<u>Current Address</u> WARD NO 22 4-11-170/4-11-169,GUNDAMMA CAMP,TQ GANGAVATHI,Koppal,Karnataka,583227 <u>Permanent address</u> WARD NO 22 4-11-170/4-11-169,GUNDAMMA CAMP,TQ GANGAVATHI,Koppal,Karnataka,583227	DIESEL
Tipper	KA37B0755	KALLAYYA S/O VEERUPAKSHAYYA HIREMATHA	<u>Current Address</u> MANNAPUR,MALEKOP,,Koppal,Karnataka,583232 <u>Permanent Address</u> MANNAPUR,MALEKOP,,Koppal,Karnataka,583232	DIESEL
Maxi Cab	KA37B0762	SANTHOSH S/O SHYAMANNA UPPAL	<u>Current Address</u> 16/37 BEHIND SSV COLLEGE NAGAR,TAVARAGERE,TQ- KUSHTAGI,Koppal,Karnataka,583231 <u>Permanent Address</u> 16/37 BEHIND SSV COLLEGE NAGAR,TAVARAGERE,TQ- KUSHTAGI,Koppal,Karnataka,583231	DIESEL/ HYBRID
Maxi Cab	KA37B0808	KRISHNA S/O LAXMAPPA	<u>Current Address</u> WARD NO 02,RAMPUR,MALLAPUR GANGAVATHI,Koppal,Karnataka,583227 <u>Permanent Address</u> WARD NO 02,RAMPUR,MALLAPUR GANGAVATHI,Koppal,Karnataka,583227	DIESEL
Tipper	KA37B0840	HANUMESH M KADEMANI S/O MARIYAPPA KADEMANI	PWD CLASS 1 CONTRACTOR WARD NO 12,SAJJIHOLA STREET KOPPAL,TQ AND DIST KOPPAL,Koppal,Karnataka,583231 <u>Permanent Address</u> PWD CLASS 1 CONTRACTOR WARD NO 12,SAJJIHOLA STREET KOPPAL,TQ AND DIST KOPPAL,Koppal,Karnataka,583231	DIESEL
Maxi Cab	KA37B0881	LINGAPPA S/O DURAGAPPA PUJARI	<u>Current Address</u> GADDI UDAMKAL,GANGAVATHI TALUK,KOPPAL DISTRICT,,Koppal,Karnataka,583235 <u>Permanent address</u> GADDI UDAMKAL,GANGAVATHI TALUK,KOPPAL DISTRICT,,Koppal,Karnataka,583235	DIESEL
Tipper	KA37B0915	M/S SAMARTH STONE CRUSHER	<u>Current address</u> SY NO 60/3, CHANNAPANAHALLI, YELBURGA,Koppal,Karnataka,583232 <u>Permanent address</u>	DIESEL

			SY NO-60/3, CHANNAPANAHALLI, YELBURGA,Koppal,Karnataka,583232	
Maxi Cab	KA37B0960	THIRUPATEPPA S/O RAMANNA	<u>Current Address</u> WARD-6, MALLIKARJUNA NAGARA,SIDDAPURA (VI),GANGAVATHI (TQ),Koppal,Karnataka,583282 <u>Permanent Address</u> WARD-6, MALLIKARJUNA NAGARA,SIDDAPURA (VI),GANGAVATHI (TQ),Koppal,Karnataka,583282	DIESEL
Tipper	KA37B1001	SHARANAGOUDA MALIPATIL S/O GURUPADA GOUDA	<u>Current Address</u> NO 73 , WARD NO 01 NEAR GUDDA,MAILAPUR GANGAVATHI,TQ GANGAVATHI DIST KOPPAL,Koppal,Karnataka,583227 <u>Permanent Address</u> NO 73 , WARD NO 01 NEAR GUDDA,MAILAPUR GANGAVATHI,TQ GANGAVATHI DIST KOPPAL,Koppal,Karnataka,583227	DIESEL
Tipper	KA37B1009	PRASHANTH S/O KUSHAL RAO SAVADAGAR	<u>Current Address</u> SANJAY NAGAR KUKANOOR,TQ YELBURGA,DIST KOPPAL,Koppal,Karnataka,583232 <u>Permanent Address</u> SANJAY NAGAR KUKANOOR,TQ YELBURGA,DIST KOPPAL,Koppal,Karnataka,583232	DIESEL
Tipper	KA37B1051	HANUMANTHAPPA L S/O LINGAPPA	<u>Current Address</u> WARD 03, SC ONI AT NAGANAKAL,BEVINAL TQ GANGAVATHI KOPPAL,,Koppal,Karnataka,583229 <u>Permanent Address</u> WARD 03, SC ONI AT NAGANAKAL,BEVINAL TQ GANGAVATHI KOPPAL,,Koppal,Karnataka,583229	DIESEL
Tipper	KA37B1088	KANAKAPPA	<u>Current Address</u> KANAKAPURA,KANAKAGIRI,TQ GANGAVATHI,Koppal,Karnataka,583227 <u>Permanent Address</u> KANAKAPURA,KANAKAGIRI,TQ GANGAVATHI,Koppal,Karnataka,583227	DIESEL
Tipper	KA37B1106	MANJAPPA S MUDDABALLI S/O SHANKRAPPA MUDDABALLI	<u>Current Address</u> HANWAL TQ & DIST,KOPPALA, Koppal, Karnataka,583238 <u>Permanent Address</u> HANWAL TQ & DIST,KOPPALA,,Koppal,Karnataka,583238	DIESEL
Tipper	KA37B1247	SANGAPPA TIPPANNA PAWAR S/O TIPPANNA PAWAR	<u>Current Address</u> WARD NO 06 NEAR SEVALAL TEMPLE,HOOLAGERI,HANAMASAGAR TQ KUSHTAGI,Koppal,Karnataka,584121 <u>Permanent Address</u> WARD NO 06 NEAR SEVALAL TEMPLE,HOOLAGERI,HANAMASAGAR TQ KUSHTAGI,Koppal,Karnataka,584121	DIESEL
Tipper	KA37B1254	TUKARAMA LOKAPPA S/O LOKAPPA	<u>Current Address</u> H.NO.100/2, W.NO.1,,VENKATAPUR,,TALUK- KUSHTAGI,Koppal,Karnataka,583281	DIESEL

			<u>Permanent Address</u> H.NO.100/2, W.NO.1,,VENKATAPUR,,TALUK-KUSHTAGI,Koppal,Karnataka,583281	
JCB	KA37N2735	AADHYA ENGINEERINGS	<u>Current Address</u> PROP:RAGHAVENDRA MANSALI,NO.1-6-75/,1-4-23, WARD NO.03,DAILY MARKET RD,,VALMIKI CIRCLE, BENDRA ONI,,Koppal,Karnataka,583227 <u>Permanent Address</u> PROP:RAGHAVENDRA MANSALI,NO.1-6-75/,1-4-23, WARD NO.03,DAILY MARKET RD,,VALMIKI CIRCLE, BENDRA ONI,,Koppal,Karnataka,583227	DIESEL
JCB	KA37N2919	BASAVARAJ R	<u>Current Address</u> WARD NO4 SIDDAPURA GANGAVATHI,KOPPAL,,Koppal,Karnataka,584130 <u>Permanent Address</u> WARD NO4 SIDDAPURA GANGAVATHI,KOPPAL,,Koppal,Karnataka,584130	DIESEL
JCB	KA37N2956	SHIVAPUTRAPPA DEVAR S/O SANGAPPA	<u>Current Address</u> NO37 RAGHAVENDRA COLONY YELBURGA,KOPPAL,,Koppal,Karnataka,583236 <u>Permanent Address</u> NO37 RAGHAVENDRA COLONY YELBURGA,KOPPAL,,Koppal,Karnataka,583236	DIESEL
JCB	KA37N3041	GURAPPA S/O GURAPPA	<u>Current Address</u> 118N 2ND WARD NAGANAKAL BEVINHAL,GANGAVATHI KOPPAL,,Koppal,Karnataka,583229 <u>Permanent Address</u> 118N 2ND WARD NAGANAKAL BEVINHAL,GANGAVATHI KOPPAL,,Koppal,Karnataka,583229	DIESEL
JCB	KA37N3046	ISHAPPA S/O PARAMESHAPPA HUNASIHAL	<u>Current Address</u> HIREWANKALKUNTA VANKALKUNTA,YALBURGA KOPPAL,,Koppal,Karnataka,583237 <u>Permanent Address</u> HIREWANKALKUNTA VANKALKUNTA,YALBURGA KOPPAL,,Koppal,Karnataka,583237	DIESEL
JCB	KA37N3081	PARASAPPA G	<u>Current Address</u> TENGUNTI GUMGERA KUSTAGI,KOPPAL,,Koppal,Karnataka,583277 <u>Permanent Address</u> TENGUNTI GUMGERA KUSTAGI,KOPPAL,,Koppal,Karnataka,583277	DIESEL
Tipper (NT)	KA37N3173	SHRI MALLIKARJUN KAIGARUKE	<u>Current Address</u> # 121, RANGAPUR CROSS,HANAMANAL POST,KUSHTAGI TALUK,Koppal,Karnataka,583280 <u>Permanent Address</u> # 121, RANGAPUR CROSS,HANAMANAL POST,KUSHTAGI TALUK,Koppal,Karnataka,583280	DIESEL

Teacher and Students Ratio in Schools in Koppal district

Taluka	Lower Primary			Higher Primary			High School		
	Teacher	Student	Ratio	Teacher	Student	Ratio	Teacher	Student	Ratio
Gangavathi	337	8819	26.17	900	35880	39.87	315	13575	43.1
Koppal	187	4373	23.39	1129	35478	31.42	326	10260	31.5
Kustagi	198	5354	27.04	876	34323	39.18	277	10678	38.5
Yelburga	168	5041	30.01	819	29104	35.54	315	11276	35.8
District Total	890	23587	26.50	3724	134785	36.19	1233	45789	37.1

Block wise – Management wise Number of Lower Primary Schools (LPS)

Sl. No.	Block Name	Government Schools				Aided Schools	Un-Aided Schools	Other Management Schools	Central Schools	Total Schools
		DoE	Social Welfare	Local Body	TOTAL					
1	GANGAVATHI	158	2	0	160	0	57	0	0	217
2	KOPPAL	78	0	0	78	1	39	0	0	118
3	KUSTAGI	85	1	0	86	0	28	0	0	114
4	YELBURGA	68	1	0	69	1	25	0	0	95
TOTAL		389	4	0	393	2	149	0	0	544

Source: STS 2016-17

Block/Management Wise No of Upper Primary Schools

Sl. No.	Block Name	Government Schools				Aided Schools	Un-Aided Schools	Other Management Schools	Central Schools	Total Schools
		DoE	Social Welfare	Local Body	TOTAL					
1	GANGAVATHI	156	7	0	163	13	62	0	0	238
2	KOPPAL	154	5	0	159	5	49	0	0	213
3	KUSTAGI	136	3	0	139	5	15	0	0	159
4	YELBURGA	127	9	0	136	3	29	0	1	169
TOTAL		573	24	0	597	26	155	0	1	779

Source: STS 2016-17

Block/Management Wise No of Elementary (LPS+HPS) Schools

Sl. No.	Block Name	Government Schools				Aided Schools	Un-Aided Schools	Other Management Schools	Central Schools	Total Schools
		DoE	Social Welfare	Local Body	TOTAL					
1	GANGAVATHI	314	9	0	323	13	119	0	0	455
2	KOPPAL	232	5	0	237	6	88	0	0	331
3	KUSTAGI	221	4	0	225	5	43	0	0	273
4	YELBURGA	195	10	0	205	4	54	0	1	264
TOTAL		962	28	0	990	28	304	0	1	1323

Source: STS 2016-17

2 - Block wise / Management wise High Schools in the District

Sl. No.	Block Name	Government Schools				Aided Schools	Un-Aided Schools	Other Management Schools	Central Schools	Total Schools
		DoE	Social Welfare	Local Body	TOTAL					
1	GANGAVATHI	45	7	0	52	9	46	0	0	107
2	KOPPAL	34	7	0	41	9	30	0	0	80
3	KUSTAGI	34	3	0	37	5	13	0	0	55
4	YELBURGA	42	10	0	52	8	11	0	1	72
TOTAL		155	27	0	182	31	100	0	1	314

Source: STS 2016-17

CHAPTER-10

CONTACT NUMBERS

Important Departments and Officers Involved in Disaster Management

S.NO	Designation of the Officer	Landline	Mobile
1	Sunil, Commissioner City Municipal Council, Koppal	230192 230280	9900910701
	Raghunandan Murthy CEO ZP Kopal	220002	9480871000
	Sangeeta G SP Koppal	230111, 230800	9480803701
2	Yashpal Sing , DFO Koppal	220021	9482640527 9482063713
	MP Maruti ADC Koppal		9632370680
	C D Geeta AC Koppal	220247	9886660847
3	Shabana M Shek Joint Director Dept of agriculture Koppal	221633	8277932100
	Siddarameshwar PD DUDC Koppal	221895	9606729144
4	Basavaraj M S DDPI Koppal	221303	9448999346
5	B. Dhananjayappa Dist Info Officer (NEWS) Koppal	220607	8151047949 9480841217
6	M S Pattar Executive Engineer GESCOM Koppal Executive Engineer GESCOM Koppal	224510	9448359020
7	Thirumala Rao EE PWD Koppal	222318-222317	9380344693 9844509084
8	Rangayya Badiger EE PRED i/c	220845	9449447283
9	Krishnamurthi Statistical Officer KPL	221869	8762302963
10	D. Dayanand Dist Youth Coordinatior NYK Koppal		9902781815 7349031958
11	Basayya Sali DD Vetaranary KPL i/c	221408	7892285129 9449641224
12	Noor mohad RTO KPL	225023	9449864035 9739838199
13	K.M.Siddeshwar Faire Officer KPL	221300	7760671603
15	Dr. Rajakumar Yargal DHO Koppal	221660	9449843056 9480399463
16	Rajesh Nadiger AD Youth Service Koppal	201400	8197058425
17	B. Kallesh DSWO	220138	9480843039 9481099256
18	Baburao Lead Bank Manager	220976	9449460244
19	Rangayya Badiger EE RWSS		9449447283
20	Vinodkumar GuptaMainor Erigation EE i/C		9448577577
21	Erappa Ashapur BCM	221606	9731042063 9480200591
	N.K Turvi DS ZP KPL	220237-220217	9448710077
	Ombudsman ZP Office KPL	225048	9480871007
	Ravi Basarihalli PD ZP	221207	9480871002
	Krishna Ukkund.	231530	9448999237
	Korabu DD Land Army KPL		9449863091
	Shivashankar AEE KHB KPL	234565	9880191070
	Mohad Faiz DC NEKRTC KPL	222340	7760992400

