PREFACE

The district disaster management plan, 2019-20 for Bagalkot District has been prepared with the primary purpose to co-ordinate responses to natural or manmade disasters and for capacity building in disaster resilience and crises responses. The Bagalkot District Disaster management plan, 2019-20 presence in concise form of process to involve to collective effort of government department and non-governmental organizations to evolve a culture of prevention, mitigation and efficient response during disasters.

Suggestion for further improvement in terms of contents coverage, etc. for the next publication would highly be appreciated.



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Chapter 1: Introduction

1.1 Rationale/Justification for DDMP

The DDMP will be developed in the following manner:

Assimilating the lessons learnt from past disasters in the District, particularly, series of droughts and floods in the District.

Reviewing the practices adopted in other Districts and States, trying to understand the various systems of preparedness, responses and recovery that have been implemented in various places. Analyzing and prioritizing the common elements of the response and recovery processes in order to have a well-thought and planned response and recovery mechanism for the District. The plan proposed is both flexible and adaptable to take into account past experiences, best practices and make it suitable to the socio-economic and cultural variables of the vulnerable people keeping in mind that they are the prime stakeholders.

Incorporating the disaster management, mainly the element of risk reduction, as the central component of all developmental plans and investment.

1.2 Aims-

The aims of preparing District Disaster Management Plan are -

- a) To ascertain the status of existing resources and facilities available with the various agencies involved in the management of disaster in the district.
- b) Assess their adequacies and short falls if any in providing a multi disaster response.
- c) Suggest institutional strengthening, technology support, up gradation of information system and data management for improving the quality of administrative responses to disaster at the district level and finally.
- d) To evolve DDMP as an effective managerial tool.

1.3 Objectives

In the absence of a defined plan response to a disaster would be arbitrary leading to over emphasis of some actions or other actions, which would be critical. Moreover, due to absence of a defined response structure and responsibilities allocations there would be mismanagement of resources and overlapping of actions among various agencies, which may exacerbate the situation thereby compounding the disaster effect.

A formal planning for managing disaster is therefore necessary to ensure to minimize the hardship. This can be achieved only through: -

- a) Preplanning of proper sequence of response actions.
- b) Allocation of responsibilities to the participating agencies.
- c) Effective management of resources, and
- d) Developing codes and standard operating procedures for smooth coordination between various departments and relief agencies involved.

The objectives of any DDMP should be to localize a disaster and to the maximum extent possible contain it so as to minimize the adverse impact on life, the environment and property.

1.4 Role of District Administration and organizations

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

Role of District Administration

- > 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 or seek the assistance of voluntary organization.

- ➤ If required, set-up mobile first aid centre or temporary health centers in the affected area or in the safe shelters.
- ➤ Visit the scene of the disaster to have first hand information about the rescue or mitigate 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 Home, Govt. of Karnataka and mobilize the help of Army/Navy/Air force or other agencies as required.
- ➤ 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.
- ➤ Psycho Social Support through counseling to the sufferers of Disaster with special emphasis on children, woman, aged and other vulnerable groups.
- > As per needs partial or full shifting villages or areas to be considered under guidance from State Government.
- Any other work based on ground realities and guidance from state level agencies.

1.5 Mandate under chapter IV of the Disaster management plan

As per Section 31 of DDM Act, 2005

District Plan:

- 1) There shall be a plan for disaster management for every district of the state.
- 2) The District Plan shall be prepared by the District Authority, after consultation with the local authorities and having regard to the National Plan and the State Plan, to be approved by the State Authority.
- 3) The District Plan shall include-
- a) The area in the district vulnerable to different forms of disaster;
- b) The measures to be taken, for prevention and mitigation of disaster, by the Department of the Government at the district level and local authorities in the district;
- c) The capacity-building and preparedness measures required to be taken by the Department of the Government at the district level and the local authorities in the district to respond to any threatening disaster situation or disaster;
- d) The response plans and procedures, in the event of a disaster, providing for-
- (i) Allocation of responsibilities to the Department of the Government at the district level and the local authorities in the district:
- (ii) Prompt response to disaster and relief thereof;
- (iii) Procurement of essential resources;

- (iv) establishment of communication links; and
- (v) The dissemination of information to the public.
- 4) The District Plan shall be reviewed and updated annually.
- 5) The copies of the District Plan referred to in sub-sections (2) and (4) shall be made available to the Department of the Government in the District
- 6) The District Authority shall send a copy of the District Plan to the State Authority which shall forward it to the State Government

1.7 Stakeholders and their responsibilities

Sl.	Department	Responsibilities
No	Nodal Officers	
1	DDMA	To look upon the coordination and cooperation of the all the existing department and giving specific instructions to the concern department. He should also mobilize, direct, and co-ordinate the emergency management staffs during emergency.
2	DEOC	The authority 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 Bagalkote District.
3	SDMA	In pursuant with section 14(1) of DM Act 2005, the State has established Karnataka State Disaster Management Authority (KSDMA). The Honourable Chief Minister of Karnataka is the Ex-officio Chairperson of the KSDMA and 8 Cabinet Ministers are members to the Authority.
4	Disaster Management Department	Prompt and effective response to a major emergency or disaster, and emergency relief and recovery, in consonance with the District Disaster Management Plan.
5	NDRF	The Disaster Management Act has statutory provisions for constitution of National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters. Accordingly, in 2006 NDRF was constituted with 8 Battalions. At present, NDRF has strength of 12 Battalions with each Battalion consisting of 1149 personnel. In the beginning, the personnel of NDRF were deployed for routine law and order duties also. In a meeting of the NDMA with the Prime Minister on October 25, 2007, the need of NDRF being made a dedicated force was highlighted and accepted. This led to the notification of NDRF Rules on February 14th, 2008, making NDRF a dedicated force for disaster response related duties, under the unified command of DG NDRF.
6	Police	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.
		Any other works as entrusted and any other work as per needs.
7	Fire and Emergency Department	 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.
8	Civil Defence	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.
9	Home Guards	 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.
10	Health Department	 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 and 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 apprise him of the situation and advise
		him on additional help required from outside agencies.
		➤ Any other work entrusted by the District Administration.
11	PWD	> Help the police to divert traffic away from the scene of accident
		along with all the 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.
12	Dy. Director of	Factory Inspectorate plays an important role during any industrial and
	Factories and	transportation disaster in which there is large-scale release of hazardous
	Boilers	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.
13	Irrigation	At the time of emergency All Ground water and Surface water Schemes
		(both flow & lift) are having Cultivable Command Area up to 2000
		hectares individually are considered as Minor Irrigation Schemes. The
		Minor Irrigation Schemes provide the farmers with controlled and
		timely irrigation, augmenting increase in agricultural production,
		thereby, meeting the growing requirement of population to large extent.
14	HESCOM	Provide necessary arrangements and make to facilitate the available
		resources to the area of emergency. Deploy necessary man force to
		control the situation.
15	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
		The second secon

		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.
1.0	Food and Civil	The DEO/AEO and the board in the European Control December 1
16	Supplies	The DFO/AFO would be based in the Emergency Control Room and assist the District Administration in running the safe shelters and relief centers set up during the disaster.
		Main functions: -
		➤ Will be overall in-charge or 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 their 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.
17	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: -
		➤ On 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.
		>
	Forest	At the emergency of 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 flora and fauna will be destroyed, Hence preventive and fire control measures have been given much importance in the habitat development
	Municipal	➤ Council roles and responsibilities. The council is the governing body
	Council	of the municipal corporation and the custodian of its powers, both
		legislative and administrative. A councilor's job is to work with other council members to set the overall direction of
		the municipality through their role as emergency facilitator.
	PRED	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.
18	Education	The school setting has its known district structure of task forces. These can vary depending on the management structure of school (e.g. Government, Aided, and Public etc), the location, capacity to house students (e.g. in-house boarding/day scholars) and school infrastructure (e.g. transportation facilities, sports and recreation facilities etc).

1.8 How to implement the plan

Under the supervision and direction of District Commissioner the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions. The outright avoidance and adverse impacts of hazards for related disasters need public awareness: The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards. Coordinate with all line departments involved.

As per Section (27) meetings: The district authority shall meet as and when necessary and at such time and place as the Chairperson may think fit.

1.9 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.

1.10 Plan Review and Updation

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: District Profile

2.1 Overview of the District:

Bagalkot a district carved out of Bijapur in 1997 as a separate district. Bagalkot is in the Northern part of Karnataka and surrounded by Bijapur, Belgaum, Raichur, Koppal and Gadag districts. Districts comprises 6 Taluks, 15\ Towns and cities, 18 Hoblies, 623 Villages and 163 Grampanchayats. It is having 6,58,877 Hectares of geographical area. Net area sown is 4,59,387 hectares. Bagalkot is blessed with the flow of 3 rivers, Krishna, Ghataprabha and Malaprabha. B.C.soil is the predominant soil. Important crops are jowar, Sugarcane, Maize, Groundnut, Sunflower, Grams etc along with Horticultural crops.

As per 2011 census district is having 18, 90,826 population. Rural population is 13, 34, 714. Urban population is 5, 56,112 that amount to 29%, which is 3% less than the state average. Density per Sq.Km. is 288, which is lower than both state and country's average.

As regards recent disasters, Flood is the 3rd disaster, which was handled during 2009. First disaster was the outbreak of H1N1 during August 2009. However the same was controlled appropriately.

The Second Natural disaster of drought during August / September 2009. Proper care has been taken to provide adequate food grains and drinking water to people, Fodder and water to animals, seeds and fertilizers for Agricultural activities. Entire situation was under control.

The month of August 2019 caught the people living in the dry and arid regions of North Karnataka. The heavy rainfall and floods in the region between august and September 2019 caused death and massive destruction. This was the first time that North Karnataka received highest rainfall. This caused intense damage in several villages as well as some of the towns in terms of loss of human life, live stocks loss, agricultural and infrastructural loss.

From 29th September up to 3rd October, all the 3 rivers over flooded due to heavy rainfall at catchments areas, normal release of water from reservoirs and incessant and abnormal rainfall in the district. As against 586 mm average annual rainfall, district received 924 mm rainfall during 2009. During the above 5 days district received 299 mm of rainfall which is more than 50% of annual average rainfall. This flood and rain fury in the district has caused great loss. Thousands of people have lost their properties and Houses.

As a Relief, Rehabilitation and Reconstruction measure District Administration with Cooperation from all Departments organizations, People representatives, Officials, Public, donors etc. within and from outside the district, was able to take necessary assistance and performed its function in such a manner that there was no cases of gastroenteritis, no outbreak of epidemics, no distress sale of animals, no distress sale of land and other properties and no migration took place.

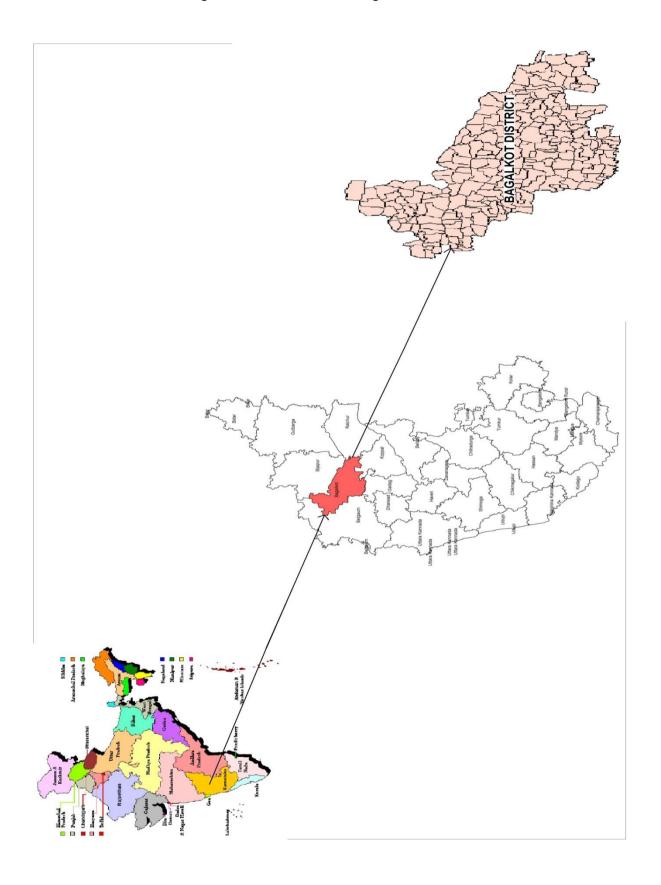
The response of the State Government is particularly important for the simple reason that a strong backing from the Government is essential to work in extraordinary circumstances like

this. There was no constraint of money or sanction and this made the process a lot easier. It is also a lesson well learned to ensure that we need to appreciate the subordinate staff, as they are

the ones who never get a share of the glory, nor the satisfaction. To work in the crisis mode for several months at a stretch is a commendable task. The district administration was blessed with excellent team and without their support the handling of the situation would not have been possible. The district administration recognizes and appreciates their efforts in successfully handling the situation.

This report contains Information pertaining to various organizations/agencies involved, like Revenue, Police, Zilla Panchayat, PWD, Fire, Medical Preparedness etc. in handling any major disaster in the district. And the action needs to be taken in the event of disaster along with the set of procedures to be followed based on norms and guidelines issued both from Government of India& Government of Karnataka, NDMA, SDMA from time to time. Standard operating procedure under the guidance of SDMA is incorporated. Further specific settings related Disaster Management information along with mock drill guidelines is also included in this plan.