Rawal Mines & Geology KPL	221285	9448763756
Manjunatha K Pollution Control Officer	222234	9845116169
Dr. Danareddy Dist. Surgeon	225066	9449843173
Ratimani DDP	222246	8904862775
Eranna Panchal, DDW&C i/c	222703	9591061005
Baurao Lead Bank Manager	220976	9449460244
Eranna DIO, NIC	222352	9448888114
Fax Number(DC office) KOPPAL	-	221235
Rajendrakumar DD, Sericulture KPL I/C	230170	9880664510
S.H Manjappa Supt, Eng, Munirabad	270026--270012	9964696492

1. Taskforce Committee, Kanakagiri

S.No	Name	Designation	Contact No
1	Shri. Basavaraj Dadesugur	Chairman Taskforce Committee MLA, Kanakagiri.	9482411666
2	Shri. Ravi.S Angadi	Member Secretary & Tahasildar, Kanakagiri	9449294410
3	Shri. Mohan	Member, Executive Officer TP, Gangavati	9538373948
4	Shri Chidanada	Member, Ececutive Engineer, RWSS Sub-Division, Gangavati	9902335960

2. Taskforce Committee, Karatagi

S.No	Name	Designation	Contact No
1	Shri. Basavaraj Dadesugur	Chairman Taskforce Committee MLA, Kanakagiri	9482411666
2	Smt. Kavita.R	Member Secretary & Tahasildar, Karatagi.	8904242184
3	Shri. Mohan	Member, Executive Officer TP, Gangavati	9538373948
4	Shri Chidananda	Member, Ececutive Engineer, RWSS Sub-Division, Gangavati	9902335960

3. Taskforce Committee, Kustagi

S.No	Name	Designation	Contact No
1	Shri. Amaregowda.L Patil Bayyapur	Chairman Taskforce Committee MLA, Kustagi	9448147099
2	Shri. Siddesh M	Member Secretary & Tahasildar, Kustagi	9741185772
3	Shri. K.Thimmappa	Member, Executive Officer TP, Kustagi	9480871110
4	Shri. S.D.Nagoda	Member, Assistant Ececutive Engineer, RWSS Sub-Division, Kustagi	7022196546

4. Taskforce Committee, Gangavati

S.No	Name	Designation	Contact No
1	Shri. Paranna Manavalli	Chairman Taskforce Committee MLA, Gangavati	9448131282
2	Shri. Chandrakant	Member Secretary & Tahasildar, Gangavati	9900595503
3	Shri. Mohan	Member, Executive Officer TP, Gangavati	9538373948
4	Shri Chidananda	Member, Ececutive Engineer, RWSS Sub-Division, Gangavati	9902335960

5. Taskforce Committee, Kukanur

S.No	Name	Designation	Contact No
1	Shri. Halappa Bassappa Achar	Chairman Taskforce Committee MLA, Yelburga.	9901633996
2	Shrishailla Talwar	Member Secretary & Tahasildar, Kukanur.	9482831330
3	Shri.Linganagowda	Member, Executive Officer TP, Yelburga.	9945644338
4	Shri Tirukanagowda	Member, Assistant Ececutive Engineer, RWSS Sub-Division, Yelburga.	9538167267

6. Taskforce Committee, Yelburga

S.No	Name	Designation	Contact No
1	Shri. Halappa Bassappa Achar	Chairman Taskforce Committee MLA, Yelburga.	9901633996
2	Shri. Shrishailla Talwar	Member Secretary & Tahasildar, Yelburga..	9482831330
3	Shri Linganagowda	Member, Executive Officer TP, Yelburga.	9945644338
4	Shri Tirukanagowda	Member, Assistant Ececutive Engineer, RWSS Sub-Division, Yelburga.	9538167267

7. Taskforce Committee, Koppal

S.No	Name	Designation	Contact No
1	Shri. K.Raghavendra Itnal	Chairman Taskforce Committee MLA, Koppal	9901633996
2	G B Majjigi	Member Secretary & Tahasildar, Koppal	9538242567
3	Shri T Venkobappa	Member, Executive Officer TP, Koppal.	9480871115
4	Shri N Bharat Kumar	Member, Assistant Ececutive Engineer, RWSS Sub-Division, Koppal.	8105118050

Contact Details of Fire and Emergency Department Koppal

S.No	Dist/Taluka	Name of the Officer	Designation	Contact Details	
				Landline	Mobile
1	Koppal	KM Siddeshwar	Dist Fire Officer	221300	9480823648 9886948237
2	Koppal	G Krishnoji	Fire Station Officer	221300	9480823892 7619433179
3	Gangavati	Khajamoinuddin	Fire Station Officer	271444	9480823893 9243994260
5	Kushtagi	Raju	ASFO	268101	9480823895 8197646258
6	Yelburga	K Janardhan Rao	AFSO	220101	9480823897 9742875484
7	Karatagi	Urakundappa	AFSO	274600	9480823896 6361773779
	Kukanoor	Sangappa	AFSO	230570	9480823894 7979847723

Koppal District Tahasildars Numbers

J.B Majjige	Tahsildar Koppal	220381	9620972112
Chandrakant	Tahsildar Gangavathi	08533-230929	9900595503
Siddesh M	Tahsildar Kustagi	08536-267031	9741185772
Shrishail Talwar	Tahsildar Yelburga	08534-220130	9482831330
Ravi S Angadi	Tahsildar Kanakagiri		9731493636
Kavita R	Tahsildar kartagi		8904242184
Shrishail Talwar i/C	Tahsildar Kukanoor		9482831330

Contact Details of City Municipal Commissioners and Municipalities Chief Officers

Manjunath	CMC Koppal	230192-230280	9742138927
Shanmukappa	CMC Gangavathi	08533-230243	9035802328
Ashok Patil	Chief officer Kushtagi	08536-267041	9945429875
Mahesh Nidasheshi	Chief officer Yelburga	08534-220138	9741377297
Shivalingappa	Chief officer Kartagi		9880342411
Smt M Thirumala	Chief officer Kanakagiri	08533-240224	9741377297
Sankanagouda	Chief officer Kukanoor		9606298948
Babu	Chief officer Bhagyanagar		9980208771
Shankar Kale	Chief officer Tavaragera		9341241838

Contact Details of Executive Officers of Taluka Panchayats in Koppal District

T Venkobappa	EO TP Koppal	220399	9480871115
Mohan	EO TP Gangavathi	08533-230230	9538373948
Linganagowda	EO Yelburga	08534-220136	9945644338
K Thimmappa	EO Kustagi	08536-267028	9480871110

Contact Details of Koppal District MLA's and MP's

Raghavendra Hitnal	MLA Koppal	9448366711	9620425101
Halappa Achar	MLA Yalburga		9901633996
Amregouda Bayyapur	MLA Kustagi		9448147099
Basavaraj Dadesur	MLA Kanakgiri		9482411666
Paranna Mnolli	MLA Gangavathi		9448131282
Karadi Sanganna	MP Koppal		9964246099

Contact Details of Government Hospitals in Koppal District

S.NO	Name of the Talika	Name of the Institution	Contact No
1	Koppal	CHC Hiresindhogi	9482594174
2	Koppal	CHC Munirabad	8095758840
3	Koppal	PHC Kavalur	
4	Koppal	PHC Alawandi	9902119776
5	Koppal	PHC Kinnal	9686385285
6	Koppal	PHC Irakallgada	7220454426
7	Koppal	PHC Hitnal	8095758840
8	Koppal	PHC Betageri	9164135799
9	Koppal	PHC Indaragi	9964574076

10	Koppal	PHC Hirebommanal	9972569767
11	Koppal	PHC Kukanapalli	
12	Koppal	PHC Ginnigera	9741119787
13	Koppal	PHC Bhagyanagar	9739428666
14	Koppal	PHC Gondabal	8105566825
15	Koppal	PHC Hulagi	9972432169
16	Koppal	PHC Hosabandiharlapura	
17	Gangavati	GH Gangavati	9448022756
18	Gangavati	CHC Karatagi	9845639883
19	Gangavati	CHC Kanakagiri	7829254408
20	Gangavati	CHC Shreeramnagar	9845507936
21	Gangavati	PHC Navali	9019554350
22	Gangavati	PHC Budagumpa	8277498539
23	Gangavati	PHC Bennur	9591869498
24	Gangavati	PHC Siddapur	8893093002
25	Gangavati	PHC Hosakera	9845339610
26	Gangavati	PHC Mustur	8105485851
27	Gangavati	PHC Musalapur	9591869498
28	Gangavati	PHC Venkatagiri	9448776999
29	Gangavati	PHC Anegundi	
30	Gangavati	PHC Sangapur	9886468630
31	Yelburga	GH Yelburga	9731414564
32	Yelburga	CHC Kukanur	9916129677
33	Yelburga	CHC Hirewankalakunta	9845349230
34	Yelburga	CHC Mangalore	
35	Yelburga	PHC Sanganal	884651181
36	Yelburga	PHC Balutagi	8951619189
37	Yelburga	PHC Mudol	9972314639
38	Yelburga	PHC Bandihal	8197745809
39	Yelburga	PHC Itagi	7892793746
40	Yelburga	PHC Chikenkoppa	9901881483
41	Yelburga	PHC Bannikoppa	9591547488
42	Yelburga	PHC Vajrabandi	8317380587
43	Yelburga	PHC Bevoor	8660469759
44	Yelburga	PHC Gunnal	9741717172
45	Yelburga	PHC Gandal	8105733157
46	Yelburga	PHC Benkal	9742566939
47	Yelburga	PHC Shriru	8495903713
48	Yelburga	MCH Talakal	
49	Kushtagi	GH Kushtagi	9535900956
50	Kushtagi	CHC Tawaragera	9113046265
51	Kushtagi	PHC Hanumanal	7795558893
52	Kushtagi	PHC Hanumasagar	8277498458
53	Kushtagi	PHC Hoolagera	8277498551
54	Kushtagi	PHC Dotihal	8277498546
55	Kushtagi	PHC Mudenoor	8277498552
56	Kushtagi	PHC Hiremannapur	9916863428
57	Kushtagi	PHC Chalagera	9986096991
58	Kushtagi	PHC Hiregonnager	8970750453

59	Kushtagi	PHC Malagitti	8971745999
----	----------	---------------	------------

Contact Details of Private Hospital /Nursing Homes Available in Koppal District

S.No	Name of Hospital/Nursing Home	Contact Details	
		Land No	Mobile No
1	Shri Nursing Home Koppal		9449006741
2	Dr.K.G.Kulkarni Hospital Koppal		9448380464
3	Bhagavati Children Hospital Koppal		7051018463
4	Kambliyal Orthropedic and General Hospital Koppal		9448323930
5	Yashoda Maternity and General hospital Koppal	08539-325314	9448434923
6	Lion eye Hospital Koppal	08539-230485	
7	Tara Hospital Koppal		8618410275
8	Shri Sai Hospital Koppal		9448954173
9	Shri Mangala Hospital Koppal		9916109497
10	Shrishailla Eye Clinic Koppal		9845790627
11	Koppal Scan Centre Koppal		9740097416
12	Chimmalgi Hospital Koppal		9008211811
13	Pritam Health Care Centre Koppal		9916075365
14	Vivikatha Orthropedic and Maternity Hospital Koppal		8105821815
15	Shri Sai Childrens Hospital Koppal		9686992222
16	Vivekananda Hospital Gangavati		9449019985
17	Annapurna Multispeciality Hospital gangavati		9242882287
18	Mariti Eye and Dental Hospital Gangavati		9445605974
19	Bhagirati Childrens Hospital Gangavati		9886332969
20	Shri Lakshmi Nursing home Gangavati		944814003
21	Om Sai Orthropedi and Trauma Centre Gangavati		9448361473
22	Swamy Eye Hospital Gangavati		9480687916
23	Padmaja Childrens Hospital Karatagi (GVT)		9886343410
24	Bhavikatti Nursing Home Gangavati		9448371292
25	KML Hospital Gangavati		9731977269
26	S.R.Yashoda Hospital Gangavati		9480089042
27	Sanjeevini Nursing Home Gangavati		9742127452
28	Mallikarjun Nursing Home Gangavati		9886391889
29	City Hosptsl Kampli Road Gangavati		9986217027
30	Channabasavaswamy Hospital Gangavati		9986027505
31	Netra Jyothi Superspeciality Eye Hospital Laser Centre Gangavati		9348872108
32	Suraksha Child Care Karatagi GVT		9663451747
33	Gangavaati City Scanning Centre Karatagi GVT		9448465814
34	Varasiddi Hospital and MRC Gangavati		9739288148
35	Vicveakashrinivasa Eye Hospital Hanumsagar Kushtagi		9900400614
36	Dr. Subash Kakhandaki Eye Hospital Kushtagi		9844665894
37	Shri Basaveshwara Maternity Hospital Kushtagi		9632111212
38	Rampur Nursing Home Koppal		
39	City Hospital Koppal		9986848824
40	G.S.R Multi speciality Hospital Koppal		9060896550
41	Khushi Multi speciality Hospital and trauma Centre Koppal		9886529620
42	Shrusha Nursing HomeGangavati	08533-270978	
43	Patil Nursing Home Gangavati		9448140808
44	Ananda Nursing Home Gangavti		9845942608