The support extended by State Disaster Management Authority and its full time member and others is praiseworthy in bringing out this plan. I would like to appreciate the coordination effort put in by the officers from different departments in the district for their dedication in bringing out this plan within a short period



2.1.1 Location

Taluks/ GPs

Sl.	Name of the	Name of the Taluk	Hoblies	VA circles	Numbers of GPs	
No	Sub-	Sub-				
	Division					
1	Bagalkote	Bagalkot	3	30	30	
		Badami	4	48	42	
		Hunagund	4	50	35	
2	Jamakhandi	Jamakhandi Jamakhandi		42	38	
		Mudhol		42	29	
	Bilagi		2	25	24	
		Total	18	237	198	

2.1.2 District Disaster Management Authority

.Sl.n	Name/ Address with Contact Numbers (Members)	Role in DDMA		
1	Deputy Commissioner,Bagalkot	Chairman		
2	PresidentZilla panchayat , Bagalkot	Co-chairperson		
3	Chief Executive Officer, Zp Bagalkot	Member		
4	Superintendent Of Police, Bagalkot	Member		
5	Commistioner of city corporation	Member		
6	District Health Officer, Bagalkot	Member		
7	Addl Deputy commitioner	Chief Executive Officer		

2.1.3 District Crisis Management Committee

Deputy Commissioner, Bagalkot District	: Chairman
2. ADC, D.C. Office , Bagalkot.	: Emergency Officer
3. Superintendent of Police, Bagalkot	: Member
4. District Commandant, Home guards and Civil	: Member
Defence, Bagalkot	
5. Divisional Fire Officer, Bagalkot	: Member
6. District Health Officer, Bagalkot	: Member
7. Regional Environmental Officer, Bagalkot	: Member

8. Commissioner, CMC, Bagalkot	: Member
9. Regional transport Officer, Bagalkot	: Member
10. Information and Publicity Officer, Bagalkot	: Member
11. Joint Director of Industries and Commerce, Bagalkot	: Member
12. Joint Director of Agriculture, Bagalkot	: Member
13. Deputy Director, Animal Husbandry & Veterinary	: Member
Services, Bagalkot	
14. Assistant Commissioner, Bagalkot/Jamkhandi	: Member
15. Senior Inspector of Factories, Bagalkot	: Member Secretary

2.2.1 Population

Sl.	Name of the District	SC	ST	GEN+OB	TOTAL
No.	Hq/Taluk/Municipality				
1	Bagalkot	47174	18230	219710	285114
2	Badami	46677	32308	251875	330860
3	Hunagund	54704	11677	254957	321338
4	Jamakhandi	80138	5866	384172	470176
5	Mudhol	60275	12961	248734	321970
6	Bilagi	30181	16161	113952	160294
	Total	319149	97203	1473400	1889752

2.2.2 Type of Workers

Sl no	Types of workers	Male	Female	Total
1	Marginal workers	56165	85509	141674
2	Non workers	438536	633135	1071671
3	Cultivators	149478	40721	196199
4	Agriculture laborers	128333	174910	303243
5	Workers in household industry	27888	16909	44797
6	Other workers	205876	67966	273842

2.2.3 Literacy Rate in Percentage:

Sl no	Taluk	Rural			Urban	Urban		Total			Rank
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	Badami	77.69	51.55	64.69	87.95	70.20	79.05	80.34	56.43	68.43	3
2	Bagalkot	79.15	53.65	66.36	91.73	79.04	85.40	84.19	63.76	73.97	1
3	Bilagi	75.18	52.13	63.59	84.79	68.62	76.54	76.25	54.01	65.05	6
4	Hungund	79.93	51.28	65.64	86.68	67.53	77.13	82.55	57.60	70.11	2
5	Jamakhandi	72.40	54.01	63.30	83.34	68.01	75.63	76.41	59.24	67.86	4
6	Mudhol	72.34	52.42	62.34	84.84	70.22	77.51	75.83	57.38	66.57	5
	Total	75.77	52.58	64.20	86.55	70.65	78.58	79.23	58.40	68.82	23

\2.4.1 Climate and Rainfall:

S.No.	Taluk	Normal Rainfall (in	Actual Rainfall (in	%DEP
		mm)	mm) 2017	
1	Badami	607	656	8
2	Bagalkot	521	555	6
3	Bilagi	585	521	-11
4	Hungund	625	584	-7
5	Jamakhandi	538	652	21
6	Mudhol	507	660	30
	Total	569	611	7

2.5 Land use pattern 2017-18 (in Hectors) (Agriculture, Horticulture, sericulture)

	2.5 Land use pattern 2017 to (in frectors) (rightenture, frontienture, serieuture)									
S		Geogra	Forest	Land not a	vailable for cu	Other Uncultivated Land				
	Taluk	phical								
N		area		Land out	Barren &	Total	Cultiva	Permanent	Tree	total
О				to non	uncultivabl		ble	pasture	and	
				agree	e land		waste		grovers	
				users						
1	Badami	139420	31263	4791	8523	13314	421	986	20	1427
2	Bagalkot	93627	11611	3528	2732	6260	192	55	17	264

3	Bilagi	78169	11761	4331	4517	8848	45	107	15	167
4	Hunagund	135358	9792	9558	2541	12099	316	839	14	1169
5	Jamakhandi	116853	11410	4389	3162	7551	1061	578	193	1832
6	Mudhol	95450	5289	3256	3335	6591	0	864	15	879
	Total	658877	81126	29853	24810	54663	2035	3429	274	5738

2.6 Forests

S.	Name of the Taluk	Reserved	Protected	Unclassified	Village	Private
No		Forests	Forests	Forests	Forests	Forests
1	Bagalkot	11482.204	-	189.610	-	-
2	Badami	31095.163	-	-	-	-
3	Hunagund	9652.864	-	-	-	-
4	Jamakhandi	10821.226	-	231.550	-	-
5	Mudhol	4148.321	-	1548.310	-	-
6	Bilagi	11702.594	-	-	-	-
	Total	78902.372	-	1969.470	-	-

2.7 Rainfall: Rain Recording Stations:

Sl.	Name of the Taluk	Rain Recording Stations	Telephone
No			Numbers
1	Bagalkot	Bagalkot Bagalkot APMC, Bevoor,	6363002055
		Kaladagi, Ramapur.	
2	Badami	Badami, Kerur, Kulageri, Belur,	9880022162
3	Guledgudda	Guledgudda, Katageri,	9880022162
4	Hunagund	Hunagund, Kudalsangam, Amingad, Sulibhavi	9108094473
5	Ilkal	Ilkal, Karadi, kandagal, Gudur s c	9108094473
6	Jamakhandi	Jamakhandi, Madharkhandi,	914867190
7	Rabakavi	Rabakavi, Mahalingapur	9740634238
8	Mudhol	Mudhol, Lokapur	9740343637
9	Bilagi	Bilagi, Aminagad, Galagali.	7259444680

2.8 Livelihood Details:

Name of the	Agricultural labour	Other labour		
Taluk/Municipality				
	10001	22717		
Badami	63806	88515		
Bagalkot	39989	78086		
Bilagi	37677	37291		

Hungund	46545	94349
Jamakhandi	60055	129416
Mudhol	55171	87181
Total	303243	514838

2.9 Drinking Water Sources:

S. No	Name of the Taluk	Bore wells	Piped water supply schemes	Mini water supply scheme
1	Bagalkot	767	141	182
2	Badami	221	298	91
3	Hunagund	875	257	120
4	Jamakhandi	1018	175	279
5	Mudhol	617	274	204
6	Bilagi	260	98	221
Total		3758	1243	1097

2.10 Crop Pattern:

Sl.No.	Name of the Taluk	Type of Crops	Area Cultivated in (Hect.)
1	Badami	Cereals	50280
		Pulses	33020
		Oilseeds	26358
		Commercial crops	8247
		Total	117905
2	Bagalkot	Cereals	27594
		Pulses	32641
		Oilseeds	10750
		Commercial crops	6125
		Total	77110
3	Bilagi	Cereals	18615
		Pulses	4805
		Oilseeds	9055
		Commercial crops	17500
		Total	49975
4	Hungund	Cereals	40290
		Pulses	88185
		Oilseeds	29049
		Commercial crops	3528
		Total	161052
5	Jamakhandi	Cereals	37200
		Pulses	12062
1		Oilseeds	3505

		Commercial crops	46580
		Total	99347
6	Mudhol	Cereals	31625
		Pulses	9348
		Oilseeds	3066
		Commercial crops	43525
		Total	87564

2.12 River Carrying Capacity:

Sl.No.	Name of the Taluk/GPs	Gauge Station	Zero level in (Mts.)	Danger Level (in Mts.)

2.13 Irrigation Facilities and Sources: (Gross and Net area irrigated under different sources 2017-18)

Sl.	Taluk	Canals				Tanks			Wells		
no		Lenth in KMS	Goss irigated area	Net area irrigated	Nos	Gross irrigator area	Net Ara irrigated	Nos	Gross irrigated Area	Net area irrigated	
1	Badami	40	0	0	15	0	0	466	136	132	
2	Bagalkot	28	3658	3658	4	0	0	421	94	79	
3	Bilagi	20	4801	4801	3	0	0	56	97	89	
4	Hungund	39	6248	6248	12	0	0	608	446	404	
5	Jamakhandi	22	11350	11350	8	0	0	318	2655	2559	
6	Mudhol	40	9720	9720	2	0	0	216	295	275	
	Total	189	35777	35777	44	0	0	2085	3723	3538	

Sl.	Taluk	r	Tube wells	S	L	ift irrigat	ion	Other s	ources	Total		
no		Nos	Goss irigated area	Net area irrigated	Nos	Gross irrigator area	Net Ara irrigated	Gross irrigated Area	Net area irrigated	Gross irrigated Area	Net area irrigated	
1	Badami	4739	31194	27523	6	0	0	14208	11603	45538	39258	
2	Bagalkot	5374	22852	17492	1	703	648	10761	7776	38068	29653	
3	Bilagi	4985	18815	16810	1	414	364	13690	11837	37817	33901	
4	Hungund	1662	11618	9495	4	250	250	10907	8391	29469	24788	
5	Jamakhandi	7981	29188	27819	6	6400	6400	30156	27671	79749	75799	
6	Mudhol	7608	28276	25892	1	0	0	31523	28002	69814	63889	
	Total	32349	141943	125031	19	7767	7662	111245	95280	300455	267288	

2.14Animal Husabandry Information: (in nos)

Sl.no	Taluk	cattles					sheeps				
			1	ı	ı			1	Crossed	1	
		Indigenous	ex	Crossed	Total	Buffaloe	Indigeno	exotic	Total		
			oti	breed		S	us		breed		
			С								
1	Badami	53004	0	5647	58651	33776	241871	0	14	241885	
2	Bagalkot	28155	0	1443	29598	20058	94060	0	0	94060	
3	Bilagi	25576	0	2552	28128	21887	61009	0	76	61085	
4	Hungund	42247	0	833	43080	26005	201408	0	5	201413	
5	Jamakhandi	48539	0	19352	67891	79245	61504	0	4	61508	
6	Mudhol	39276	0	12791	52067	53831	73649	0	0	73649	
	Total	236797	0	42618	279415	234802	733501	0	99	733600	

2.15 Educational Information

SI. No	Name of the District Hq/Taluk/ Municipality	Prir	mary Sch	ools	I	High scho	ols	PU C	olleges	Degree Colleges		
	District	govt	Aided	private	govt	Aided	private	govt	private	govt	private	
1	Bagalkot	1300	109	436	185	124	121	43	96	14	38	

2.16 Anganwadi center information year:2017-18(in Nos)

Taluk	Own	School	Others	Total	No of	No of
	building	building			Anganwadi	Anganwadi
					Teachers	Helpers
Badami	282	13	108	403	403	403
Bagalkot	212	34	81	327	327	326
Bilagi	153	5	50	208	208	182
Hungund	226	22	150	398	398	391
Jamakhandi	289	17	221	527	527	527
Mudhol	228	23	107	358	358	335
Total	1390	114	717	2221	2221	2164

2.17 Health Information

Sl.No	Name of the Taluk	СНС	PHC	Civil Hospital	Specialty	Hospital
					Govt	Private
1	Bagalkot	1	6		1	122
2	Badami	2	9		1	
3	Hunagund	2	13	District hospital Bagalkot	1	
4	Bilagi	1	2		1	
5	Mudhol	1	9		1	
6	Jamakhandi	1	9		1	

1. Primary Health Centers	48
2. Clinics	190
3. Nursing Homes/ Hospitals (with limited facilities)	167
4. Government General Hospitals	6
5. Specialized Government Hospitals	6
6. Private Major General Hospitals	12
7. ESI Hospitals	2
8. Public Sector Hospitals	2
9. Medical College Hospitals Private	1
10.Total No beds available in Government Hospital	1158
11. Beds reserved for Disaster management in Government	186
Hospital	
12.Total No beds available in Private Hospital	2836
13. Beds reserved for Disaster management in Private Hospital	207

14. Total No. beds available in the district	3994
15.Total Number of Orthopedic Surgeons in District	8
16.Total Number of General Surgeons in District	40
17. Total Number of Physicians in District	21
18.Total Number of Gynecologists in District	38
19. Total No. of skin specialists in the district	2
20. Total no. psychiatrists in the district	2