45	Vasavi Nurisng Home Gangavati		9845470451
46	Tejaswini Childrens and Maternity Home Gangavati		9448023967
47	Dr.G Chandrapa Multispeciality Hospital Gangavati	08533-231206	9900339996
48	Vinayaka Nursing Home Gangavati		9448133730
49	Amar Hospital/Nursing Home Gangavati		9482567648
50	Amareshwar ENT and Dental Hospital Gangavati		9448120433
51	Mahamaya Clini Kukanoor, yelburga		9986575465
52	Chiniwal Multi Speciality Poly Clinic Karatagi, GVT		9448122257

Contact Details of Ambulances Available in Govt Hospitals of Koppal District

S.No	Vehicle Reg No	Address/Location	Contact No
1	KA-36 G-399	CHC Hiresindhogi	9900437542
2	KA-37 G-420	CHC Hiresindhogi	8310908087
3	KA-37-G-407	CHC Kukanoor	9901995893
4	KA-37 G-432	CHC Kukanoor	8050240028
5	KA-37 G-464	CHC Mangalore	9945879454
6	KA-37 G-421	SDH Gangavati	9164895752
7	KA-37 G-463	CHC Kanakagiri	9741434822
8	KA-37 G-391	PHC Siddapura	9740994240
9	KA-37 G-428	GH Kushtagi	8310899833
10	KA-37 G-460	GH Kushtagi	9945218049
11	KA-37 G-476	CHC Tawaragera	9535552574
12	KA-37 G-379	PHC Kavaloor	8105156205
13	KA-37 G-390	PHC Hitnal	7795386163
14	KA-37 G-419	GH Yelburga	9036812492
15	KA-37 G-465	GH Yelburga	7406963612
16	KA-37 G-438	CHC Hirewankalakunta	9916544140
17	KA-37 G-378	CHC Karatagi	8105522340
18	KA-37 G-422	CHC Karatagi	9591601334
19	KA-37 G-435	CHC Shreeramnagar	8310708541
20	KA-37 G-543	PHC Mudenur	7676649371
21	KA-37 G-547	PHC Bennur	9743067184
22	KA-37 G-418	CHC Munirabad	886750203
23	KA-37 G-528	SDH Gangavati	9036155192

Contact Details of 108 Ambulances Available in Koppal District

24	KA-51 G-5413	TLHGangavati	9148435877	ALS
25	KA-51 G-5406	PHC Kanakagiri	9148435878	BLS
26	KA-51 G-5408	CHC Karatagi	9148435789	BLS
27	KA-51 G-5405	PHC Navali	9148435876	ALS
28	KA-51 G-5411	PHC Hiresindogi	9148435880	BLS
29	KA-40 G-462	DH Koppal	9449861555	BLS
30	KA-42 G-883	PHC Kukumpalli	9148435881	BLS
31	KA-51 G-5412	PHC Munirabad	9148435882	BLS
32	KA-40 G-461	PHC Hanamanal	9148435886	BLS
33	KA-51 G-5407	PHC Hanumasagar	9148435884	BLS
34	KA-51 G-5409	TLH Kushtagi	9148435883	ALS
35	KA-51 G-5410	PHC Tawaragera	9148435885	BLS
36	KA-42 G-885	PHC Bannikoppa	9148435889	BLS
37	KA-37 G-462	PHC Bevoor	9148435890	BLS

38	KA-51 G-5404	CHC Hirewankalkunta	9148435892	BLS
39	KA-42 G-824	CHC Kukanoor	9148435891	ALS
40	KA-37 G-461	TLH Yelburga	9148435887	BLS

Contact Details of Police Officials in Koppal District

S.No	Unit/Station	Contact No
1	Superintendent of Police	9480803701
2	PSI Wireless Centre	9480803700
3	PI Wireless Centre	9480800957
4	DAR	9480803706
5	DSB	9480803707
6	DCIB	9480803708
7	DCRB	9480803709
8	FPB	9480803710
9	DSP Koppal	9480803020
10	DSP Gangavati	9480803721
12	CPI Gangavati (Rural)	9480803730
13	CPI Koppal (Rural)	9480803731
14	CPI Kushtagi	9480803732
15	CPP Yelburga	9480803733
16	PI Koppal (Urban)	9480803745
17	PSI Koppal (Rural)	9480803746
18	PSI Alawandi	9480803747
19	PSI Munirabad	9480803748
20	PSI Yelburga	9480803749
21	PSI Kuknoor	9480803750
22	PSI Bevoor	9480803751
23	PI Gangavati (Urban)	9480803752
24	PSI Gangavati (Rural)	9480803753
25	PSI Karatagi	9480803754
26	PSI Kanakagiri	9480803755
27	PSI Gangavati (Traffic)	9480803756
28	PSI Kushtagi	9480803757
29	PSI Tawaragere	9480803758
30	PSI Hanumasagar	9480803759
31	DCRB Computer Section	9480806043

Contact Details of Contractors in Koppal District (PWD)

S.No	Name of the Contractor (Sriyuths)	Taluk	Mobile
1	Suresh Bhoomaraddi	Koppal	9448130453
2	B M Purad	Koppal	9845230303
3	Suresh Thatti	Koppal	9448381559
4	Gurappa Kallur	Koppal	9448183654
5	S Prasad	Gangavathi	9448140647
6	R Rajashekar	Gangavathi	9448020966
7	G Nagamallesh	Gangavathi	9448334789
8	G Haribabu	Gangavathi	9448486119
9	Basavaraj Hallur	Kushtagi	9901392565
10	D S Kandakur	Kushtagi	9880532227
11	Rahmansab Doddamani	Kushtagi	9482768043

12	Ramesh Kapse	Kushtagi	9448120244
13	Mudakappa Bandare	Kushtagi	845347694
14	V B Bisnahall	Yelburga	9448649040
15	Mallappa Neelappagouda	Yelburga	9448764837
16	S V Naregal	Yelburga	9900484292
17	A K Hosangadi	Yelburga	9481282744
18	Shivaputrappa Hatti	Yelburga	9448267274
19	Veeresh Myagalmath	Yelburga	9480898911
20	Yamanurappa Nadvalmani	Yelburga	9448262984

Contact Details of Information and Public Relation Officer Koppal District

Name of Officer/Reporter	Name of the Paper/Office	Contact No	E-mail
Dananjayappa.B District Information Officer	Information and Public Relation Officers of Koppal District	08539-220607 9480841245	varthabhavankoppal@gmail.com koppalnews@gmail.com

Contact Details District Level Paper Editor/Reporters Koppal

Name of Reporter	Name of the Paper	Contact No	E-mail
Veeranna Kallimani	Nadanudi	9060809259	nadanudi@gmail.com
Shivaraj Nugadoni	Prajaprapancha	9902746097	nugadoni@gmail.com
S.M Patel	Suvarnagiri	9448751757	suvarnagirikannada@gmail.com
Girish Kulkarni	Samarthavani	9880120038	editorsamarthavani@gmail.com
Harish H S	Sudina	9900617582	sudinakpl@gmail.com
Y B Judi	Koteya Karnataka	9902225836	Ybjudi123@gmail.com
Raghavendra Arakeri	Varthaloaka	9901905177	varthaloakaeditor@gmail.com
Devappa Naganur	Tungasiri	9739996695	tungasirikpl@gmail.com
Lalitavva Pujar	Kalyana Darshana	9483375573	Editorkd16@gmail.com

Contact Details of Regional Level Paper Editor/Reporters Koppal

Name of Reporter	Name of the Paper	Contact No	E-mail
Santosh Deshapande	Nagarika	9880088367	nagarikkpl@gmail.com
Sadiq Ali	Lokadarshan	9449154028	lokadarshankpl@gmail.com
Siddappa Hanchinal	Suddimoola	9448695088	Suddimoola24@gmail.com sudimoola@gmail.com
Ramesh Powar	Eshanya Times	9880769626	eshyanyatimes@gmail.com
Rajasab Talakeri0	Raichurvani	9480375331	rajasabmulluar@gmail.com
Nagaraj Hoogar	ENamma Kannada Nadu	9916170877	enknbel@gmail.com
Ravichandra Badiger	Gadi Kannadiga	9916728838	Rbadiger2@gmail.com
Kotrappa Muktal	Kittura Karnataka	9448695112	kitturkarnatakagadag@gmail.com
Moula Hussain B	Kannadamma	9448262875	muldiyaryl@gmail.com
Rudra Gowda Patil	Ballari Belagayitu	9448730518	ballarybelagayothu@gmail.com
Reporter	Navodaya		navodayadaily@gmail.com
Reporter	Kranti		rajumedia@gmail.com

Contact Details of State Level Paper Editor/Reporters Koppal

Name of Reporter	Name of the Paper	Contact No	E-mail
Siddanagowda Patil	Prajavani	9448470142	pvanikpl@gmail.com
Somareddy Alawandi	Kannada Prabha	9742152171	somareddykpl@gmail.com
Gangadhar Bandihal	Vijaya Karnataka	9343381826	Gangadhar.bandihal@gmail.com
Dattu Kammar	Udayawani	9686019176	dattukammar@gmail.com

Ravindra	Vijayavani	9900585353	vijayavanikpl@gmail.com
Tippanagowda Patil	Hosadiganta	9901936942	tspatil1001@gmail.com
Basavaraj binnal	Samyukta Karnataka	9945999011	kplskpaper@gmail.com
Ahiraj M	The Hindu	9742558049	ahiraj@gmail.com
Sripad Ayachit	Indian Express	9448001135	expresskpl@gmail.com
Basavaraj Karkihalli	Vishwavani	8747984999	Basavarajpk85@gmail.com

Contact Details of Agriculture Department Officers Koppal District

S.No	Name of the Officer	Designation	Mobile	Dist/Taluk
	Shabana M Shaik	Joint Director	8277932100	Koppal
	Siddesh	Deputy Director	8277932101	Koppal
	Yenkappa	Assistant Director	8277932119	Koppal
	Mahadev	Assistant Director	8277932109	Kustsgi
	Sharanappa	Assistant Director	9845769845	Yelburga
	Chandrakant	Assistant dDirector	8277932106	Gangavati

Contact Details of Officers of Deputy Director Food Civil Supplies and Consumer Affairs Koppal District

S.No	Name of the Officer	Designation	Contact No
1	Smt. C.D Geeta	Deputy Director	9886660847
2	Shri Ravikumar Vastrad	Manager	9972705502
3	Shri Mallappa G Doddamani	Account Superintendent	8618355595
4	Shri M D Rafi	Account assistant	7892821450
5	Kumari Savita Unki	FDC (Deputation)	9611233623
6	Yelisha	Peon-1	9986278819
7	Shri M D Taher	Peon-2	9986078645

Contact Details of Taluka Level Food Officers(Tahasil Office) in Koppal District

S.No	Taluka		Name of the Officer	Contact No
1	Koppal	Food Shirastedar		
2		Food Inspector	Shri. Channabassappa	9449464125
3		Food Inspector		
4		SDC		
5	Gangavati	Food Shirastedar		
6		Food Inspector	Shri. H I Bagali	9743425038
7		Food Inspector	Smt. Nanda Palled	8762297130
8		SDC	Shri Pavankumar Nilogal	9036780356
9	Kushtagi	Food Shirastedar	Shri Raju Firangi	9008669249
10		Food Inspector		
11		Food Inspector		
12		SDC	Shri Manjula Sirwar	9741161549
13	Yelburga	Food Shirastedar	Shri Mallikarjunayya	9844960399
14		Food Inspector		
15		Food Inspector		
16		SDC	Raheeman	9945420539

Contact Details of District Go-Downs

S.No	Taluka	Details of Godown	Name of the Manager	Contact No
1	Koppal	KFCSC APMC Gunj Circle, Koppal	Shri Kantesh	9448541195
2	Kushtagi	KFCSC Kushtagi		
3		KFCSC APMC Islampur Circle Gangavati	Shri Basavaraj	9448440274
4		KFCSC Yelburga		

Contact Details of LPG Distributers in Koppal District

S.No	Taluka	Name of Agency	Gas Company	Contact No
1	Koppal	Shri Guruprasad Bharat Gas Agency Koppal	BPC	9945131388
2		KFCSC Bharat Gas Agency Koppal	BPC	9902269204
3		Shri Nandi Bharat Gas Agency Koppal	BPC	9008901290
4		Shri Panchamuki HP Gas Agency Ginigeri	HPC	9448632670
5		Shri C V Kurgod HP Gas Agency Alawandi	HPC	9901748072
6		Shri Ram HP Gas Agency Kinnal	HPC	9663768266
7		Shri Adishakti IOC Gas Agency Munirabad	IOC	9845457979
8	Gangavati	Shri Manoj Bharat Gas Agency Karatagi	BPC	9448183653
9		Shri Balaji HP Gas Agency Gangavati	HPC	9739007757
10		Shri Lakshmi HP Gas Agency Gangavati	HPC	9481984659
11		Shri Basavashree IOC Gas Agency Gangavati	IOC	9008313584
12	Kushtagi	Shri Saimaharaj Bharat Gas Agency Kushtagi	BPC	9902299302
13		Shri Amaresheara IOC Gas Agency Tawaragera	IOC	9620870744
14		Shri Annadaneshwara IOC Gas Agency Hanumasagar	IOC	9901301936
15	Yelburga	Shri Basavalingeshwara IOC Gas Agency Yelburga	IOC	9901435551
16		Shri Hosmani Bharat Gas Agency Yelburga	BPC	9742537705
17		Shri Apoorva Bharat Gas Agency Yelburga	BPC	7795766456