Information of Health facility in Government setup

1 SI.No.	Name of the Hospital	Beds	ICU	Ventilator	Ambulance	Beds Reserved	Pharmacy	Lab	X-ray& Ultrasound	Specialization	Nodal Doctor Contact No	Ambulance Contact No.
1	BAGALKOT T	'ALU	KA									
	District Hospital, Bagalkot	25 0	3	1	2	25	Y	Y	Yes	Surgeon, Ortho, Pediatrician, Gynecologi st	Dr. Narahatti 236260, 236261	94498 43160
	50Bedded GH Old Bagalkot	50	0	0	1	4	Y	Y	X-ray	Surgeon, Dermatolog ist	Dr Prema.Patil	94496 12347
2	BILAGI TAL	UKA										
	CHC Bilagi	10 0	0	0	1	10	Y	Y	X-ray	Gynecologi st	Dr. Jayashree Emmi 275421	94805 98352
	CHC Girisagar	30	0	0	0	5	Y	Y	X-ray		Dr Dayanand 268601	99721 45295
3	BADAMI TAI	UKA	\	1		1				1	1	
	CHC Badami	10	0	0	1	10	Y	Y	X-ray	Gynecologi	Dr.Kavita	94805

		0								st	2 220111	98351
	CHC Kerur	30	0	0	1	3	Y	Y	X-ray		Dr.Shashirek ha and Basavraj	
	CHC Guledagudda	30	0	0	1	3	Y	Y	X-ray	Gynecologi st, Anesthetist Pediatrician,	Dr Sharada. Hanchinal	
4	MUDHOL TA	LUK	A		···	•	•	•			,	
	CHC Mudhol	50	0	0	1	5	Y	Y	X-ray	Gynecologi st, Anesthetist, Pediatrician,	Dr Saravagol 280038	94805 98355
	CHC Mahalingapur	30	0	0	1	3	Y	Y	X-ray	Gynecologi st, Anesthetist Pediatrician,	Dr Chippalakatti 271003	
5	JAMAKHANI	 DI TA	LU	KA								
	GH Jamakhandi	10 0	0	0	1	10	Y	Y	YES	Gynecologi st Anesthetist, Pediatrician,	Dr Desai ☎220066	94805 98354
	CHC Rabakavi Banahatti	30	0	0	1	3	Y	Y	X-ray	Gynecologi st Anesthetist, Pediatrician,	Dr Nadaf 230238	
6	HUNAGUND	TAL	UKA	\ \	<u> </u>	<u> </u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>

CHC	10	0	0	1	10	Y	Y	X-ray	Gynecologi	Dr	94805
Hunagund	0								st	S.D.Avaradi	98353
									Surgeon	2 260217	
GH ILKAL	50	0	0	1	5	Y	Y	X-ray	Gynecologi	Dr Kiragi	
									st Surgeon, Anesthetists	2 70444	
Total	95 0				96						
]	Hunagund GH ILKAL	Hunagund 0 GH ILKAL 50 Total 95	Hunagund 0 GH ILKAL 50 0 Total 95	Hunagund 0 GH ILKAL 50 0 0 Total 95	Hunagund 0	Hunagund 0 st Surgeon GH ILKAL 50 0 0 1 5 Y Y X-ray Gynecologi st Surgeon, Anesthetists Total 95 96	Hunagund 0 st S.D.Avaradi GH ILKAL 50 0 0 1 5 Y Y X-ray Gynecologi st Dr Kiragi Surgeon, Anesthetists Surgeon, Anesthetists Anesthetists 270444				

Information of Facilities available in Private Hospitals at Bagalkot District

SI.No.	Name of the Hospital	Beds	ICU	Ventilator	Ambulance	Beds	Reserved	Pharmacy		Scanning	Specializatio n	Doctor Contact no
	BAGALKOT TALUKA											
1	Kerudi Hospital	120	14	3	1	10		Y	Y	Y	All Specialization available	Dr .Kerudi
2	Daddennavar Hospital	50	4		1	5		Y	Y	Y	All Specialization available	Dr Daddennavar ☎221888
3	Patil Medicare	50	10		0	5		Y	Y	Y	Physician & Surgeon	Dr S L Patil
4	Dhanush Children Hospital	50	10		0	5		Y	Y	Y	All Specialization available	Dr.D H Patil
5	Baragi Hospital	50	6		0	5		Y	Y		Gynecologis t & Surgeon	Dr.G S Baragi

6	Sanjeevini Children & Eye Hospital	30	12		0	5	Y	Y		Pediatrician & Ophthalmol ogist	Dr S S Patil 221121
7	Shanti Children Hospital	75	24		0	5	Y	Y		Pediatrician & Surgeon	Dr.R.T.Patil
8	Bhavi Hospital	50					Y	Y			Dr.B K Bhavi ☎ 226166
9	HSK Hospital	750	30	2 0	2	50	Y	Y	Y	All Specialisation available	2 235400/401
	BILAGI TALUK										
10	Sai Nursing Home	20	0	0	0	4	Y	Y	Y	Gynecologis t & Pediatrician	Dr Jayashree 9341098733
	JAMAKHANDI						Y	Y			
11	KLE's Hospital	100	Y	Y	1	10	Y	Y	Y	all specialist are available	Dr. Kokatanur 223099 223699
12	Dr.Tungal Nursing Home	30	-	-	-	4	Y	Y	Y	OBG	Dr. Tungal 9480263325
13	Dr.Sharda Nursing Home	25	-	-	-	4	Y	Y	Y	MD. DGO	Dr Sharad 9480263325
14	Dr.Mounasha Nursing Home	13	-	-	-	2	Y	Y	Y	DGO	9448120466
15	Dr.Abhinav Nursing Home		-	-	-	2	Y	Y			9448776896
16	Dr.Krishna Nursing Home	10	-	Y	-	2	Y	Y	Y	DGO	9448646192
19	Dr.Devaraddi Hospital Nursing Home	18	Y	-	-	-	Y	Y	Y	DGO	Dr Devaraddi

											9448960150
20	Dr.Abhinava Nursing Home		-	-	-	-	Y	Y		MS	9448776896
21	Dr.Shettar Hospital	21		-	-	4	Y	Y	Y	D.Ortho	Dr Shettar
											9448103212
22	Dr. partnalli Nursing Home	25	-	-	-	4	Y	Y	Y	D.Ortho	Dr Patnalli
											9448103212
23	Dr. Thonshal Nursing Home	15	-	-	-	3	Y	Y	Y	MS,GS	Dr.Tonshyal
											9448103212
24	Dr. Daddi Hospital	20	Y	-	-	4	Y	Y	Y	MBBS, MD	Dr.Daddi
											9448118335
25	Dr. Kadlevaddi	40	Y	-	-	6	Y	Y	Y	MBBS, MS	Dr. Kadlewad
	Hospital										9845412068
27	Dr. Benakatti Hospital	30	-	-	-	-	Y	Y	Y	MBBS	Dr.Benakatti
										DCH	8480263322
29	Dr. krishna Nymagoud	20	-	-	-	4	Y	Y	N	MBBS	Dr.Nyamagond
	Hospital									DOMS	9448113023
30	Dr.Shobha kulkarni Hospital	25	-	-	-	31	N	Y	N	MBBS	Dr Kulkarni
31	Dr.Baddur Nursing Home	30	-	-	-	6	Y	Y	Y	MBBS MS	Dr Baddur 9845512064
33	Dr.Ashakiran Nursing	20	-	-	-	4	Y	Y	Y	MBBS	Dr Patil
	Home									DGO	9448157594
34	Dr.Nadaf Nursing Home	30	-	-	-	6	Y	Y	Y	MBBS DGO	Dr Nadaf
	Home									טטט	9448587556
35	Dr.Chitargi Nursing	20	Y	Y	-	4	Y	Y	Y	MBBS MD	Dr.Chittaragi
	Home										9448228648
36	Dr.Kadashideshwar	25	-	-	-	4	Y	Y	Y	MBBS	9739134981

	Hospital											
37	Dr.Deshapande Hospital	10	-	-	-	2		Y	Y	N	MBBS DGO	DrDeshpande 255161
38	Dr.Padma Nursing Home	20	-	-	-	-		Y	Y	Y	MBBS MD	Dr Padma
49	Dr. Yashodha Krishna Hospital	35	-	-	-	-		Y	Y	Y	MD. DGO	Dr Pujar ☎ 232266
40	Dr.Srinivas Nursing Home	30	Y	-	-	6		Y	Y	Y	MD. DGO	Dr Arashingodi 9945308829
HUN	GUND TALUKA			<u>I</u>	1	<u> </u>					L	l
41	Akki Nursing Home Ilkal	50	5		1	0	4	Y	Y	Y	Orthopedici an Gynaec & Pediatrician	Dr Akki 9449144522
42	Kakhandki Nursing Home Ilkal	20	0	(0	0	2	Y	Y	Y	Gynecologis t	Dr Kakhandki 9448305437
43	Kathari Nursing Home	30	0	•	0	0	3	Y	Y	Y	Gynecologis t	Dr.kathari 9448003283
44	Shivakrupa Hospital Ilkal	20	4	•	0	0	2	Y	Y	Y	Physician & Gynecologis t	Dr Kadapatti 9448129281
45	JB Hospital Ilkal	20	0	(0	0	10	Y	Y		General Surgeon	Dr Jagadish. B 9448021588
46	VM Ayush College & Hospital Ilkal	100	0		0	1	10	Y	Y	Y	Both Ayush &Allopathic Visiting Consultant	271401
47	Lakshmi Venkateshwar Hospital Hungund	10	0		0	0	1	Y	Y	Y	Gynecologis t	Dr Vasanad 9448960217
	BADAMI TALUKA											

48	Venkateshwar Hospital Badami	50	4	0	0	4	Y	Y	Y	Gynecologis t, Physician, Surgeon	Dr.Ugalawat 9448655944
49	Karudagimath Hospital	50	4	0	0	4	Y	Y	Y	Gynecologis t, Physician, Surgeon	9449822567
50	Banashankari Hospital Guledagudd	20	0	0	0	2	Y	Y	Y	Gynecologis t	Dr Bhantnur 9845633111
51	Kyalkond Nursing Home Badami	15	0	0	0	4	Y	Y	Y	Gynecologis t	Dr.Kyalakond 9448644224
52	Soni Hospital Guledgudd	15	0	0	0	2	Y	Y	Y	Physician	250893
53	Rathi Hospital Guledgudd	15	0	0	0	4	Y	Y	Y	Physician	Dr Rathi 250753
	MUDHOL TALUKA						Y				
54	Naik' s Nursing Home(Dr.V.N.Naik. M.D.) Mudhol	15	2	0	0	2	Y	Y	Y	M.D (Physician)	Dr.Naik 9448120464 ☎281460
55	Talathi Nursing Home Mudhol	20	4	1	0	2	Y	Y	Y	Physician	Dr Talathi 9448193337 ☎283337
56	Kubsad Nursing Home Mudhol	40	4	1	0	4	Y	Y	Y	Surgeon	Dr Kubsad 281666
57	Chetana Nursing Home Mudhol	20	2	1	0	2	Y	Y	Y	Gynecologis t ENT Surgeon	Dr kakaraddi 282773
58	Dr Basaraddi Nursing home Mudhol	10	1	0	1	1	Y	Y	Y	Physician	Dr. Basareddi

59	Sri Sai Nursing Home ortho Mudhol Dr.Udyakumar Naik	100	6	0	0	10	Y	Y	Y	Orthopedic an & Anesthetist	Dr.Uday Naik 282720
60	Hosur Nursing Home Mudhol	24	2	1	0	3	Y	Y	Y	Obesitician	Dr G B Hosur ☎ 283535
61	Dr. Honavad Hosptil Mudhol	18	2	1	0	2	Y	Y	Y	Gynecologis t	Dr.Honnwad 283588
62	Dr. Ramesh. Patil Nursing Home	10	1	0	0	1	Y	Y	Y	Orthopedic an	Dr. Patil ☎ 280818
63	Dr. Sanjay Naik Nursing Home Mudhol	40	12	1	0	4	Y	Y	Y	Pediatrician	Dr.S V Naik ☎ 283090
64	Dr. Kamakeri Nursing Home Mudhol	15	3	1	0	2	Y	Y	Y	Pediatrician	Dr.Kamakeri.
65	Dhanvantari Nursing Home Mudhol. Dr. Chippalakatti	10	1	0	0	1	Y	Y	Y	Physician	Dr. Chippalakatti ☎280252
66	Dr. Inamdar. Nursing Home Mudhol	10	1	0	0	1	Y	Y	Y	Physician	Dr.Inamadar 9341571201
67	Dr. Hosour. Nursing Home Mudhol	10	0	0	0	1	Y	Y	Y	Physician	Dr. Hosur ☎ 280275
68	Shrinivas Nursing Home Mahalingapur	20	2	0	0	1	Y	Y	Y	Physician	2 70494
69	Dr. Andani Nursing Home Mahalingapur	25	4	0	0	3	Y	Y	Y	Physician	Dr Andani 270669
70	Aadarsh Nursing Home Mahalingapur	6	0	0	0	1	Y	Y	Y	Physician	☎ 270604
71	Dr.Belagali	35	3	1	0	4	Y	Y	Y	Physician	Dr Belagali

	Nursing Home Mahalingapur										2 70005
72	Dr.Gunda Nursing Home Mahalingapur	16	3	0	0	2	Y	Y	Y	Physician	Dr. Gunda ☎ 270557
73	Dr. Aavradhi Nursing Home Mahalingapur		0	0	0	0	Y	Y	Y	General+ Maternity	Dr Avaradhi
74	Dr.Hanchinal Anupama Nursing Home Mahalingapur		0	0	0	2	Y	Y	Y	MD Physician	2 70365
75	Dr.Kakarddi Nursing Home Mahalingapur	30	5	1	1	2	Y	Y	Y	MD Physician	Dr. Kakareddi ☎322140

In Brief Health facilities in Private Hospitals.