Contact Details of Veterinary Department Officials in Koppal District

Sl No	Name of the Dist/Taluka/Village	Name of the Officer	Designation	Mobile Number	Land Line
1	DD OFFICE	Dr.Basayya Sali	Deputy Director (i/c)	9449641224	08539-221408
2	DD, Polyclinic	Dr.Yamanappa B.H	Deputy Director (i/c)	9845892056	08539-222669
3	AD Sheep Board Koppal	Dr.Yamanappa B.H	Assistant Director	9845892056	08539-222669
4	V.H. KOPPAL	Dr.Shivaraj Shetter	Assistant Director	9902135800	08539-220023
5	P.V.C.CHIKKABOMMANAL	Dr.Shivaraj Shetter	Assistant Director (i/c)	9902135800	
6	V.D.BETAGERI	Dr.Nishanth.C	Veterinary Officer (i/c)	9380528128	
7	V.D.MUDDABALLI	Dr.Vinay Kumar Angadi	Veterinary Officer	6364173746	
8	V.D. HULAGI	Dr.Sunil Kumar Patil	Veterinary Officer	9741653200	
9	V.D. BANDIHARLAPURA	Dr. Shivakumar Agre	Veterinary Officer	9164496996	
10	V.D. KAVVALUR	Dr.Nishanth.C	Veterinary Officer (i/c)	9380528128	
11	V.D.HALAGERI	Dr.Pruthvi raj	Veterinary Officer	9980343526	
12	V.H.ALAWANDI	Dr.Nishanth.C	Veterinary Officer (i/c)	9380528128	
13	V.D. HIRESINDOGI	Dr.Vinod kumar Divater	Veterinary Officer	9886934138	

14	V.D.BISARAHALLI	Dr.Vinod kumar Divater (i/c)	Veterinary Officer	9886934138	
15	V.D. KATARAKI GUDLANUR	Dr.Vinod kumar Divater (i/c)	Veterinary Officer	9886934138	
16	V.D. HATTI	Dr.Nishanth.C	Veterinary Officer (i/c)	9380528128	
17	V.D. KINNAL	Dr.Vinay Kumar Angadi (i/c)	Veterinary Officer	6364173746	
18	V.D. IRAKALAGADA	Dr.Vinod kumar Divater (i/c)	Veterinary Officer	9886934138	
19	V.D. INDRAGI	Dr. Shivakumar Agre (i/c)	Veterinary Officer	9164496996	
20	V.D. HITNAL	Dr.Sunil Kumar Patil (i/c)	Veterinary Officer	9741653200	

Ganavathi Tq

1	V.H. GANAGAVATHI	Dr.P.M.Mallayya	Assistant Director (i/c)	9972709497	08533-271324
2	P.V.C. CHIKKABENAKAL	Dr.P.M.Mallayya	Assistant Director (i/c)	9972709497	
3	V.H. KANAKAGIRI	Dr.Arun Guru	Veterinary Officer (i/c)	9591637222	
4	V.H. KARATAGI	Dr.Zakeer Hussain	Veterinary Officer (i/c)	8660046252	
5	V,H,NAVALI	Dr.Channaveerappa	Veterinary Officer (i/c)	8151965722	
6	V.H.SIDDAPURA	Dr.Zakeer Hussain	Veterinary Officer	8660046252	
7	V.H.VENKATAGIRI	Dr. Somappa A	Veterinary Officer	9845635656	
8	V.H.HULIHAI DAR	Dr.P.M.Mallayya	Chief Vety Officer (i/c)	9972709497	
9	V.D. HEROOR	Dr.Mahesh kumar	Veterinary Officer (i/c)	8762908511	
10	V.D. HOSAKERA	Dr.Mahesh kumar	Veterinary Officer	8762908511	
11	V.D.SANGAPURA	Dr.Arun Guru	Veterinary Officer	9591637222	
12	V.D.BASANAVANNAC AMP	Dr.Mahendra	Veterinary Officer	7022274546	
13	V.D.MUSALAPURA	Dr.Kavya.V	Veterinary Officer	9739695130	
14	V.D. DHANAPUR	Dr.Dhanush.V	Veterinary Officer	8904432016	
15	V.D.SHRIRAMANAGAR A	Dr.Channabasappa.Hallad	Veterinary Officer	9986243808	
16	P.V.C. SINGANAL	Dr.Channabasappa.Hallad	Veterinary Officer (i/c)	9986243808	
17	V.D.CHIKKADANKANA KAL	Dr.Channaveerappa	Veterinary Officer	8151965722	
18	V.D.BHUDAGUMPA	Dr.Aadarsh.N	Veterinary Officer (i/c)	9740294142	
19	V.D.YARADONA	Dr.Aadarsh.N	Veterinary Officer	9740294142	
20	V.D.BENNUR	Dr.Laxman Naik	Veterinary Officer	8951500721	

Sl No	Name of the Dist/Taluka/Village	Name of the Officer	Designation	Mobile Number	Land Line
Kustagi Tq					
1	V.H. KUSTAGI	Dr.Channabasappa.Hallad	Assistant Director (i/c)	9986243808	08536-267104
2	P.V.C, MUDENUR	Dr.Channabasappa.Hallad	Assistant Director (i/c)	9986243808	
3	P.V.C, NAVALAHALLI	Dr.Channabasappa.Hallad	Assistant Director (i/c)	9986243808	
4	P.V.C, KALAMALLI	Dr.Channabasappa.Hallad	Assistant Director (i/c)	9986243808	
5	P.V.C, JUMLAPURA	Dr.Channabasappa.Hallad	Assistant Director (i/c)	9986243808	
6	P.V.C, CHALAGERA	Dr.Channabasappa.Hallad	Assistant Director (i/c)	9986243808	

7	V.H. HANASAMASAGAR	Dr.Channabasappa.Hallad	Veterinary Officer (i/c)	9986243808	
8	P.V.C. HOOLAGERA	Dr.Channabasappa.Hallad	Veterinary Officer (i/c)	9986243808	
9	V.D. KABBARAGI	Dr.Channabasappa.Hallad	Assistant Director (i/c)	9986243808	
10	V.D.NILOGAL	Dr. Siddalingayya Sankin	Veterinary Officer (i/c)	9481254254	
11	V.D.HIREMANNAPURA	Dr. Siddalingayya Sankin	Veterinary Officer	9481254254	
12	V.D.KORADAKERA	Dr. Santhosh Kudari	Veterinary Officer (i/c)	9110203682	
13	V.D.HANUMANALA	Dr. Siddalingayya Sankin	Veterinary Officer (i/c)	9481254254	
14	V.D.TAVARAGERA	Dr. Siddalingayya Sankin	Veterinary Officer (i/c)	9481254254	
15	V.D.DOTIHAL	Dr. Santhosh Kudari	Veterinary Officer (i/c)	9110203682	
16	V.D. SANGANAL	Dr.Channabasappa.Hallad	Veterinary Officer (i/c)	9986243808	
17	V.D. MALAGITHI	DR. Pallavi	Veterinary Officer	7259437423	
Yelburga Tq					
1	V.H. YALBURGA	Dr.Ravikumar	Assistant Director	9449528395	08534-220457
2	V.H.KUKANUR	Dr.Suresh saraganachar	Veterinary Officer (i/c)	9886265167	
3	V.D. MANDALAGERI	Dr.Suresh saraganachar	Veterinary Officer (i/c)	9886265167	
4	P.V.C. BINNAL	Dr.Suresh saraganachar	Veterinary Officer (i/c)	9886265168	
5	V.D. BEVOOR	Dr.Prakash Choori	Veterinary Officer	9880490872	
6	V.D.ITAGI	Dr.Suresh saraganachar	Veterinary Officer	9886265167	
7	V.D. TALAKAL	Dr.Venkobappa Tikare	Veterinary Officer	9739694974	
8	V.D. BALOTAGI	Dr.Vinod Kumar.G	Veterinary Officer	9035309968	
9	V.H.MANGALORE	Dr.Venkobappa Tikare	Veterinary Officer (i/c)	9739694974	
10	V.H.HIREVANKALKUN TAKA	Dr.Prakash Choori	Veterinary Officer (i/c)	9880490872	
11	V.D. HUNASIHALA	Dr.Prakash Choori	Veterinary Officer (i/c)	9880490872	
12	V.D. HIREMYAGERI	Dr.Vinod Kumar.G	Veterinary Officer (i/c)	9035309968	
13	.D. CHIKKAMYAGERI	Dr.Venkobappa Tikare	Veterinary Officer (i/c)	9739694974	
14	V.D. BANDI	Dr.Vinod Kumar.G	Veterinary Officer (i/c)	9035309968	
15	V.D. BANNIKOPPA	Dr. Harshavardhan	Veterinary Officer	8095134144	
16	V.D.BALAGERI	Dr.Suresh saraganachar	Veterinary Officer (i/c)	9886265167	
17	V.D. MUDHOL	Dr.Vinod Kumar.G	Veterinary Officer (i/c)	9035309968	
18	V.D. BENAKAL	Dr.Suresh saraganachar	Veterinary Officer (i/c)	9886265168	
19	V.D. THONDIHAL	Dr.Ravikumar	Assistant Director (i/c)	9449528395	
20	V.D. SHIRUR	Dr.Venkobappa Tikare	Veterinary Officer (i/c)	9739694974	
21	V.D. YADDONI	Dr.Prakash Choori	Veterinary Officer (i/c)	9880490872	

Contact Details Of NDRF Officers

NDRF Head Quarter

Name	Address	Tele.	Fax.	Mobile	E-mail.
DG	Directorate General , National Disaster Response Force (NDRF) Sector-1 R. K. Param, New Delhi - 66	011-26712851 011-26161442	011-26105912	09818916161	dg-ndrf@nic.in
Shri Mukul Goel (IG)	Directorate General , National Disaster Response Force (NDRF) Sector-1 R. K. Param, New Delhi -	011-26160252 011-26113014	011-26105912	09871115726	ig.ndrf@nic.in
Shri J K S Rawat (DIG)	Directorate General , National Disaster Response Force (NDRF) Sector-1 R. K. Param, New Delhi - 66	011-26105910 011-26260389	011-26105912	09968262466	rawatjks_k562@rediffmail.com
Shri Rakesh Ranjan Dy Commandant (Proc)	Directorate General , National Disaster Response Force (NDRF) Sector-1 R. K.	011-26107921	011-26105912	08860136649	rakeshbxf@gmail.com

	Puram, Ne w Delhi - 66				
Shri Keshav Kumar DC(Adm)	Directorate General , National Disaster Response Force (NDRF) Sector-1 R K Puram, Ne w Delhi - 66	011- 26107934	011- 26105912	09015243611	keshavkumar128@rediffmail.com
Shri R K Srivastava DC(Ops/Trg)	Directorate General , National Disaster Response Force (NDRF) Sector-1 R K Puram, Ne w Delhi - 66	011- 26181519	011- 26105912	09990572600	srivastava_rks10@yahoo.com
Shri Ashok Malhotra Sr AO	Directorate General , National Disaster Response Force (NDRF) Sector-1 R K Puram, Ne w Delhi - 66	011- 26105911	011- 26105912	-	dg-ndrf@nic.in
Shri Sudhir Thapa Inspector Control Room	Directorate General , National Disaster Response Force (NDRF) Sector-1 R K Puram, New Delhi	011- 26107953	011- 26105912	09711448595	dg-ndrf@nic.in