1.	Total Number of Beds Available -	2836
2.	Beds Reserved for disaster Management	207
3.	ICU available in 38 hospital	185 beds
4.	Ventilator available in 16 hospital	33
5.	Total No. of available ambulances	08
6.	Total No. of available Orthopaedicians	07
7.	Total No. of available General Surgeons	36
8.	Total No. of available Gynecologists	28
9.	Total No. of psychiatrists	02
10	Total No. of Skin specialists	02

PHC, CHC and District Hospital Details

No.	Name of health facility	Type of facility	Contact Numbers	Functioning (fully, partially not at all	Total beds	Beds Reserved for disaster Management
1.	Bevoor	PHC	(256151	Functioning	6	2

2.	Rampur	PHC	(250053)	Functioning	6	2
3.	Kaladagi	PHC	(\$\mathbb{Z}\$240136)	Functioning	6	2
4.	Shirur	PHC	(2 253066)	Functioning	6	2
5.	Sutagundar	PHC	(\$\mathbb{Z}255044)\$	Functioning	6	2
6.	Bennur	PHC		Functioning	6	2
7.	50Bedded Hospital, Bgk	GH	222950	Functioning	50	5
8.	Halagali	PHC	(\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mtx\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Functioning	6	2
9.	Malali	PHC	(\$\mathbb{\textit{284288}}\$)	Functioning	6	2
10.	Belagali	PHC	(270493)	Functioning	6	2
11.	Metagudda	PHC	(244066)	Functioning	6	2
12.	Kasabajambagi	PHC	(247103)	Functioning	6	2
13.	Lokapur	PHC	(240161)	Functioning	6	2
14.	Uttur	PHC	(\$\mathbb{\mathbb{\omega}}277076)\$	Functioning	6	2
15.	Yadahalli	PHC		Functioning	6	2
16.	Mahalingapur	СНС	(\$\mathbb{Z}\$271003)	Functioning	30	5
17.	Mudhol	ТН	(\$\mathbb{\text{280038}}\$)	Functioning	30	5
18.	Kundaragi	PHC	(\$\mathbb{\mathbb{\omega}}271249)\$	Functioning	6	2
19.	Galagali	PHC	(269141)	Functioning	6	2
20.	Bilagi	PHC	(\$\mathbb{\mathbb{P}}275421)\$	Functioning	100	10
21.	Girisagar	PHC	(268601)	Functioning	6	2
22.	Hireshinganautti	PHC	(\$\mathbb{\tilde{\pi}}283004)\$	Functioning	6	2
23.	Gudur	PHC	(\$\mathbb{\tilde{\pi}}285104)	Functioning	6	2
24.	Chittaragi	PHC	(\$\mathbb{\tilde{\pi}}284122)\$	Functioning	6	2
25.	Marol	PHC	(\$\mathbb{\mathbb{Z}}226028)\$	Functioning	6	2
26.	Kudalsangam	PHC	(Time)	Functioning	6	2

			268133)			
27.	Aihole	PHC	(\mathbb{\mathbb{R}}284513)	Eunotioning	6	2
21.	Alliole	PHC	(204313)	Functioning	0	2
28.	Sulebhavi	PHC	(\$\mathbb{E}280233)	Functioning	6	2
29.	Dhannur	PHC	(\$\mathbb{\mathbb{P}}276230)\$	Functioning	6	2
30.	Havaragi	PHC	(276127)	Functioning	6	2
31.	Karadi	PHC	(265054)	Functioning	6	2
32.	Nagur	PHC	(\$\mathbb{\mathbb{C}}261354)\$	Functioning	6	2
33.	Kamatagi	PHC	(\$\mathbb{Z}287774)	Functioning	6	2
34.	Aminagad	PHC	(\$\mathbb{T}280243)\$	Functioning	6	2
35.	Kandagall	PHC	(267170)	Functioning	6	2
36.	Hunagund	TH	(260217)	Functioning	100	10
37.	Ilkal	GH	(270444)	Functioning	30	5
38.	Kerur	PHC	(230240)	Functioning	6	2
39.	Pattadakallu	PHC	(243239)	Functioning	6	2
40.	Kakanur	PHC	(\$\mathbb{Z}\$239044)	Functioning	6	2
41.	Belur	PHC	(240512)	Functioning	6	2
42.	Kulageri Cross	PHC	(\$\mathbb{Z}\$236017)	Functioning	6	2
43.	Nandikeshwar	PHC	(\$\mathbb{Z}243059)\$	Functioning	6	2
44.	Togunashi	PHC		Functioning	6	2
45.	Halakurki	PHC	(\$\mathref{2}42097)\$	Functioning	6	2
46.	Mustigari	PHC	(\$\mathref{2}\$238086)	Functioning	6	2
47.	Katageri	PHC	(237058)	Functioning	6	2
48.	Guledagudda	СНС	([®] 250222)	Functioning	30	5
49.	Badami	ТН	([®] 220111)	Functioning	100	10
50.	Linganur	PHC	(237070)	Functioning	6	2

51.	Ghote	PHC	(\$\mathbb{Z}253130)\$	Functioning	6	2
52.	Hipparagi	PHC	(\$\mathbb{\text{228583}}\)	Functioning	6	2
53.	Terdal	PHC	(\$\mathbb{2}55045)\$	Functioning	6	2
54.	Chimmad	PHC	(\$\mathbb{Z}\$231730)	Functioning	6	2
55.	Konnur	PHC	(\$\mathbb{Z}\$239095)	Functioning	6	2
56.	Savalagi	PHC	(\$\mathbb{Z}\$50024)	Functioning	6	2
57.	R Banahatti	CHC	(230238)	Functioning	30	5
58.	Jamakhandi	ТН	(\$\mathbb{\mathbb{P}}220066)\$	Functioning	100	10
59.	District Hospital	DH	(\$\mathbb{\mathbb{P}}236260\$	Functioning	250	20
				Total	1158	186

Every PHC and CHC is with minimum of one Doctor and average of three staff nurses.

However in District there are 86 doctors and 228 staff nurses.

Total Number of Beds in Government Hospitals - 1158

Beds reserved for disaster Management - 186

Availability of Drugs.

Disease	Selected Drugs	
Diarrhoea	Oral dehydration salts	
	Co-trimoxazole tablets	
ARI	Co-trimoxazole tablets Procaine	
	penicillin injection'	
	Pediatric paracetamol tablets	
Malaria	Chloroquine tablets	
	SP	Drugs are Available in
	Quinine	District Health Office & Taluka Health Office District Hospital
	Artesunate	& Taluka Hospitals & Private
	Amodiaquine	Hospitals
Anemia	Ferrous salt = Folic Acid tablets	

Worm infestations	Mebendazole tablets albendazole	
Skin infections	Iodine, gentian violet	
Fungal skin infections	Benzoic acid + salicylic acid ointment	
Scabies and others	Benzyl benzoate lotion soap	
	Zinc oxide ointment Permethrin / malathion	D 4 7111 :
Pain	Acetylsalicylic acid or paracetamol tablets	Drugs are Available in District Health Office & Taluka
Prophylactic drugs	Retinol (vitamin A)	Health Office District Hospital & Taluka Hospitals & Private
	Ferrous salt + folic acid tablets.	Hospitals
Vaccine- preventable diseases	Intact cold chain syringes and needles BCG vaccine/adjuvant Measles vaccine	
diseases	DPT vaccine	
	Polio vaccine	
Trauma/ surgery	General anaesthetics (Ketamine, thiopental)	
	Local Anaesthesia	
	Preoperative medication and sedation for short-term	
	Procedures (atropine, diazepam)	
	Parenteral solutions for rehydration + giving ser + canulate	
	Ringer's lactate	
	Glucose 5%	
	Blood substitute / transfusion, Muscle relaxants, cholinesterase inhibitors.	
Pain	Non- opioids (ASS, ibuprofen, paracetamol)	

Allergies,	Adrenaline (epinephrine) inj.						
anaphylactic reactions	Hydrocortisone powder for inj. Prednisolone tablets						
Convulsions	Phenobarbital tablets						
	Phenytoin tablets						
nfections	Amoxicillin tablets						
	Ampicillin powder for inj.						
	Benzylpenicillin powder inj.						
	Cloxacillin powder inj.						
	Co-trimoxazole tablets						
	Phenoxymethylpencillin tablets						
	Procaine benzylpencillin tablets						
	Chloramphenicol capsules						
	Doxycycline capsules, tablets						
	Erythromycin tablets						
	Gentamician Injection						
	Metronidazole tablets						
	Trimethoprim = sulfamethoxazole						
	Tetracycline eye ointment						
	Gentamicin eye drops						
Hypertension	Atenolal tablets injection						
coronary heart disease	Furosemide injection	Available in all	Institutions				
Disinfectant antiseptics	Chlorhexidine solution						
	Polyvidone iodine solution Silver sulfazidine cream	Available in all Institutions					
Diabetes	Oral antidiabetics						
	Insuline	Available in all	Institutions				

Obstetrics	Ceasarian equipment Equipment for assisted delivery	Available in Taluka Hospital & CHC		
Psychotic disorders	Chlorpromazine tablets, injections	Available in all Institutions		
Asthma	Aminophylline injection Salbutamol tablets / aerosol Beclometasone aerosol Ipratropium bromine aeroso;l Adrenaline injection.	Available in all Institutions		
Hormonal contraceptives	Ethinylestradiol + Levonorgestrel tablets, Levonorgestrel Tablets, Medroxyprogesterone acetate depot injection.	Available in all Institutions		

Are the following adequate	
Water supply?	Available in all institutes
Food distribution source?	Available in Taluka Hospital and CHC
Soap, buckets etc, for washing?	Available in all institutes
Cooking utensils?	Available in Taluka Hospital and CHC

Availability of drugs, equipment and utilities

Amoxici llin co- trimox Ampicill in	ORS	Anti Malaraial Drugs	IV Fluid s	Electr	Water supply	Toile t	operatin g theatres	Vacci ne cold chain	Other expressed needs (attach list in necessary)
Availabl e	Avai lable	Available	Avail able	Prese nt	Presen t	Prese nt	Present	Prese nt	Present

2.18 Religious details

Sl.No	Name of	the	District	Hindu	Muslim	Christians	Buddhists	sikh	Jains
	Hq/Taluk/Municipality								

1	Bagalkot		43685	358	86	51	696
2	Badami		29533	2103	17	52	184
3	Bilagi		17072	62	30	25	90
4	Hunagund	86.48%	39386	410	50	56	511
5	Jamakhandi		62549	296	195	98	22369
6	Mudhol		27766	204	34	161	1348
	Total		219991	3433	412	443	25198

2.19 Industries:

DETAILS OF CHIEF EXECUTIVES CEMENT FACTORIES, BAGALKOT

SL No	Name & address of the Industry	Name & & Designation of the Person	Telephone (Office)
1	Bagalkot Cements Industries Ltd. Bagalkot	R.Subramanain (Factory Manager)	08354-220735/37/38
2	Katawa Udyog Ltd., Unit-2 Naganapur, Lokapur. Tq:Mudhol	Shri Vilas H Katwa (Chief Executive)	08354-240187/137
3	Nirani Cements Pvt.Ltd., Ningapur Tq:Mudhol	K.S.Girisagar (General Manager)	9379090015 / 9980522116
4	J.K.Cem Pvt.Ltd . Muddapur Tq:Mudhol	Hemanth Sharma (General Manger)	9900553133 / 08350- 280710

DETAILS OF CHIEF EXECUTIVES OF SUGAR INDUSTRIES IN

BAGALKOT DISTRICT

SL No	Name & address of the Industry	Telephone (Office)
1	Prabhulingeshwar Sugars Ltd.Siddapur Tq:Jamakhandi	08353-238004/ 238160
2	Raitar Sahakari Sakkare Karkane Niyamit Hebbal Tq:Mudhol	08350-284846
3	Godavari Sugars Ltd. Sameerwadi. Tq:Mudhol.	08350-260046/47/48
4	Nirani Sugars Ltd. Mudhol. Tq:Mudhol.	08350-200767/200770
5	Gem Sugars Ltd. Kundargi. Tq:Bilgi.	08425-271285
6	Jamkhandi Sugars Ltd., Hirepadasalgi. Tq:Jamakhandi	08353-254161/254160
7	Sadashiva Sugars Pvt.Ltd., Nainegali Tq:Bagalkot	08354-235911

8	Bilgi Sugars Pvt.Ltd., Badagandi Tq:Bilgi	08425-277366
9	Indian Cane Power Ltd., Uttur. Tq: Mudhol	08350-200567
10	Kedharnath Sugars Ltd., Kerakalmatti. Tq:Badami	08357-234198/99
11	Savarign sugers teradal tq: jamakhandi Dist :Bagalkot	