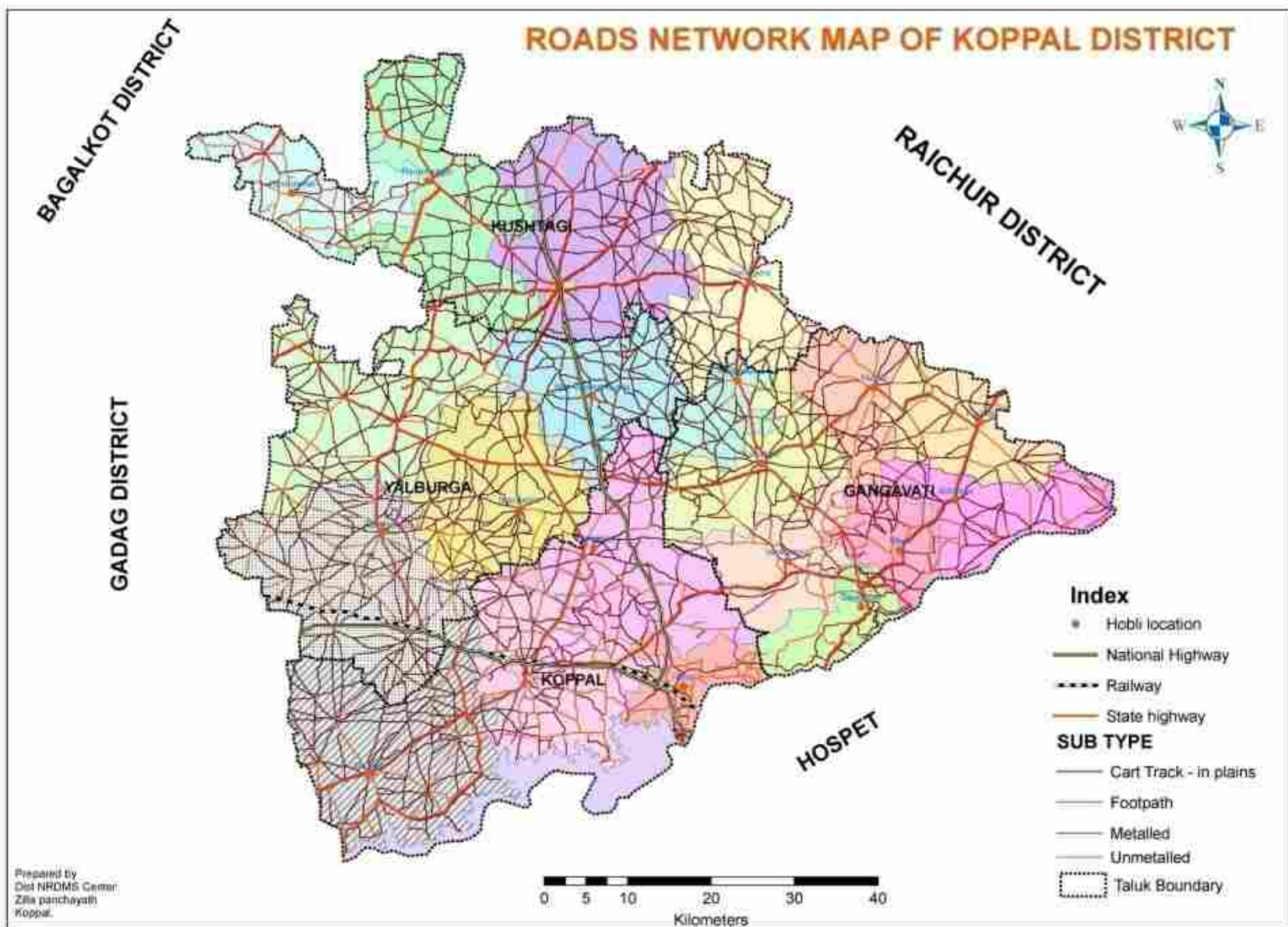
NDRF BNS

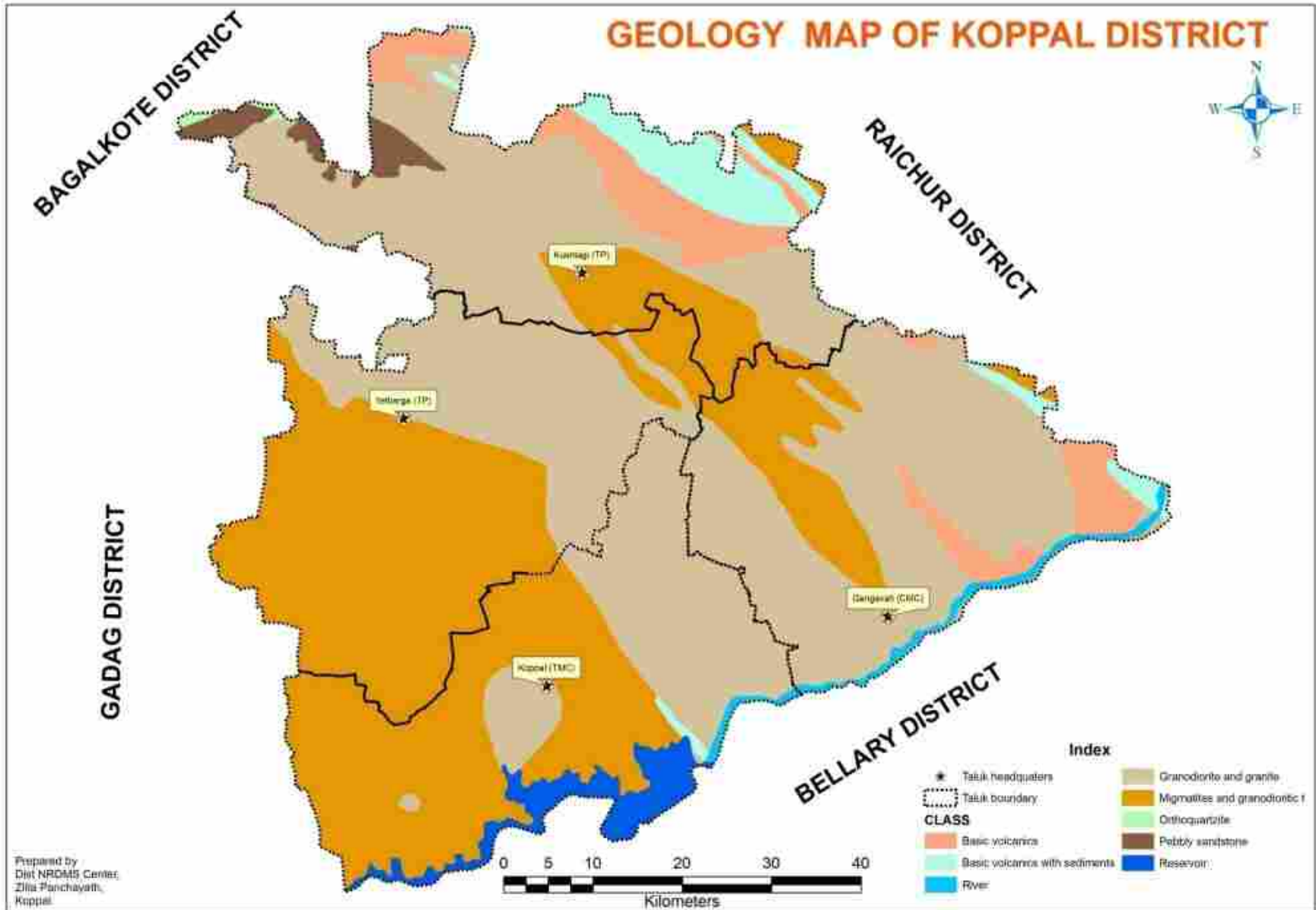
Name	Address	Tele.	Fax	Mobile	E-mail
Sh. A.K. Singh Commandant	1st BN NDRF, Patgaon PO- Azara, Guwahati	0361- 2840027	0361- 2840284	09435545951	ndrf01@yahoo.com ndrf01@hotmail.com
Sh. Sukhdev Raj Commandant	2nd BN NDRF Digberia Camp, PO-Badu Road, Madhyamgram, Barasat Kolkata-700128	033- 25264302, 033- 25264394	033- 25263077	09434742836	comdt106@bsf.nic.in , bnndrf106@rediffmail.com , 2ndndrf@gmail.com
Sh. M.K. Yadav Commandant	3rd BN NDRF, PO-Mundali, Cuttack-Odisha	0671- 2879710	0671- 2879710	09439103170 09437964571	bn-4th@cisf.gov.in , 3rdndrfmundali@gmail.com
Sh.M K Verma Commandant	4th Bn NDRF, PO-Suraksha Campus, Arrakonam, Distt. Vellore, Tamilnadu	04177- 246269	04177- 246594	08903687065, 09442105169	rb-6th@cisf.gov.in
Sh. Alok Avasthy Commandant	5th Bn NDRF, PO- Vishnupuri, Telegaon, Pune (Maharashtra)	02114- 231245	02114- 231509	09423506765	145crpf@gmail.com
Sh. R.S. Joon Commandant	6th Bn NDRF, Chilora Road, Gandhinagar, Pin- 382042	079- 23202540	079- 23201551	09428826445	comdt6ndrf@gmail.com
Sh. Jatdeep Singh Commandant	7th Bn NDRF, Bihwala Road, Bhatinda (Punjab)	0164- 2246030	0164- 2246570	09417802032	comdt.27thbn@itbp.gov.in , 7thbnndrfbhatinda@gmail.com
Sh. Jaipal Yadav Commandant	8th Bn NDRF, Greater Noida, Distt. G.R. Nagar, UP	0120- 2766013	0120- 2766618	09968610011	eighthndrf@yahoo.com , jpvyadav1960@yahoo.com
Sh. S.S. Guleria Commandant	9th Bn NDRF, Bihata Patna, Bihar	06115- 253942	06115- 253939	08986909490	ndrfpatna@gmail.com , ndrfpatna@yahoo.com
Sh. Parshant Dhar Commandant	10th Bn NDRF, Malkangiri, Vijaywara (AP)	09419217790	01955- 252646	09419217790	Commandant125@rediffmail.com

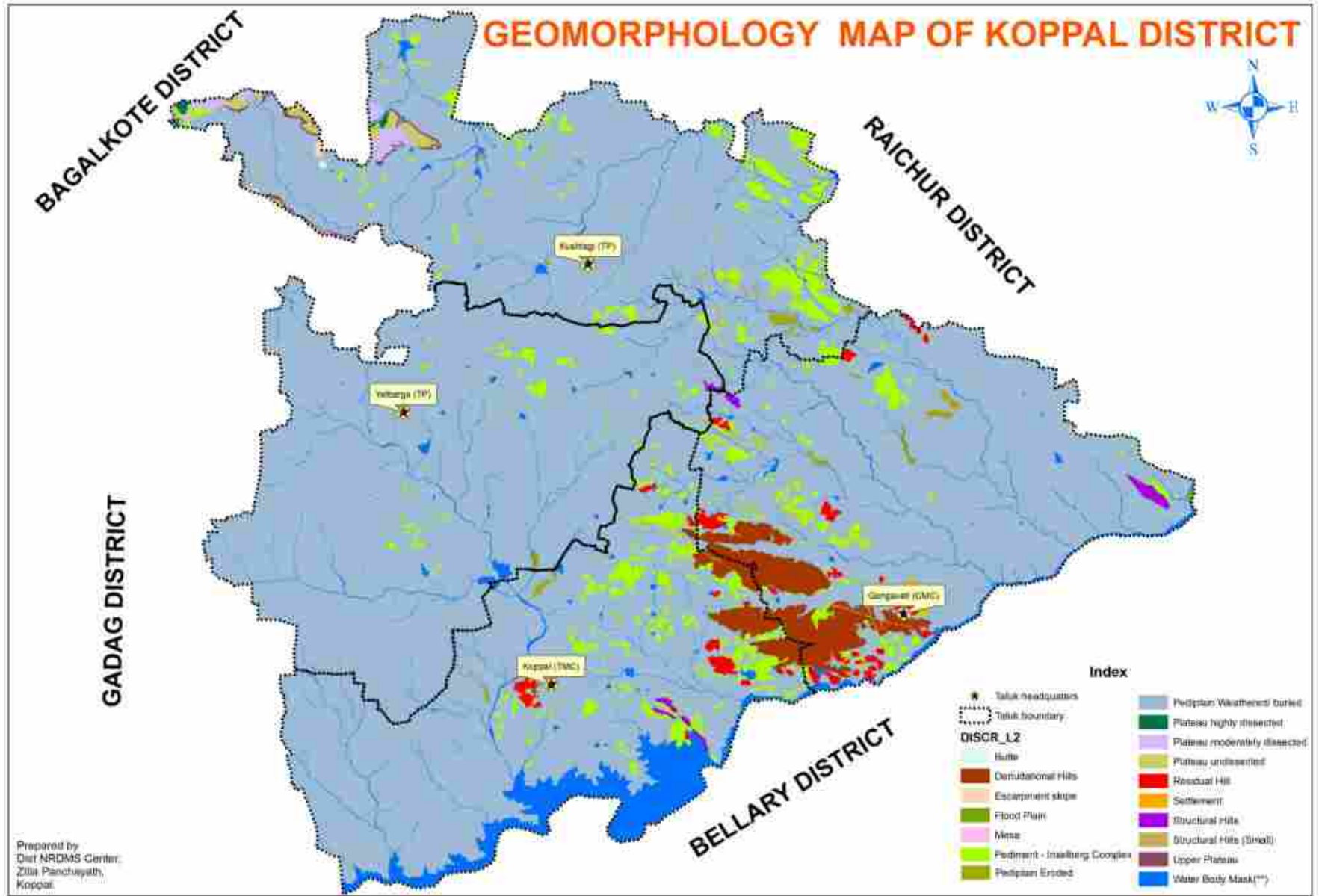
CHAPTER-11

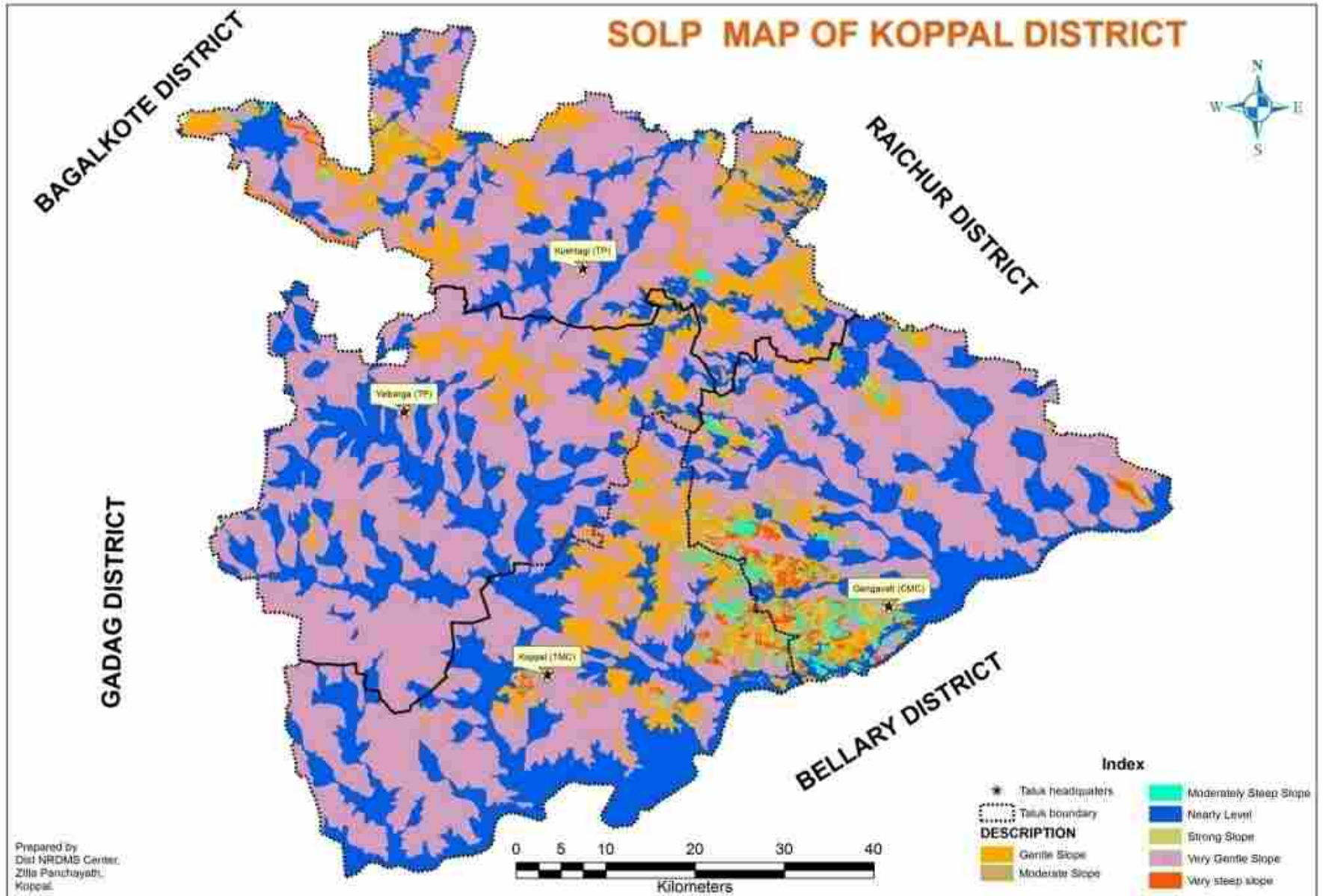
MAPS OF KOPPAL DISTRICT



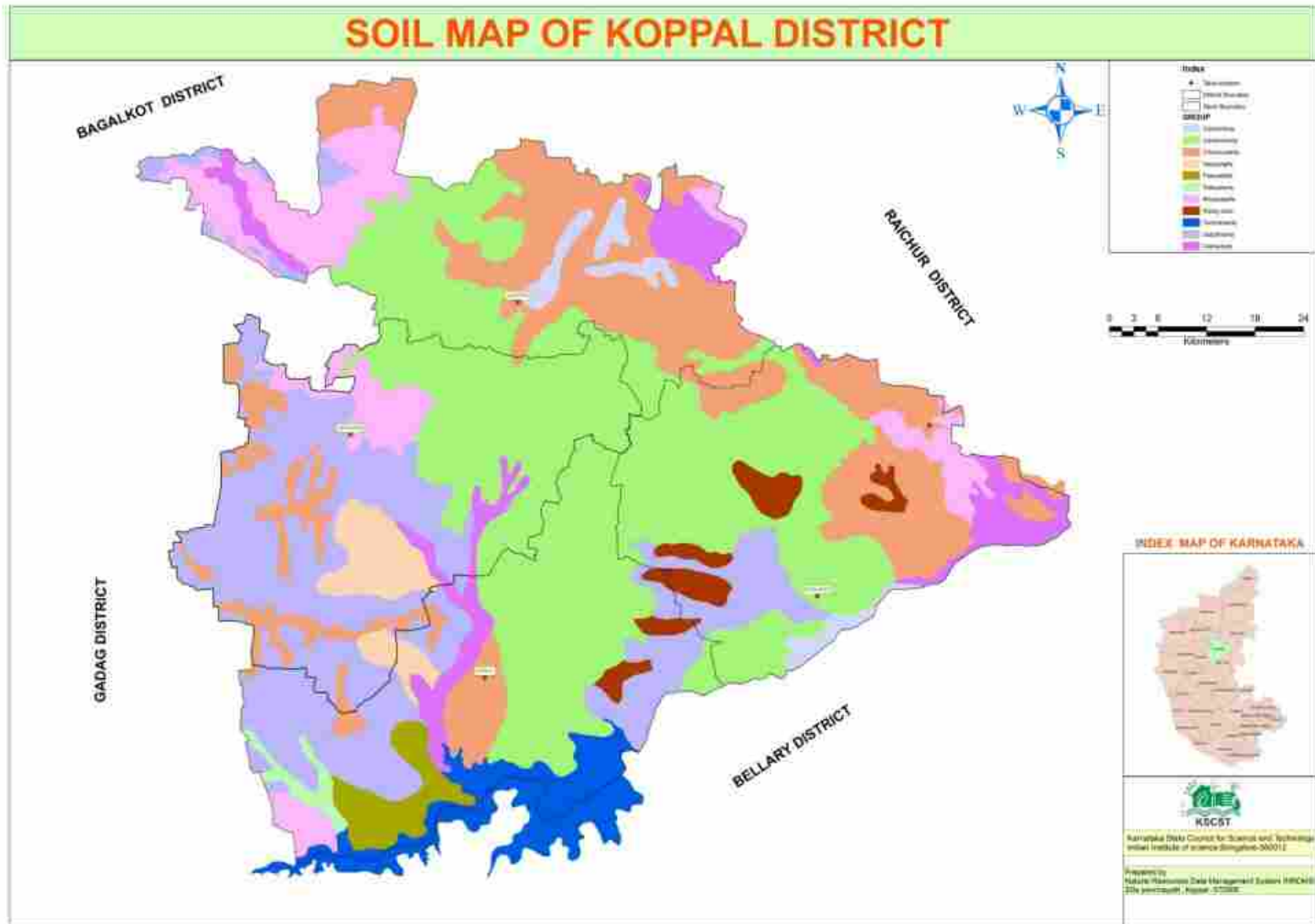


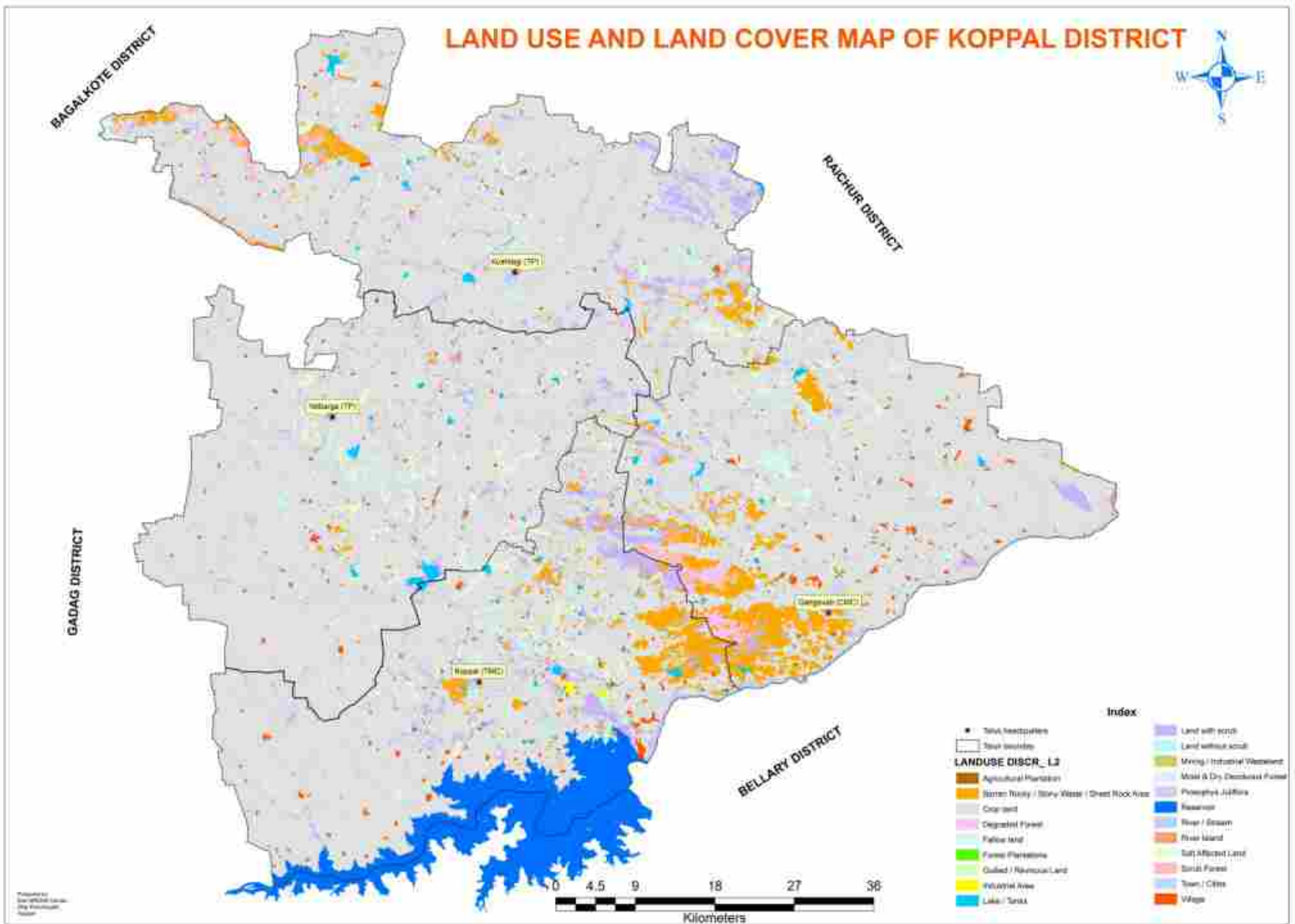




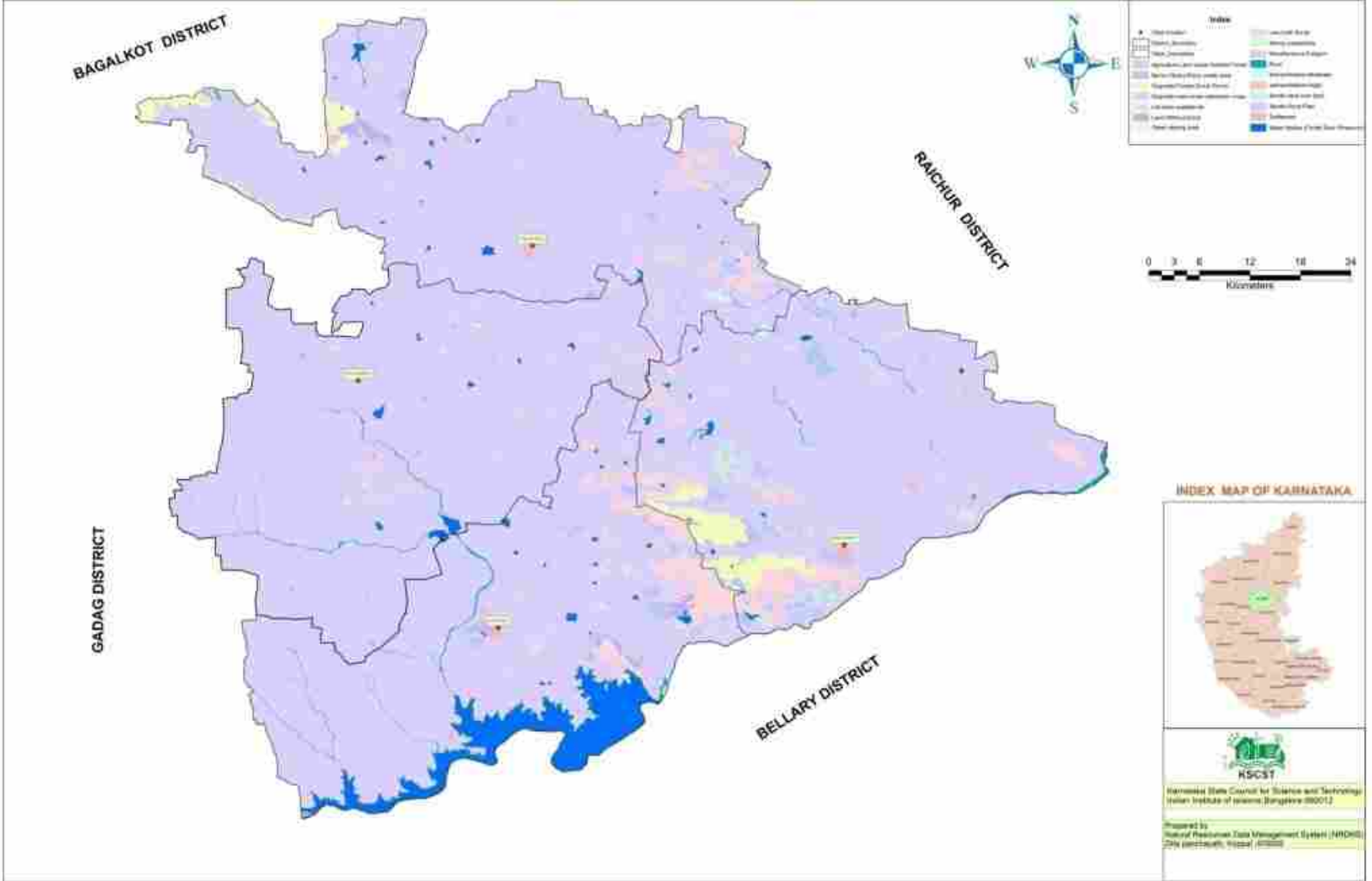


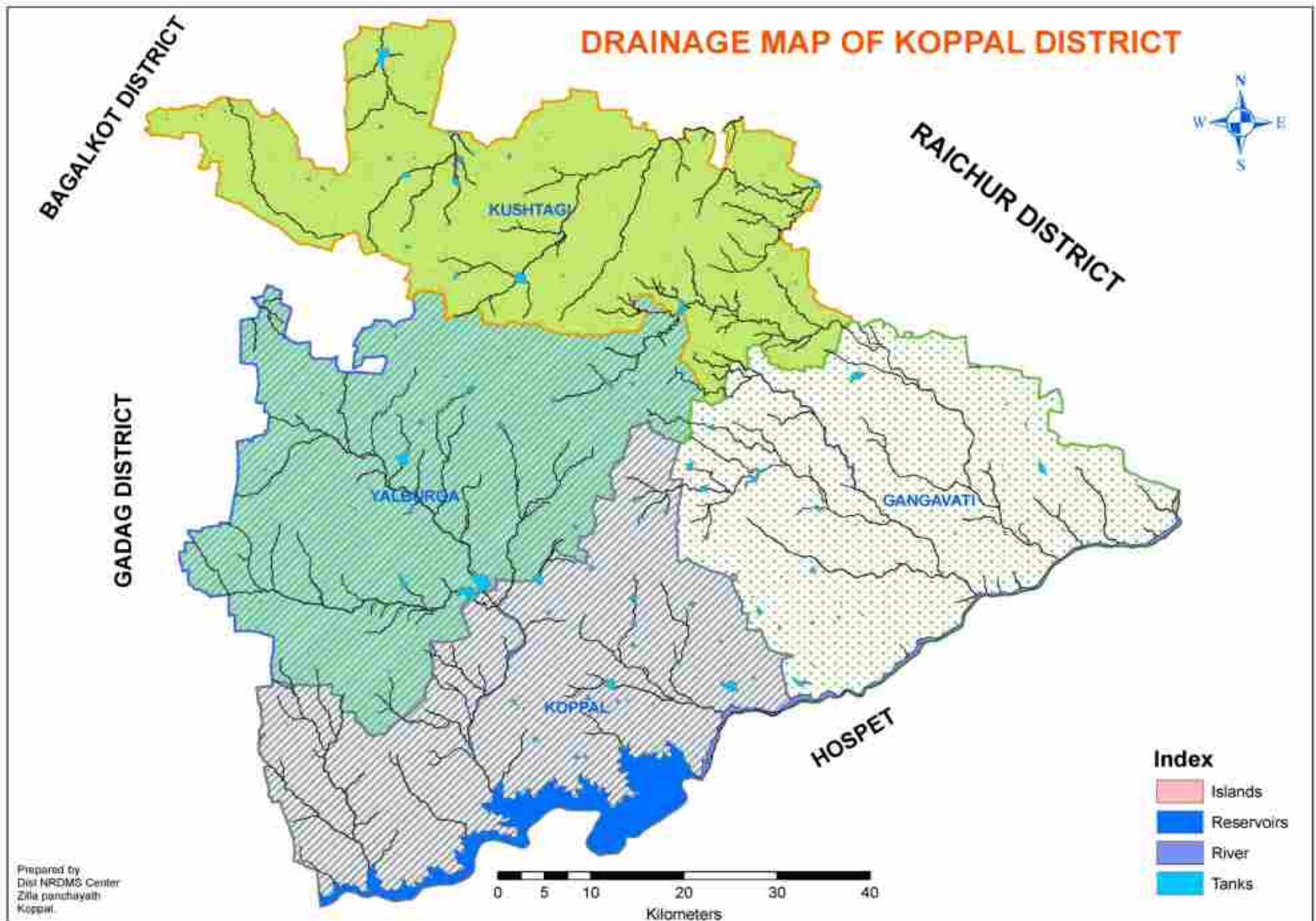
SOIL MAP OF KOPPAL DISTRICT





WASTELAND MAP OF KOPPAL DISTRICT





WATER BODIES & DRAINAGE PATTERN MAP OF KOPPAL DISTRICT

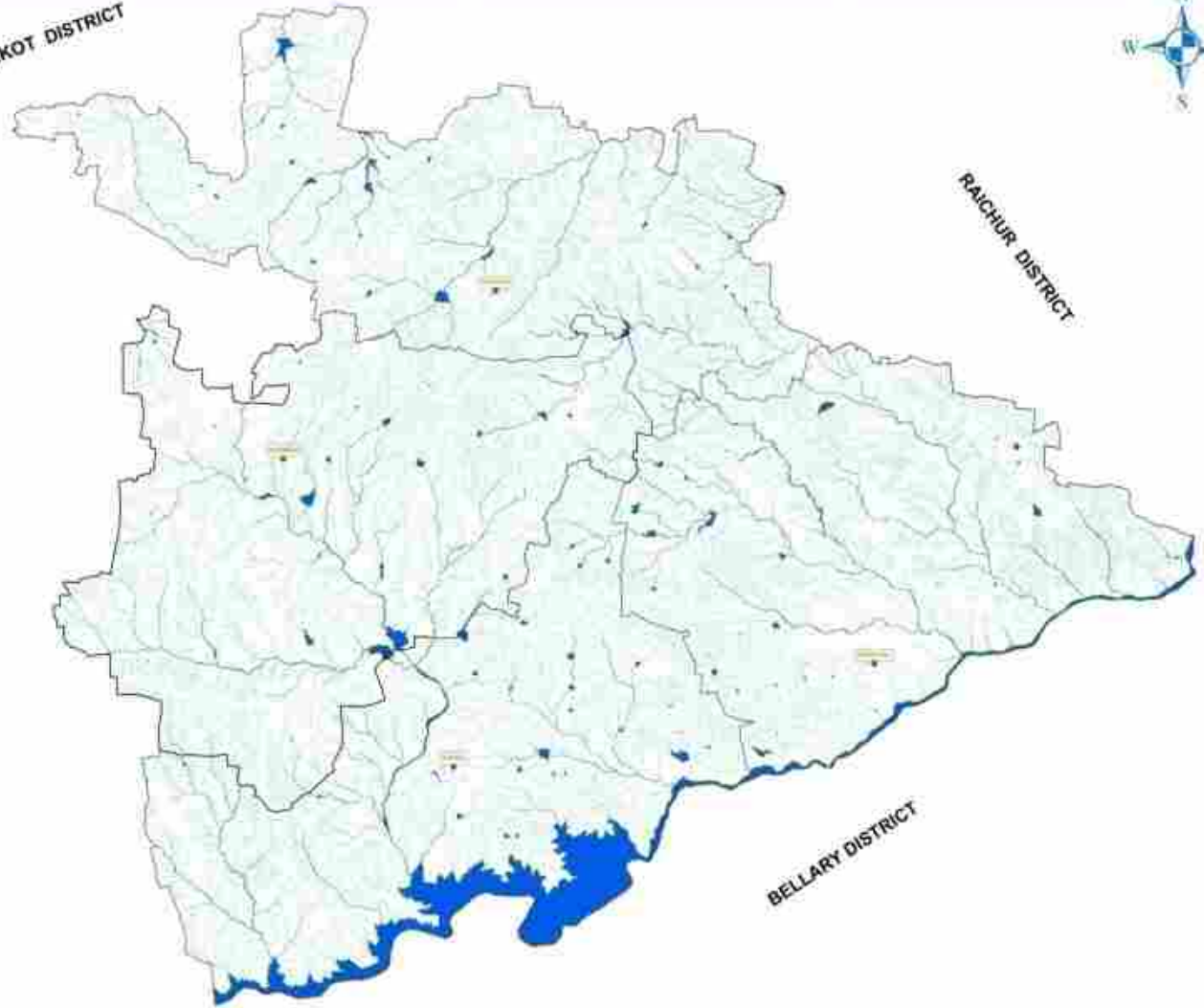
BAGALKOT DISTRICT



- Index**
- Taluk location
 - ▭ District Boundary
 - ▭ Taluk Boundary
 - ▭ Drainage pattern
 - Water bodies



GADAG DISTRICT



RAICHUR DISTRICT

BELLARY DISTRICT

INDEX MAP OF KARNATAKA



Karnataka State Council for Science and Technology
 Indian Institute of Space Research and Organisation (ISRO)
 Prepared by