2.21 Transportation Facilities :motor vehicles as on 31-3-2018

Sl	taluks	Goods vehicles			Buses				
.n		Truck& lorries	Four wheelers	Three wheelers	Stage carriages	Contract vehicles	Private servise	Educational institutional	Other buses
		Torries	WIICCICIS	WHECHEIS	carrages	venicies	vehicles	vehicles	ouses
1	Badami	410	610	850	0	0	0	30	2262
2	Bagalkot	579	752	1833	1229	0	0	93	4810
3	Bilagi	453	670	718	0	0	0	32	2162
4	Hunagund	368	570	712	0	0	0	23	1991
5	Jamakhandi	747	1439	407	0	16	0	122	0
6	Mudhol	1388	1504	438	0	0	0	138	0
Tot	al	3945	5545	4998	1229	16	0	438	11225

S1 n	taluk	No. o jeeps	of	No. of cars	No. of Tract or	No. of Jeeps	No. of Wheelers	Two
1	Badami	120		2671	1746	120	30218	
2	Bagalkot	50		4110	2909	50	70023	
3	Bilagi	67		1692	4655	67	31731	
4	Hunagund	38		2630	2328	38	30116	
5	Jamakhandi	311		3710	5424	311	81547	
6	Mudhol	342		4823	6119	342	64826	
Tota	1	928		19636	23181	928	308461	

2.23 Rivers and Dams

S.No.	Name	of	the	Name of the Place	Zero level	Danger level
	river/cre	ek				
1	KRISH	VΑ		ALMATTI	500.00 Mtrs	520.00Mtrs

2.25 Road Connectivity

Sl.	Name of the District	NationaHig	State	Dist.	Panchayat	Major
No	Hq/Taluk/Municipality	hway	Highw	Roads	Samiti Roads	bridges
			ay			
1	Badami	54.00	22.15	198.95	746.24	7
2	Bagalkot	52.91	70.92	231.30	844.16	4
3	Bilagi	22.00	46.12	215.50	1097.59	1
4	Hunagund	38.00	212.67	225.88	838.80	13
5	Jamakhandi	0.00	95.64	374.28	815.86	3
6	Mudhol	0.00	163.53	340.29	1155.93	5
Total		166.91	814.56	1586.20	5498.58	33

2.31 Police Station

Name of the District Hq/Taluk/Municipality	Police Station	Staff Available
	1)Bagalkot Town PS	PSI-02,ASI-07,CHC-20,CPC-37, WPC-03=69
	2) Bagalkot Rural PS	PSI-01,ASI-07,CHC-19,CPC-31, WPC-02=60S
Bagalkot	3)Navanagr PS	PSI-01,ASI-09,CHC-23,CPC-24, WPC-03=61
Buguinot	4)Bagalkot Traffic PS	PSI-02,ASI-05,CHC-13,CPC-14, WPC-01=35
	5)Women PS	WPI-01,WPSI-01,CHC-4,CPC-3, WPC-05=14
	6)CEN PS	PI-01,PSI-01,ASI-02,CHC-08, CPC-04=16
	1)Hunagund PS	PSI-02,ASI-05,CHC-06,CPC-20, WPC-02=35
Hunagund	2)Ilkal Town PS	PSI-02,ASI-01,CHC-07,CPC-16, WPC-01=27
	3)Ilkal Rural PS	PSI-01,ASI-03,CHC-08,CPC-20, WPC-02=34
	4)Aminagad PS	
	1) Badami PS	PSI-01,ASI-07,CHC-10,CPC-26, WPC-05=49
	Hq/Taluk/Municipality Bagalkot	Hq/Taluk/Municipality 1)Bagalkot Town PS 2) Bagalkot Rural PS 3)Navanagr PS 4)Bagalkot Traffic PS 5)Women PS 6)CEN PS 1)Hunagund PS 2)Ilkal Town PS 2)Ilkal Town PS 4)Aminagad PS

03	Badami	2)Guledgudda PS	PSI-01,ASI-03,CHC-10,CPC-13, WPC-02=35
		3)Kerur PS	PSI-01,ASI-03,CHC-08,CPC-18, WPC-03=33
04	Mudhol	1)Mudhol PS	PSI-02,ASI-06,CHC-24,CPC-36, WPC-06=74
		2)Mahalingapur PS	PSI-02,ASI-03,CHC-12,CPC-19, WPC-02=38
		3)Lokapur PS	PSI-01,ASI-04,CHC-13,CPC-16, WPC-05=39
		1)Jamakhandi Town PS	PSI-01,ASI-04,CHC-25,CPC-38, WPC-02=70
		2)Jamkhandi Rural PS	PSI-01,ASI-05,CHC-11,CPC-22, WPC-02=41
05	Jamakhandi	3)Savalagi	PSI-01,ASI-03,CHC-09,CPC-18, WPC-02=33
		4)Banahatti PS	PSI-01,ASI-04,CHC-14,CPC-23, WPC-03=45
		5)Teradal PS	PSI-01,ASI-03,CHC-09,CPC-20, WPC-02=35
06	Bilagi	1)Bilagi PS	PI-01, PSI-01,ASI-3, CHC-15, CPC-19,WPC-02=42

2.32 Post Offices

Sl.No	Name of the District	Post Offices	No. of Staff Available
	Hq/Taluk/Municipality		
1	Bagalkot	10	86
2	Badami	5	30
3	Bilagi	2	13
4	Hunagund	6	31
5	Jamakhandi	6	49

6	Mudhol	5	29
7	Guledgudda	2	15
8	Ilkal	4	25
9	Rabakavi-banahatti	6	32
	Total	46	310

2.33 Fire Station Information

S.No.	Name of the District Hq/Taluk/Municipality	Number of the fire station	Telephone Number	Disposition of Vehicle & Pumps	Disposition of Man Power
1	Bagalkot fire station	01	08354- 236101	04	24
2	Jamakhandi fire station	01	08353- 238231	02	24
3	Mudhol fire station	01	08350- 283101	02	17
4	Bilagi fire station	01	87625- 23101	02	21
5	H-ilkal fire station	01	82770- 16102	02	16
6	Badami fire station	01	08357- 221101	01	22
7.	R-banahatti fire station	01	08353- 232101	01	20

Chapter 3 Hazard Vulnerability, Capacity and Risk Assessment (HVCRA)

Hazard Vulnerability, Capacity and Risk assessment is carried out by using various Participatory Risk Appraisal Tools such as Resource mapping, Seasonality chart, vulnerability mapping etc. Following is the minimum information required.

3.1 History of Disaster in the District/Taluk/GPs

During rainy season, Krishna, Ghataprabha and Malaprabha 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 I and II, 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 standing crops.

Disasters	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Earthquake	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Floods	-	-	-	-		YES	Yes	Yes		Yes	-	-	-	-	-	-	-	-	-	yes
Cyclones	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Droughts	-	-	Yes	Yes	YES	-	YES			Yes	-	Yes								
Epidemics	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Industrial accide	I -	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Fire	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Road/rail accider	1-				-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Boat capsize	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Mine accidents	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Heat/cold wave	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Avalanches	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Building collapse	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Bomb blasts	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Pests	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
River bank erosion	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-

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 may happen in the district particularly fire accident occurs during the summer season.

Occurrence of disasters in the past: - As regards recent disasters, Flood is the 3rd disaster, which was handled during 2009. First disaster was the outbreak of H1N1 during August 2009. However the same was controlled appropriately.

The Second Natural disaster of drought during August / September 2009. Proper care has been taken to provide adequate food grains and drinking water to people, Fodder and water to animals, seeds and fertilizers for Agricultural activities. Entire situation was under control.

The month of August 2019 caught the people living in the dry and arid regions of North Karnataka. The heavy rainfall and floods in the region between auguste and September 2019 caused death and massive destruction. This was the first time that North Karnataka received highest rainfall. This caused intense damage in several villages as well as some of the towns in terms of loss of human life, live stocks loss, agricultural and infrastructural loss.

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 below;

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 of rice, jowar, wheat will be be 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 Organizations: -

All the departments working under the D.C. S.P.,Z.P. A.C., Tahasildar, 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), VHFs 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 to prepare themselves with disaster management plans. The resources available with different agencies are identified.

Administrative preparedness: -

The following steps have been taken to combat any eventualities during and after the disaster situations.

1) DC will be overall in charge of the disaster management in the district and could delegate any of the powers to other officers in the district.

- 2) Control Room will be functioning round the clock in the DC office, SP's office, Tahasildar's office with adequate facilities. Exclusive staff members are assigned with the job.
- 3) The respective Taluk Tahasildars are working as taluk level incident commanders for managing the disasters.
- 4) BTDA has been assigned the overall responsibility of setting up of site operations centre during the disaster situation and provide all the necessary facilities.
- 5) Transport Department/RTO is in charge of providing the vehicles necessary for managing the response activities.
- 6) DHO is in charge of providing the necessary medical facilities such as Medicine, Ambulances, hygiene and sanitation at medical relief camps, mobile medical teams ready for the purpose.
- 7) SC, HESCOM/KPTCL is in charge of providing electricity supply during disaster situations.
- 8) Flood and Civil supplies officers have been directed by the DC to store adequate foodstuff at vulnerable areas and strategic points.
- 9) SP has been directed by the DC to set up and monitor the wireless stations and make arrangements to seek army assistance if required.
- 10) The EE/PWD; EE, Irrigation have been instructed to carry out the repair works of dams, canals, river embankments, bridges, old and unsafe buildings immediately and before the rainy season every year.
- 11) City Municipal Commissioner and the Chief Officers of the respective Town Municipalities have been asked to clean the drains, manage solid and water wastes, supply of water, provide sanitary facilities and all the civic facilities needed for effective management of urban disasters.
- 12) Some NGOs in the district working at the levels of taluks and villages are asked to collaborate with local administrations to carry out the relief, and rescue operations and rehabilitation activities.
- 13) HAM radio sets with operators are instructed to be ready.
- 14) The Deputy Director and Assistant Director of Veterinary Department are asked to keep the medicines ready to protect the animals against contagious diseases and medicines supplied to the field functionaries for routine treatment.
- 15) Review of pre-disaster arrangements has been carried out and contingency plan for the district has been provided to all the heads of the departments in the district.

The resources available in the district with both private and Government have been compiled.

The list of vital installations such as Dam, transformers, telecommunication centers, wireless relay stations etc., have been provided with protection and security and the same will be intensified during disaster.

Resource	Capabilit	У		Availability			
	Group of villages level	Taluk level	District level	Group of villages level	Taluk level	District level	
Police	Yes	Yes	Yes	Yes	Yes	Yes	
Fire Brigade	-	Yes	Yes	-	Yes	Yes	
Home Guards	-	Yes	Yes	-	Yes	Yes	
Power supply	Yes	Yes	Yes	Yes	Yes	Yes	
Defence	-	-	-	-			
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	Yes	Yes	
Private Hospitals	Yes	Yes	Yes	Yes	Yes	Yes	
Road network	Yes	Yes	Yes	-	Yes	Yes	
Railways	-	-	Yes	-	Yes	Yes	
Colleges student Volunteers	-	Yes	Yes	Yes	Yes	Yes	
Airways	-	-	-	-			
Safe shelters	-	Yes	Yes	Yes	Yes	Yes	
CBOs	Yes	Yes	Yes	Yes	Yes	Yes	

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 are identified 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/nalhas 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. Pesticides and fertilizers are available during any disaster situation. Field staffs are alert to help the farmers to protect their crop.

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

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 other sources.

Supply of Fodder: -

Fodder of at least 1 kg/per 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 to 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.

Post Disaster Evaluation Measures:

Private properties and properties of the government under different departments are also damaged by the natural calamity. Assessment in such cases has to be done quickly by the officers.

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 loss of crops.
- c) Cropping pattern, Rabi or Khariff.
- d) Requirements of seeds, seedlings, fertilizers, pesticides, etc., to be assessed.
- e) It is to be examined if seeds/seedlings can be supplied to the affected cultivators at subsidized rates.
- f) Availability of seeds/seedlings etc. and procurement of pump sets.
- g) Funds needed funds available and additional requirement of funds to be assessed.

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 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.

Restoration: -

The restoration programme may involve two stages of works. In the first stage some repairs are immediately necessary to avoid further deterioration for making the works worthy for immediate use. Restoration of communication power supply, hospital facilities, water and sanitary arrangements are some of the programme, which may come under this category. The concerned departments of government may lay down priorities in the restoration programme

having regard to the necessary and availability of funds. All the concerned departments are instructed to be pro-active and work on war footing basis.

1.	Executive	They will take steps for clearance of fallen trees and
	Engineer, PWD;	departmental buildings from the roads for free movement of
	DCF, Forest	vehicles etc. Immediate repair of roads and bridges be taken up.
	Department	
2.	BSNL	Immediate restoration of Telephone services.
3.	DD, Veterinary	Removal and disposal of carcasses, vaccination, cattle
	Dept.	treatment, supply of fodder, etc.
4.	DHO	Disinfections of water sources & treatment etc.
5.	Agriculture Dept.	Treatment of saline inundation fields. Supply of seeds in area
		where crop has been damaged.
6.	KUWS & DB;	Repair of damaged tube wells/installations of new tube wells.
	Municipality &	
	Panchayats	
7.	KPTCL	Immediate restoration of power lines.

3.3 vulnerability and Risk Assessment

Past history reveals that Bagalkot district is less prone to natural disasters. But during the recent 10 years period Bagalkot districts is affected with heavy rains and floods. The district has witnessed floods 5 times during last 7 years in different parts of the district. 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 also common.