 Natural Resources Data Management System (NRDMS)
 The Government of Karnataka, Koppal, 576205

TANK OF KOPPAL DISTRICT

BAGALKOT DISTRICT

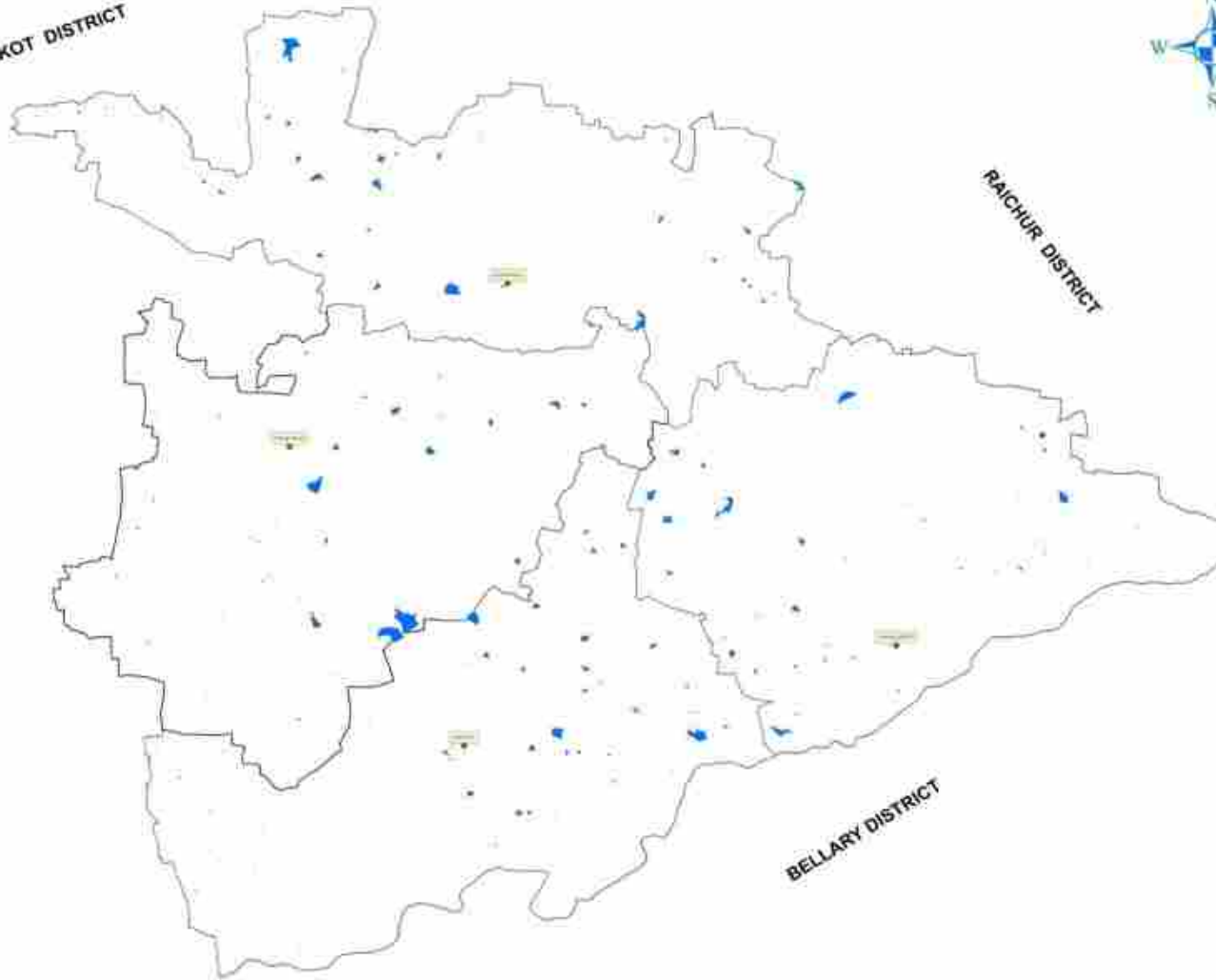


Index

- Tank location
- District Boundary
- Tank Boundary
- Tank



GADAG DISTRICT



RAICHUR DISTRICT

BELLARY DISTRICT

INDEX MAP OF KARNATAKA



Karnataka State Council for Science and Technology
Indian Institute of Science, Bangalore-560012

Prepared by
Natural Resources Data Management System (NRDMS)
Diksha Prakash, Mysore-570002

WATERSHED MAP OF KOPPAL DISTRICT

BAGALKOT DISTRICT



- Index**
- Town location
 - District boundaries
 - Taluk boundaries
- Watershed**
- Area not suitable for Treatment
 - WAP 20-10
 - WAP 20-11
 - WAP 100-Plan
 - WAP 100-Plan
 - WAP 100-Plan
 - Reservoirs
 - Treatment/Supply Works