Proneness to different disaster

Name of	Type of	Time of	Potential impact	Vulnerable area
the district	hazard	occurrence		
Bagalkot	Floods	June -	Loss of Human life and	Along the river
		September	Cattle	courses, entire
			Loss of crops, damage to	district.
			infrastructure such as	List of flood
			roads, houses, bridges, Soil	affected villages is
			erosion etc.	given in Annexure-
				III
	Heavy	June -	Loss of crops. House	Entire district.

rainfall	September	damages	
Drought	Jan - May	Burning loss of crops, scarcity of drinking water, fodder, etc.	Partly in Bagalkot district.
Landslides	-	-	-
Fire accident	Jan - May, any time	Loss of life and property	Entire district especially during festivals/fares, 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 - September	Heavy rainfall, loss of crops	Entire district.

3.9 Road Accidents

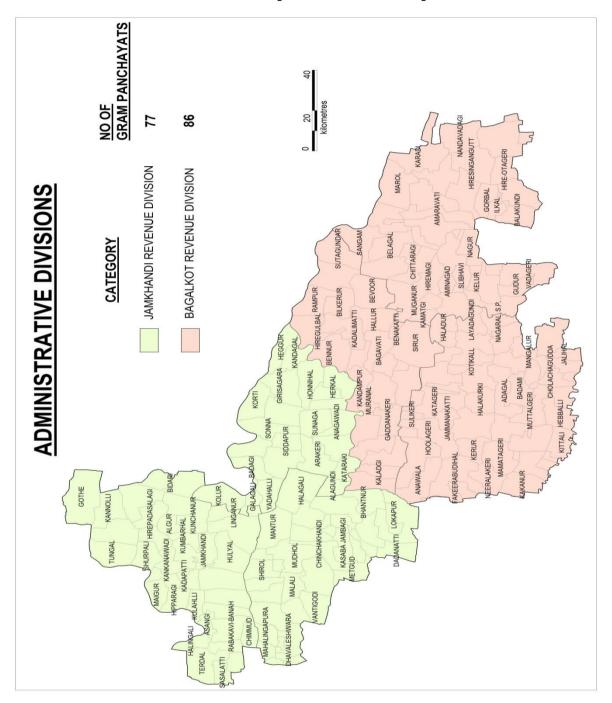
Year	No. of accident	No. of Injured	No. of Deaths
2014	877	1045	302
2015	935	1215	426
2016	865	1067	370
2017	780	1030	328
2018	851	1018	367

3.10 Industrial Accidents

Year	No. of accident	No. of Injured	No. of Deaths
2014	07	07	04
2015	12	10	02
2016	01	01	-
2017	08	04	04
2018	07	11	05

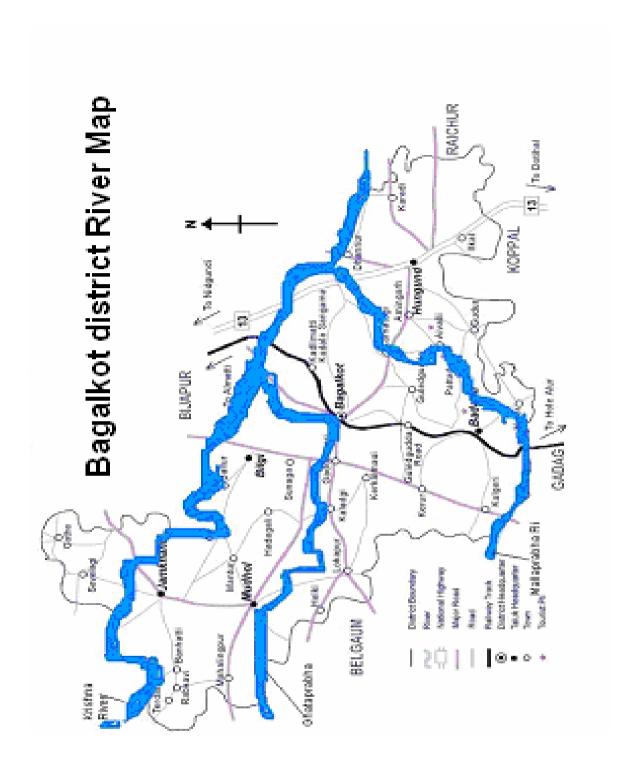
3.12 Man- Animal conflicts

Year	No. of conflicts	No. of people	No. of animals	No. of	Crop
		affected	dead	people dead	damaged
2014	-	-	-	-	-
2015	-	-	1	-	1
2016	-	-	-	-	-
2017	-	-	1	-	1
2018	-	-	-	-	-

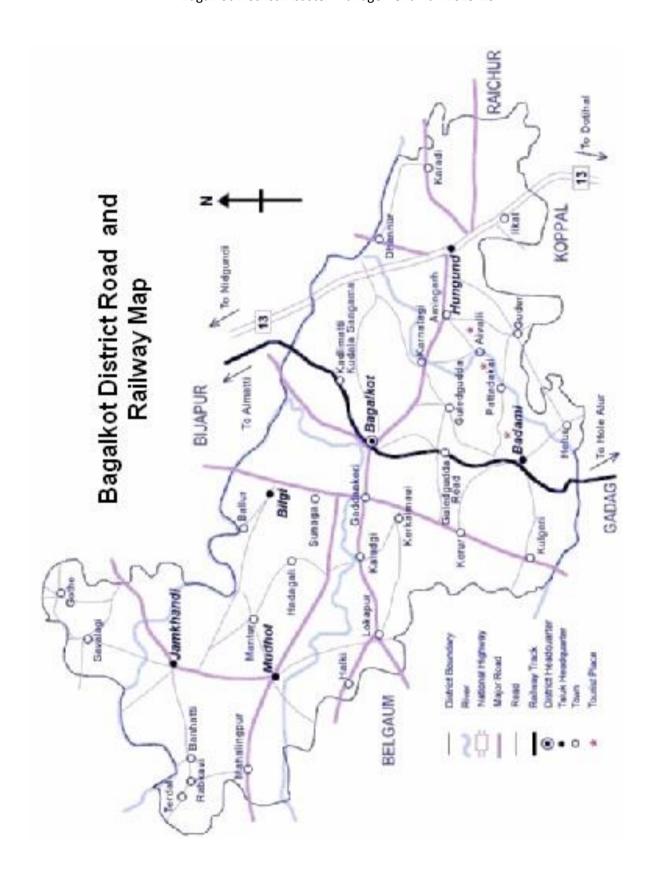


Chapter 4
GIS and Preparation of Basic Maps

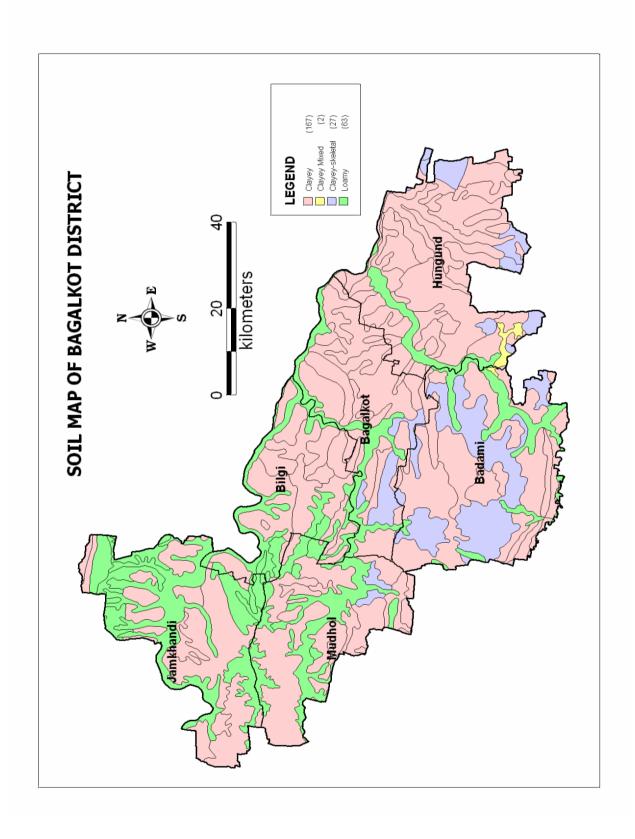
For administration Purpose the district is divided in two revenue divisions, namely Bagalkot and Jamkhandi. Bagalkot, Badami and Hungund taluka come under Bagalkot division and Jamkhandi, Bilagi and Mudhol taluka come under Jamkhandi division.

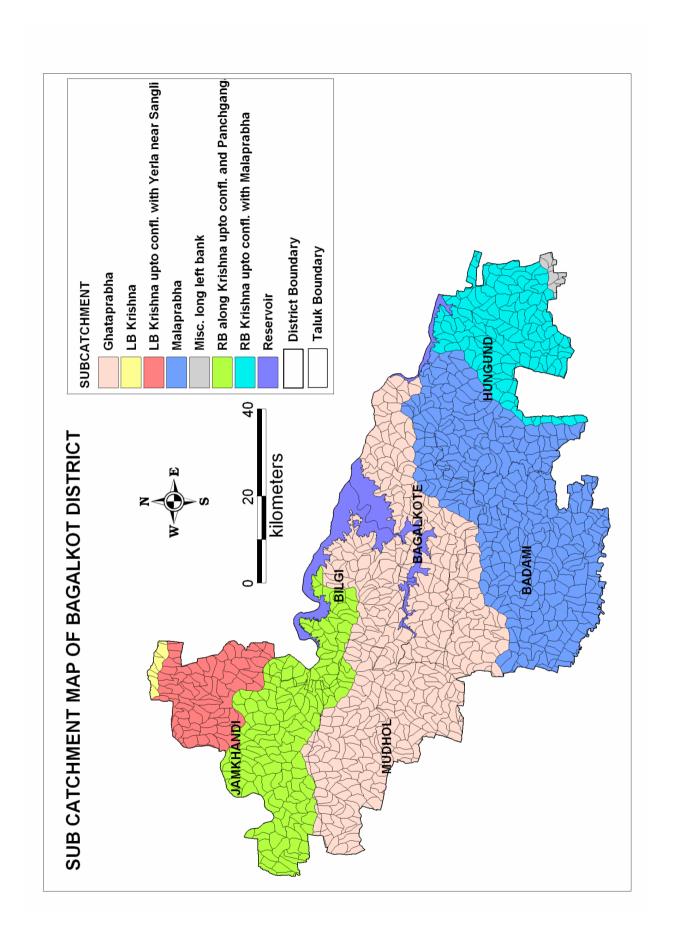


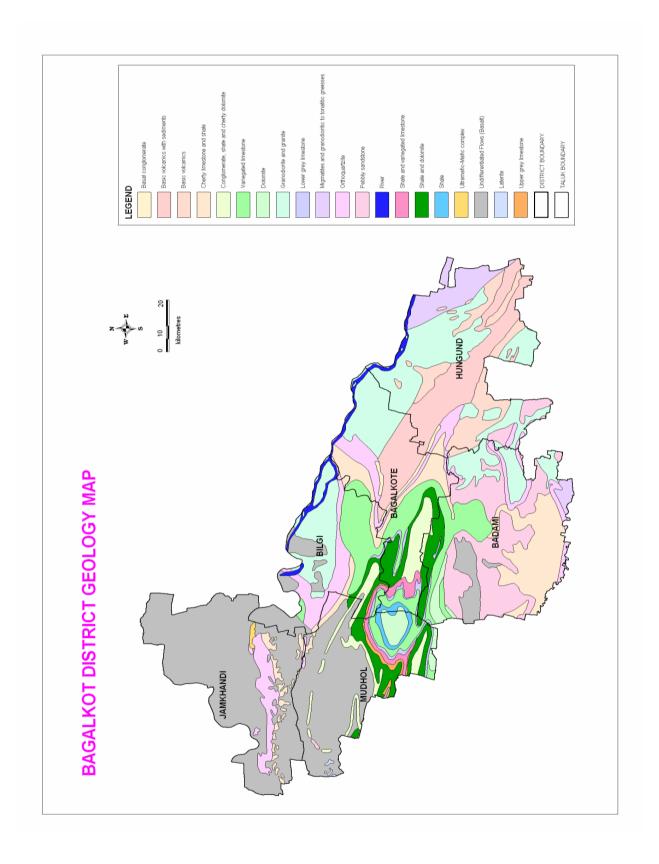
The district is blessed with three rivers Namely, Krishna, Ghataprabha and Malaprabha. Around 191 villages are on the bank of these three rivers, those are vulnerable for flood during the rainy season.

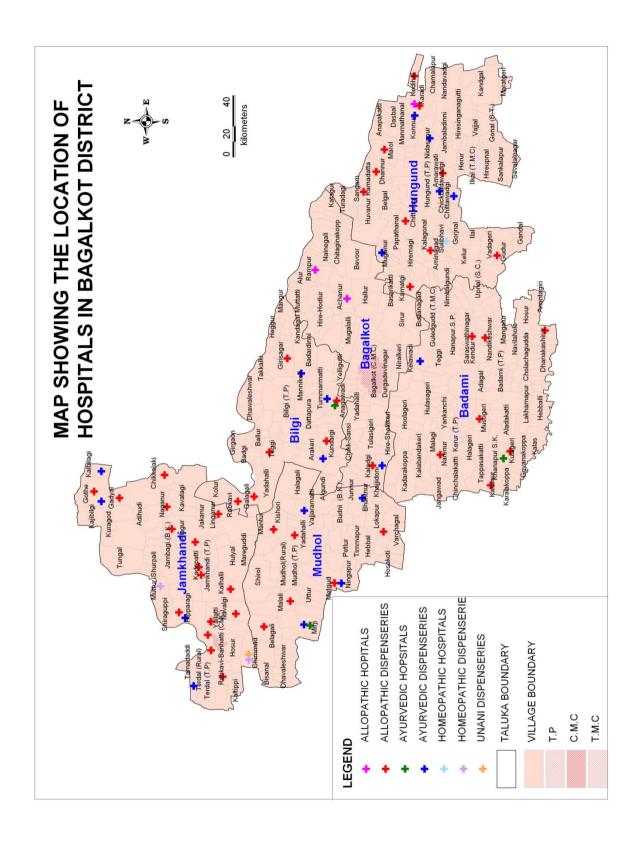


The above map shows the road and railway facilities in the district.

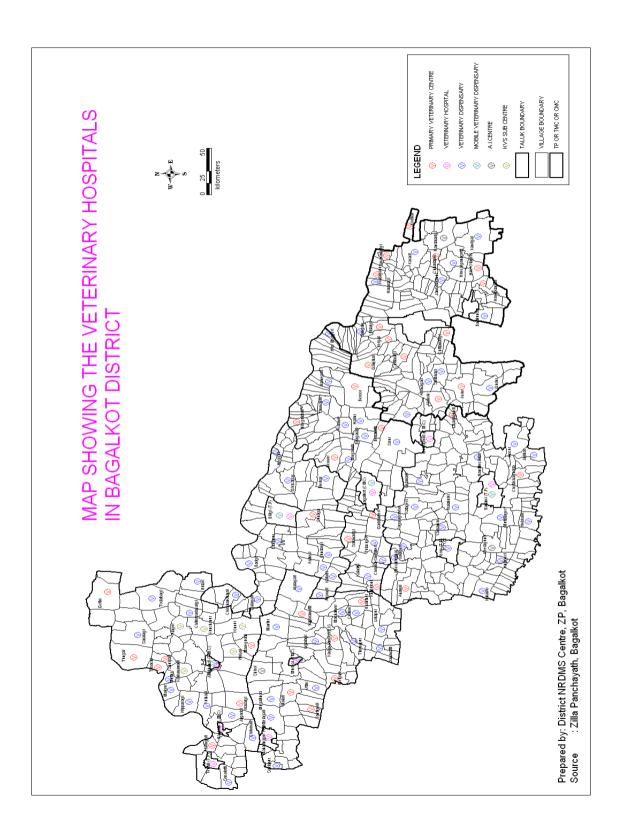




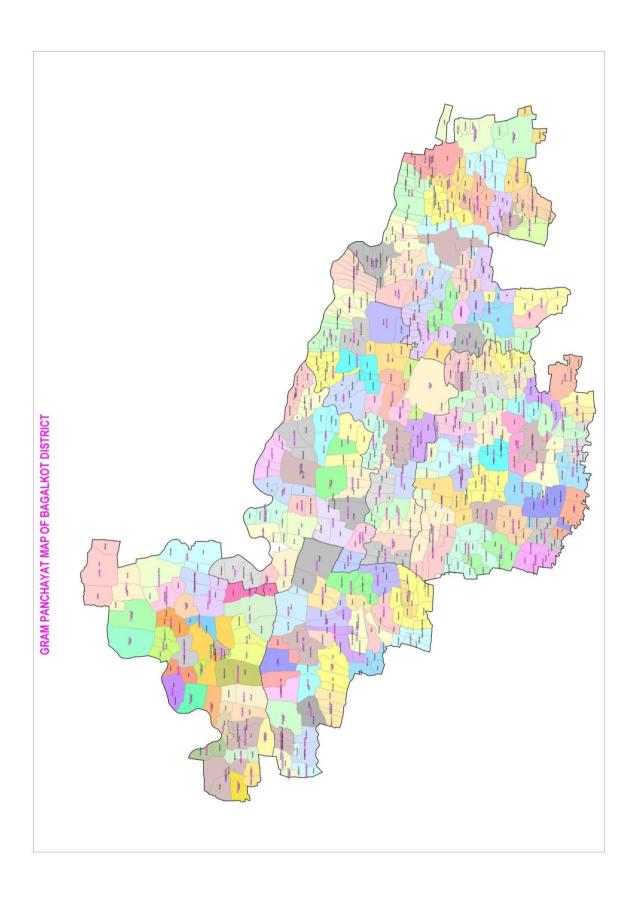




The above picture shows the health facilities available in the district.



The above map shows the veterinary hospitals and veterinary facilities available in the district.



The map shows the Gram Pnchayats of Bagalkot District, there are 163 GPs in the District.

Chapter 5 Institutional Mechanisms

AGENCIES & INFRASTRUCTURE

Introduction: -

The Revenue Administration for Bagalkot district is headed by the Deputy Commissioner (DC) whose office is based at Bagalkot. He is assisted by the Additional District Magistrate (ADM), also called as Additional Deputy Commissioner, stationed at Bagalkot. There are two Revenue Sub divisions and Assistant Commissioners in the District – one for Bagalkot Sub division comprising of Bagalkot, Badami and Hungund taluks, the other for Jamkhandi Sub division comprising of Jamkhandi, Mudhol and Bilagi Taluks.

The taluks are headed by the Tahsildars who are based at the Taluk Head Quarters and report to respective Assistant Commissioners. Each Taluk is further divided into number of Nada Kacheries, which are headed by Deputy Tahsildars.

Agencies involved in Disaster Management: -

The Deputy Commissioner is the Administrative Head in the district and has the overall responsibility in handling any disaster in the district and is assisted by his team as described above. However, during any disaster, many activities have to be carried out at a short notice. Hence, the Deputy Commissioner needs to be ably assisted by other departments in the District. Keeping this in view, a District Crisis Management Group has been formed under the provisions of Environment Protection Act 1986 & Chemical Accidents-Emergency Planning Preparedness and Response.

The District Crisis Management Group for Bagalkot comprises of members from various government departments, major industries and institutions in the district.

The members of District Crisis Management Group are as follows:

Deputy Commissioner, Bagalkot District	: Chairman
2. ADC, D.C. Office, Bagalkot.	: Emergency Officer
3. Superintendent of Police, Bagalkot	: Member
4. District Commandant, Home guards and Civil Defence, Bagalkot	: Member
5. Divisional Fire Officer, Bagalkot	: Member
6. District Health Officer, Bagalkot	: Member
7. Regional Environmental Officer, Bagalkot	: Member
8. Commissioner, CMC, Bagalkot	: Member
9. Regional transport Officer, Bagalkot	: Member
10. Information and Publicity Officer, Bagalkot	: Member

11. Joint Director of Industries and Commerce, Bagalkot	: Member
12. Joint Director of Agriculture, Bagalkot	: Member
13. Deputy Director, Animal Husbandry & Veterinary Services, Bagalkot	: Member
14. Assistant Commissioner, Bagalkot/Jamkhandi	: Member
15. Senior Inspector of Factories, Bagalkot	: Member Secretary

During any disaster, apart from the above member agencies, help may need to be mobilized from a number of non-governmental agencies like voluntary organizations, social service organizations private hospitals and private transport operators.

The departments and agencies, which will be involved in execution of the Disaster Management Plan are:

- 1. DC office/AC offices/Taluk offices.
- 2. Police Department.
- 3. Inspectorate of Factories.
- 4. District Fire Services.
- 5. Home Guard (Civil Defense Services)
- 6. Health Department.
- 7. Public Works Department.
- 8. Irrigation Department.
- 9. Food Department.
- 10. Drug Controller.
- 11. Meteorological Department.
- 12. ZP Engineering Departments.
- 13. Transport Department.
- 14. Voluntary & Social organizations.
- 15. Other Agencies would be involved as per needs.

OFF SITE EMERGENCY PLAN AT A GLANCE

CHART Supdt. of Police, Dy. Commissioner, Principal Secy. to Govt. Bagalkot of Karnataka, Revenue Bagalkot Dept., Bangalore Chief Exe. Officer, Z.P., Bagalkot TV/Radio/Press Additional District Asst. Supdt. of Police, Commissioner Bagalkot. Bagalkot (Nodal Agency) Site Controller of MAH unit

Asst. Comr, Bagalkot	Asst. Comr, Jamkhandi	Dvl. Fire Officer,	Dist. Surgeon, Bagalkot	Dist.Health Officer, Bagalkot	Dy. Director of Factories Belgaum	Pollution Control Brd Bagalkot
Asst. Dir. of Factories, Bagalkot	Senior Geologist (M), DMG, Bagalkot	RTO, Bagalkot	Dy. Dir. Animal Husbandry	Supdt. Engineer, Bagalkot	Exe. Engr, PHE, Bagalkot	Bus/taxi Owners' association
Dist. Comdt., Home guards, Bagalkot	Dist.Agrl. Officer Bagalkot	Dy. Dhier Controller of Explosives, Belgaum	Executive Engineer, KEB.	Dir. Controller, KSRTC.	Dy. Dir. of Fisheries	Dist. Information Officer
Tahsildar, Bagalkot	Tahsildar, Badami	Tahsildar, Bilagi	Tahsildar, Hungund	Tahsildar, Mudhol	Tahsildar, Jamkhandi	
Gen. Mgr. Telecom, Bagalkot	Mutual Aid Industries	Voluntary Organizatio n	Private Hospitals, Bagalkot	Govt. Hospitals, Bagalkot	Truckers Association, Bagalkot	Dy. Dir. Public Instr, Bagaalkot
Commr, CMC, Bagalkot	Commr, CMC, Jamkhanid	GM UKP Bagalkot	CE, BTDA BAGALKO T			

Officers from other departments would be co opted as per emergency need

DISASTER NODAL DEPRTMENT CONTINGENCIES ARE AS FOLLOWS

Sl.	Nature of Contingencies/Disasters	Nodal Departments
No.		
01	Flood and Urban Flooding	Revenue Department
02	Major Earthquake	Revenue Department
03	Cyclone	Revenue Department

04	Landslide	Revenue Department
05	Drought	Revenue Department
06	Early warning system in cases of Cyclone, Tsunami, Heavy, Rainfall, Landslides, Floods etc.	State Meteorological Department State Natural Disaster Monitoring Cell State Water Resources Department Central Water Commission
07	Major Fires & Building collapses	Karnataka State Fire & Emergency Service Dept of Health & Family Welfare
08	Stamped	Karnataka State Fire & Emergency services Police Department Dept of Health & Family Welfare
09	Bore well related accidents	Karnataka State Fire & Emergency services Police Department
10	Boat accidents/capsize	Karnataka State Fire & Emergency services Police Department
11	Major Road Accidents	Karnataka State Fire & Emergency services Police Department
12	Major Structural Collapse (Bridges etc.)	Public Works Department South Western Railways Army K & K Sub Area South Western Railway Emergency Management Committee (SDMA/DDMA)
13	Railway Accidents	South Western Railway Emergency Management Committee (SDMA/DDMA

14	Chemical & Industrial Disaster accidents inside the state or outside the state which poses health or other hazards	Dept of Factories & Boilers Karnataka State Pollution Control Board
15	Biological Disasters (Ex: Epidemics, accidental release of Virulent microorganisms/Bioterrorism accidents) inside the State or outside the state which poses health or other hazards.	Dept of Health & Family welfare Dept of Medical Education Dept of AH & Veterinary science Dept of Agriculture
16	Radiological Disaster accidents inside the state or out side the state, which poses health or other hazards.	Department of Atomic Energy
17	Nuclear Disasters inside the state or outside the state which poses the people of Karnataka	Department of Atomic Energy
18	Chemical / Petroleum / Disaster while transportation (Road / Railways).	Department of Atomic Energy Dept of Factories & Boilers Karnataka State Pollution Control Board Nearest/Concerned Oil companies Karnataka State Fire & Emergency services Police Department Petroleum & Explosive safety organization (south circle) South Western Railways (in case of railways) South Western Railway Emergency Management Committee (SDMA/DDMA)
19	Mass Casualty Management	Dept of Medical Education Dept of Health & Family Welfare Transport department
20	Forest Fires	Dept of Forest & Environment

21	Data Loss (Document) Hardware/software	Dept of IT
		Dept of E-Governance
22	Breach/Sabotage of Dam/Canals	State Water Resources Dept
		Central Water Commission (CWC)
		Karnataka Neeravari Nigam
		Krishna Bahagya Neeravari Nigam
23	Major events like Aero	Revenue Department
	show/national/International events etc.	Home Department
24	Air Crash/Accident/etc., other than	DGCA, BCAS, Concerned Airport
	Terrorist related.	Authorities.
	Terminal & Inside the Airport	Revenue (DDMA) & Airport Emergency Management Committee.
	Outside Airport/outside Terminal	Transferrent Committee.

Source: S D M A GoK

N.C.C.:

20th Karnataka Battalion NCC unit is functioning covering Bagalkot District with the

Sl. No Place Associate NCC Officers Cadets Strength

1 Bagalkot 23 1950

<u>CIVIL DEFENCE – HOME GUARDS</u>

Sub-units and Cadets strength as below:

BAGALKOT District has 21 units of home guards for the district. The District Commandant heads the Home Guards Department and is supported by Deputy Commandant, instructors (two) and about 1000 home guards, some of them are specially trained in rescue and relief operation and various other emergency fields of civil defence. 100 members expert swimmers, 25 members Quick Response team has also been identified recently and kept ready for any disaster.