GADAG DISTRICT

RAICHUR DISTRICT

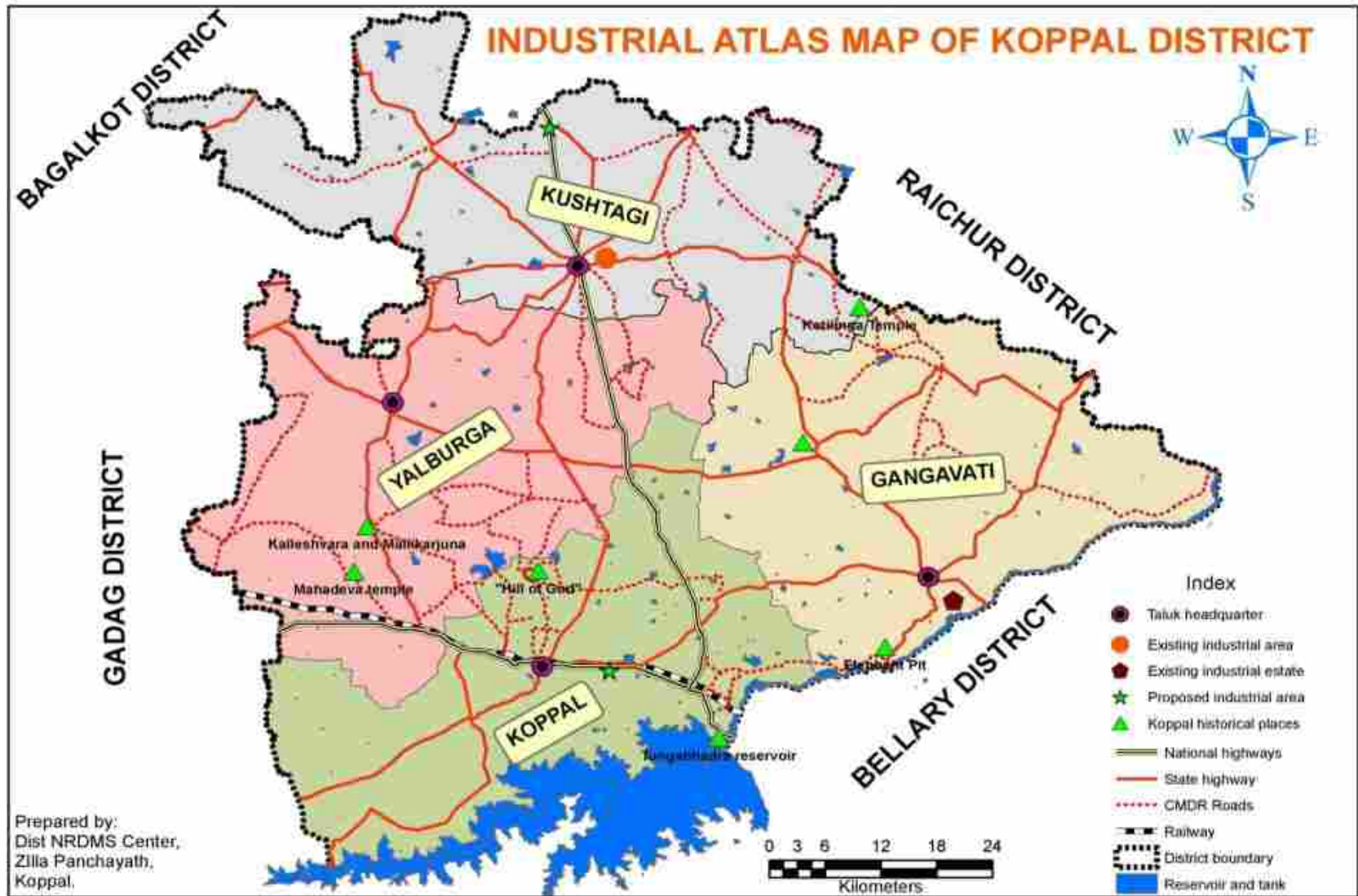
BELLARY DISTRICT

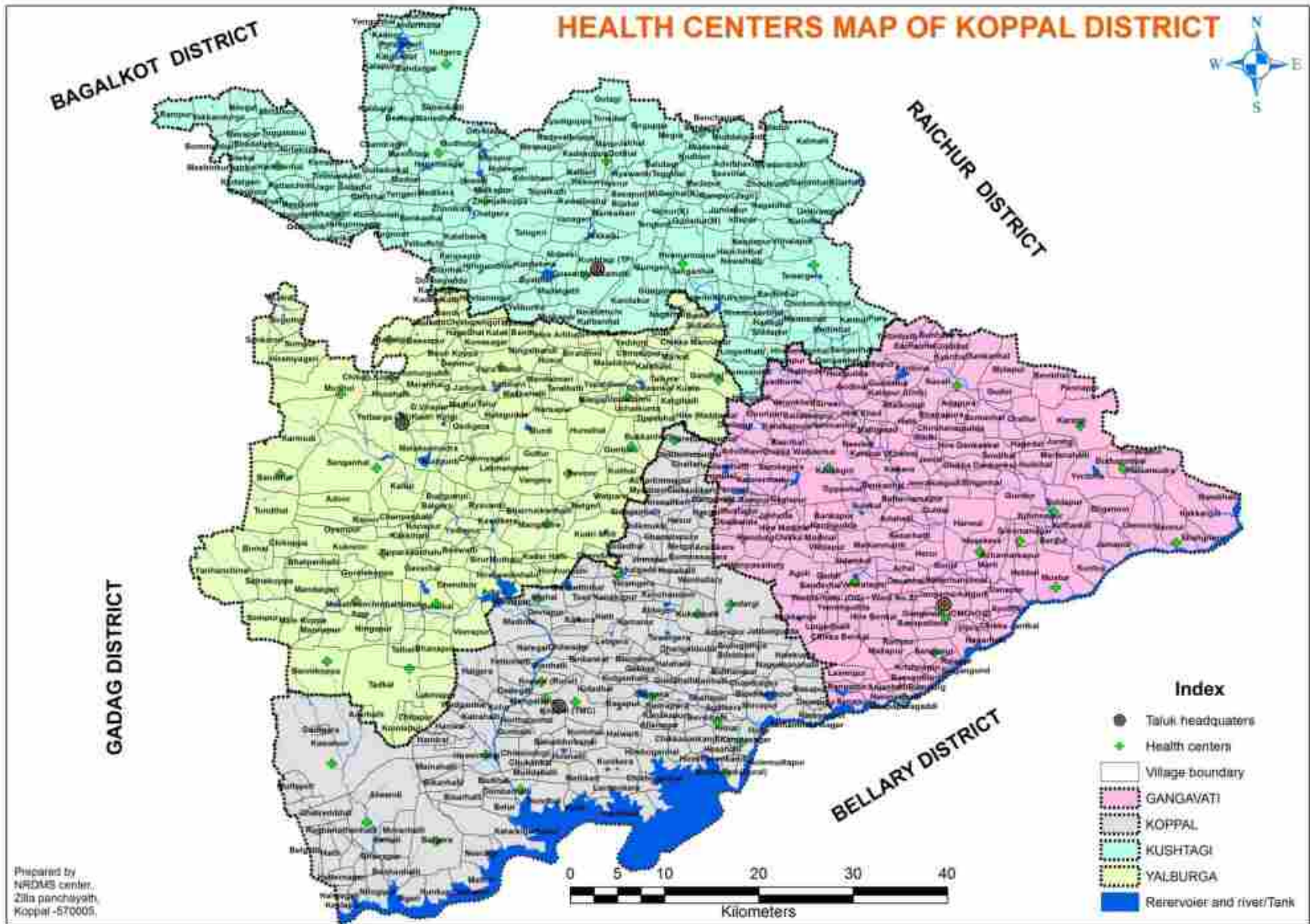
INDEX MAP OF KARNATAKA

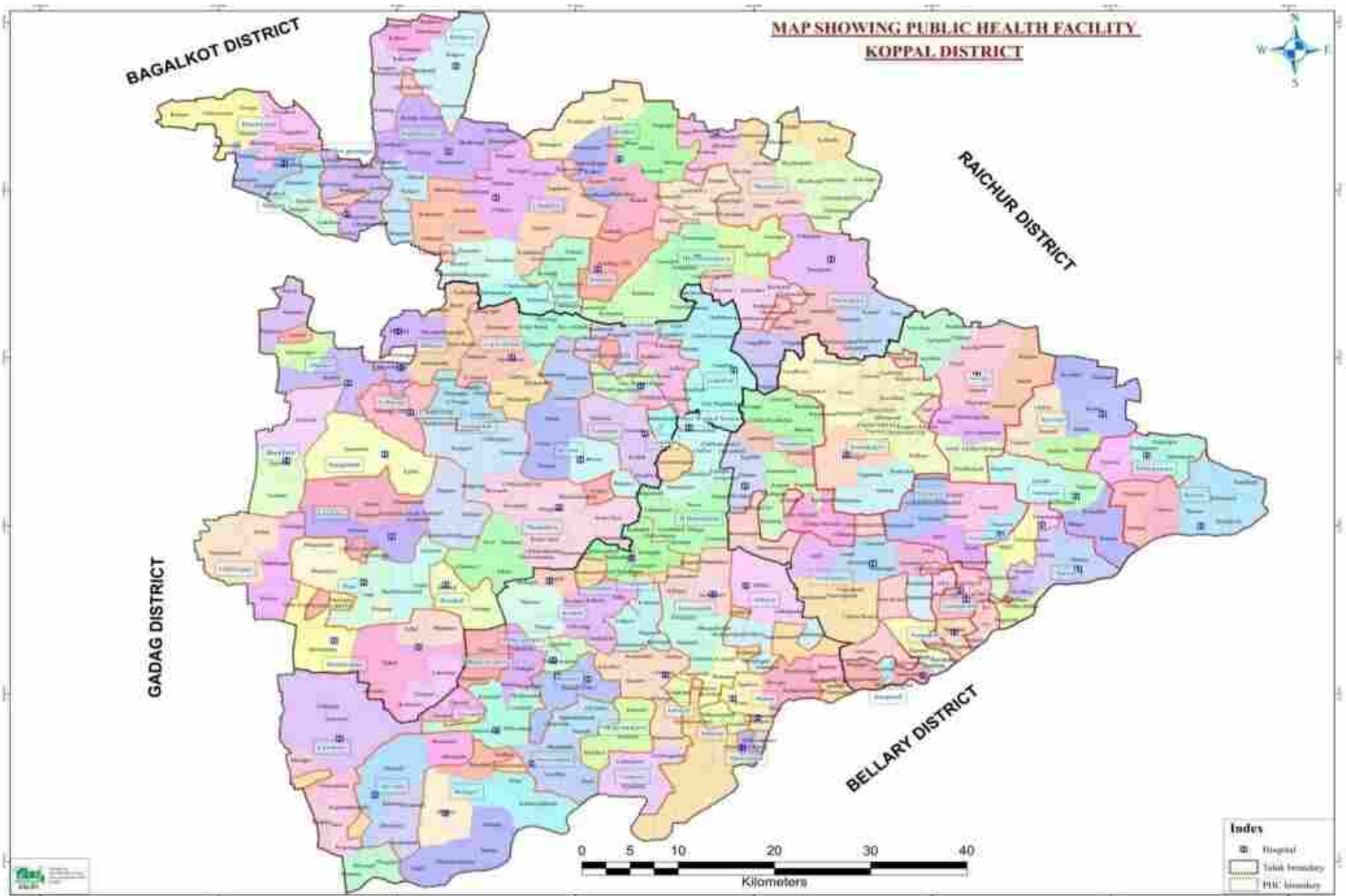


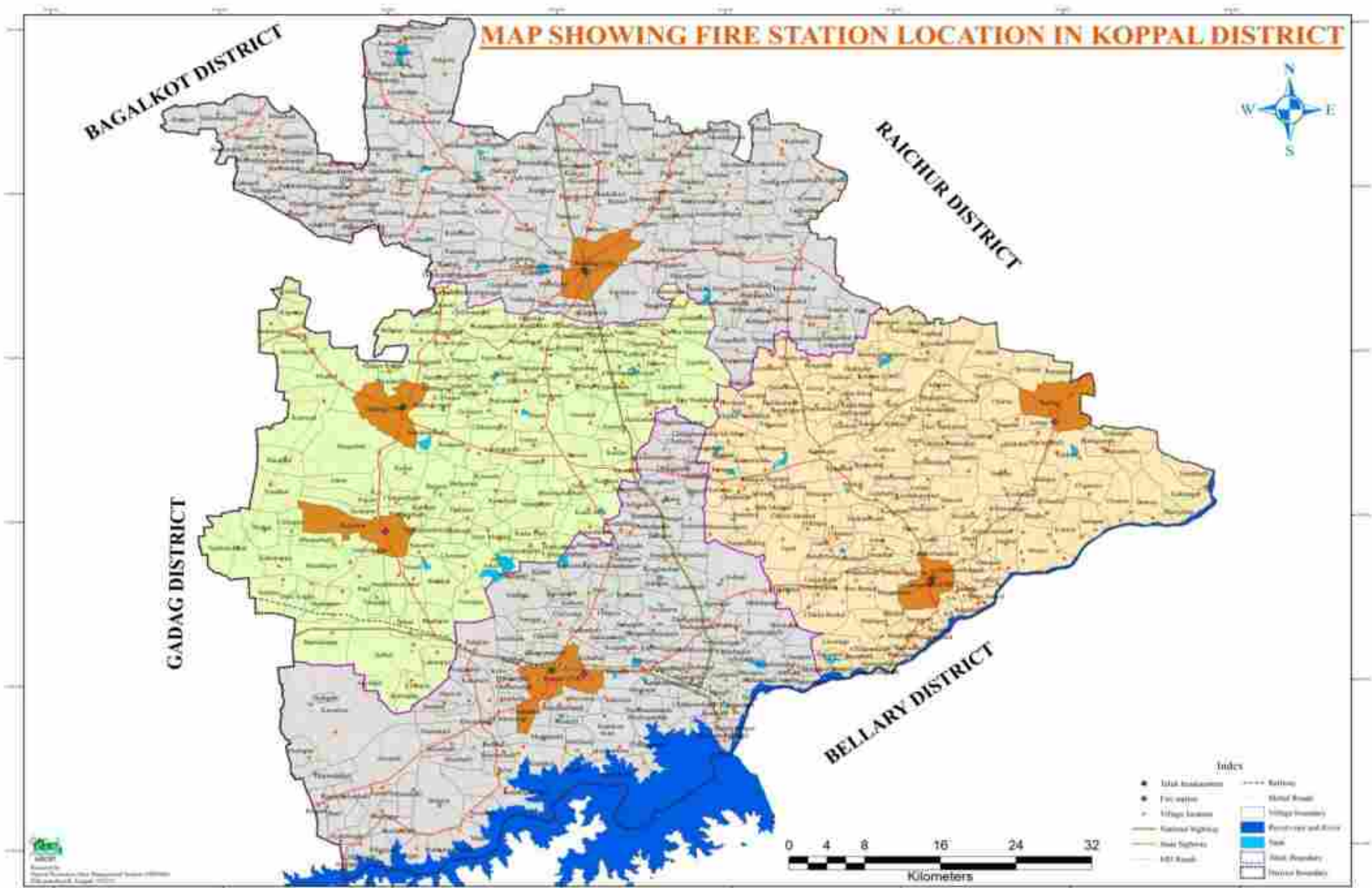
Karnataka State Council for Science and Technology
Indian Institute of Science, Bangalore-560012

Prepared by
Hydrological Resources Data Management System (HRDMS)
DHS (KICST), Koppal - 571002









VETERINARY INSTITUTIONS LOCATION MAP OF KOPPAL DISTRICT

BAGALKOT DISTRICT



Index

- Taluk headquarters
- Veterinary institution
- Village location
- National highway
- State highway
- CMDR Roads
- Railway
- District Boundary
- Reservoir and river
- Village boundary



GADAG DISTRICT

RACHUR DISTRICT

BELLARY DISTRICT

INDEX MAP OF KARNATAKA



KSCST

Karnataka State Council for Science and Technology
Indian Institute of Science Bangalore 560012

Prepared for
Natural Resource Data Management System (NRDMS)
25a, Sarvagalli, Koppal - 577205