Following are the contact details of this department: -

Sl. No.	Designation	Contact No.	
1	Choudari	08354-235052	

Home guards Details in the District

Name of the Taluka	Men Home Guard	Women Home Guard	Total No.
Badami	263		263
Mudhol	130		130
Jamkhandi	191	55	246
Hungund	229		229
Bilagi	44		44
Bagalkot	88		88
Total:	945	55	1000

Statement showing the Home guard personnel trained in different aspects of Civil Defense.

Sl.	Particulars	Male home	Women home
No.		guards	guards
1.	First – aid training	25	10
2.	Rescue Course	14	-
3.	Flood Rescue Course	18	-
4.	Fire Fighting Course	14	-
5.	Traffic Control and Crowd Control	10	-
6.	Weapon Training	10	-
7.	Unarmed combat training	-	-
8.	Wireless Operators Course	16	02
9.	Civil Defence Course	-	-

10.	Leadership Course	10	04
11.	Disaster Management Course	-	-
12.	Camouflage and concealment Course	-	-
13.	Unexploded Bomb detection and disposal Course	04	-
14.	Nuclear, Chemical and Biological warfare Course	-	-
15.	Radiological monitoring and sheltering Course	-	
16.	Civil Defence Planner's Course	-	
17.	Maintenance of Essential Service Course	-	
18.	Communication Course	-	
19.	Civil Defense Wardens Course	-	

5.1 Center for Disaster Management, ATI

AIM:

The Center for Disaster Management aims at building the capacities of the work in the Government, Local Bodies and Non-Government Organizations who are responsible for the management of the natural and manmade disasters in the state.

OBJECTIVES:

To conduct training programs and workshops on various issues of disaster management.

To undertake action research, documentation and case studies on disaster management.

To support the district administrations to formulate district disaster management plans.

To organize mock drills on disaster management in coordination with concerned departments.

To prepare and disseminate information, education and communication materials on disaster management.

To bring awareness among the community through different media such as TV / Radio / News paper etc.

5.2 Community based organization (CBOs)

Community based organizations (CBO's) are non profit groups that work at a local level to improve life for residents. The focus is to build equality across society in all streams - health care, environment, quality of education, access to technology, access to spaces and information for the disabled, to name but a few.

5.3 Role and Responsibilities

The basic aim and objective of community organization is to abolish the differences among individuals, develop spirit of common interest and sacrifice and also participate collectively in community programs. To organize the people for the promotion and progress of community.

5.4Non- Government Organization (NGO)

NGO Participation

Sections 35 and 38 of the Disaster Management Act *inter alia* specially emphasis the coordination of actions with NGOs. The National Policy on Disaster Management (NPDM) also states the national vision for community mobilization and participation in DM and aims to provide momentum and sustenance through the collective efforts of all government agencies and NGOs. There is emphasis on community based disaster management, including last mile integration of the policy, plans and execution and early warning dissemination. Promoting a productive partnership with NGOs is a prominent thrust area in the NPDM. There is a large scope for improving the engagement of NGOs in DM and on efaciently utilizing their unique advantages and core competencies by strengthening humanitarian coalitions, alliances and NGO networks. There is also need to strengthen public awareness, capacity building and knowledge management through CBOs and NGOs. Institutional mechanisms for the advocacy and engagement of NGOs with government agencies on DM concerns require to be strengthened. Replication and scaling up of community level good practices has to be promoted.

5.5 Services and facilities to be provided by EOC

The DEOC will function to its fullest capacity on the occurrence of disaster. The district DEOC will be fully activated during disasters. The activation would come into effect either on occurrence of disaster or on receipt of warning. On the receipt of warning or alert from any approved agency which is competent to issue any early emergency warning, The Deputy Commissioner will assume the role of the Chief of Operations for Disaster Management. All line departments' senior official will be immediately reported to the DEOC. The DDMA will expand the Emergency Operations Centre to include Branch arrangements with responsibilities for specific tasks depending on the nature of disaster and extent of its impact.

All the occurrences report would be communicated to the SEOC/SDMA, NEOC/NDMA and Supporting Agencies by means of telephone and subsequently fax periodically. The occurrence of disaster shall be immediately communicated to the stakeholders such as NGOs, trained volunteers through SMS gateway (or telephonic in case of communication exist or any available communication network) for which specific provision of group mobile directory would be made.

5.6 Coordination between EOC and District Control Room

- a. Assimilation and dissemination of information.
- b. Liaise between Disaster site and State Head Quarter.
- c. Monitoring, coordinate and implement the DDMP.
- d. Coordinate actions and response of different departments and agencies.
- e. Coordinate relief and rehabilitations operations.
- f. Hold press briefings.

5.7 Minimum Facilities in the EOC

Proper functioning of the DEOC including hunting line 1077

Keep updated resource inventory for disastrous situation (IDRN).

Keep updated the functioning of Satellite phones.

Stock piling of multi – hazard emergency equipment and maintenance.

24 HOURS helpline for the regular monitoring of the Disaster management.

Proper Co-Ordination between all the concerned Department.

Chapter 6 Mitigation Plan

6.1 Structural Mitigation Measures

1. Disaster mitigation measures are those that eliminate or reduce the impacts and risks of hazards through protective measures taken before an emergency or disaster occurs. The theory behind disaster mitigation is a simple one: by making an investment of time . money and planning prior to the occurrence of natural disasters, there can be tremendous savings that result from reducing the impact of natural disasters when they inevitably occur.

2.WHY THE MATIGATION IS NEEDED?

Habitation of threatened areas has increased. Even smaller storms can cause large damage. Engineering studies have consistently shown that inexpensive measures can have a large effect on damage reduction (cost benefit analysis) Disaster mitigation measures may be structural (e.g. flood dikes) or non structural (e.g. land uses zoning) mitigation activities should incorporate the measurement and assessment of evolving risk environment. Activities may include the creation of comprehensive, pro-active tools that help decide where to focus funding and efforts in risk reduction. Hazard mapping, reinforced, tornado safe rooms, raising of homes in flood-prone areas, Disaster mitigation public awareness programmes.

6.1.1 Flood Mitigation

Before	During	After			
Embankments	People living in low-lying areas are	In case of deaths, proper			
	informed to evacuate the place and	documentation to be done after			
Flood ways are shifted to a safe environment.		identifying the deceased and necessary			
and	Relief centres are to be set up to	steps to be taken to dispose the corpse			
diversions of	provide adequate food, clothing,	to prevent health hazards.			
rivers.	shelter and water to the persons	NGO's and other volunteers to set up			

Protection of river banks.

Communitycum-shelter buildings.

Desiltation of river coast

shifted. For shifting people and animals rafts and boats are to be kept ready and services of exservice 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 emergency.

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 ingroups, which will make the task of re-location easier.

Storage of adequate stock of food grains, rafts, boats and other equipment for shifting of affected persons and animals. Alternate shelters for communities headed by co-ordinator to ensure that proper medical facilities are provided to the affected families.

kitchens in the shelters for providing food to the evacuees. Necessary food grains to be provided by the district administration.

Adequate quantity of drinking water to be supplied by the local administration to the evacuees and where necessary transport facilities be provided for providing water.

Each relief centre to be provided with adequate number of trained personnel from health department. Temporary health centres to be set up with sufficient quantity of medicines and beds. Local doctors from the nearby towns to be requisitioned to attend to emergencies.

Core committee members to set up relief centres in each village and work round the clock to co-ordinate with the medical team and relief workers.

Wireless communication is to be kept functioning round the clock. All core committee members to be provided with wireless handsets for coordination.

6.1.2 Drought Mitigation

Before	During	After		
Digging of bore wells.	Water conservation.	Food: Department of Food		
Providing hand pumps and	Supply of essential	and Civil Supplies is in		
motor pumps wherever	commodities.	readiness to face any		
required.	Employment generation.	situation of drought and		
Repair of existing hand pumps	Early warning systems.	has maintained stock		
and motor pumps.	Health care.	register of availability of		
Digging of wells.	Water supply to remote areas	food grains.		
De-silting of wells, tank beds.	by tankers etc.	<u>Health:</u> Department of		
Providing pipelines for supply	Emphasis on the poorer	Health has trained		
of water.	classes of society.	personnel on its rolls to		
Providing water to problematic	Priority to drinking water	deal with situation of		
areas through water tankers and	over irrigation.	drought and forms an		

other means.	Training	to	NGO's	important	organ	of	the
Providing water storage	Volunteers	and youth		Core Com	mittee.		
facilities at all block levels.				Fodder: A	n adequ	iate	step
				taken to er	nsure tha	t fo	dder
				for cattle i	is stored	in	case
				of impendi	ng droug	ght.	
				<u>Veterinar</u>	y Fa	acili	ties:
				Veterinary	Departr	nent	has
				been instr	ructed 1	to s	store
				adequate	stocl	ζ.	of
				medicines	to save	live	s of
				cattle and l	live stoc	k.	

6.1.3 Earthquake Mitigation

Before	During	After
Structural planning	Public to be educated to remain	The first and foremost requirement
of individual	calm and not to panic.	consequent upon the earthquake
buildings.	Not to enter or exit from	would be an alternate shelter that is
Communication	buildings when tremors are felt.	capable of withstanding the next
lines.	If indoors, take protection/shelter	tremor.
Electricity and water	under a heavy object, which can	District Administration has to take
supply.	sustain weight of heavy objects.	steps along with the public works
Health hazards.	Ex. A heavy desk, a study table, a	department to ensure that any new
Loss of life, property	strong cot etc.	constructions that are taken up are
and employment.	Protect the head with covering	capable of withstanding quakes
Preventive steps are	such as books, pillows, blankets	according to the standard
required in the	etc.	requirement. Wherever possible
following areas:	If outdoors to stay away from	old and dilapidated buildings are
Public structures.	buildings, walls, trees, etc. as they	subjected to inspection by the
Dams.	are likely to collapse or get	Public Works Department and
Roads.	uprooted.	necessary reinforcements
Maintenance of	If driving, it is safe to stop the	provided.
health and	movement & stay inside the	Road and Rail network are kept
prevention of	vehicle, as it is likely to provide	under close watch to ensure that
epidemics.	protection from falling objects.	people do not panic and desert
	Inform the core committee	their dwellings.
	members to swing into action.	Control rooms with wireless,
	Summon the fire brigade.	transportation and adequate food
	Inform Road Transport	supplies to be set up at places
	Authorities to stop movement of	affected by tremors to keep in
	vehicle.	constant touch with the District

Mobilize volunteers, youth, Administration. First Aid and Medical facilities to sportsmen, social service be provided on war footing. workers, Ex-servicemen, Medical Services of Jawans, NCC cadets, personnel. Make shift and swift Scouts and Guides and other arrangements for temporary voluntary organizations like Lions shelters to displaced persons. club, Rotary club, Youth Providing water and food to the Association, Citizen forum etc., to affected. be sought.

6.1.5 Epidemic Mitigation

Before	During	After
Since, epidemics are major	Inadequate medical and	Setting up emergency
health hazards it is necessary to	health facilities.	health service.
have trained persons to handle	Inadequate supply of pure	Preparing a contingency
disasters of such nature. Proper	water.	plan.
training in first aid, hygiene and	Lack of medical and health	Training of personnel to
treatment is essential to deal	assistance.	deal with such
with biological disasters. To	Absence of effective control	emergencies.
treat effective cases of epidemics	of common diseases.	Awareness camps for
public awareness and education,	Unsanitary conditions.	epidemic prone areas.
before and after the epidemic, is	Malnutrition.	
vital.		

6.1.6 Road Accidents

Before	During	After
Since accidents generally result	The provisions of Motor	Upon arrival at the
in injuries, burns or loss of life	Vehicles Act and other	accident spot the team
providing emergency medical	related legislation's and	should immediately
facilities is of utmost	regulations are strictly	provide first aid to the
importance. Relief teams	enforced.	victims and look for
comprising medical personnel	Adequate Highway and	persons trapped inside the
and transport authorities have to	traffic Aid post will be	vehicle. Assistance of the
be rushed to the spot, provide	created.	local police should be
first aid and shifting the injured	Trauma Care Centres shall be	sought to disperse any
to the nearest hospital. Speed	established at the distance of	crowds that may hinder the
monitoring equipments and	every 100 kms. on the	effective relief measures.
computerization of movement of	National and State Highways.	If the magnitude of the
vehicles with adequate	Fixation of timings to the	accident is high help of

checkpoints on the National	passenger vehicles to avoid	local NGOs and volunteers
Highway will be introduced.	traffic jams. Identify and	may be taken
	designate routes and fixing	
	the time for transportation of	
	hazardous chemicals and	
	other materials.	

6.1.7 Fires Mitigation

Before	During	After
Fire disasters occur mainly due to	Prior to the fire season the	Forest camps are
carelessness or mischief by	fire lines of 3.2 m. width are	established at sensitive
miscreants. Preventive measures	created to stop the fire from	points and forest staffs stay
such as avoiding storage of large	entering from one block to	round the clock & rush to
quantities of combustible materials	another, these fire lines are	the spot in groups as soon
in one place, fire fighting	created near roads, around	as they get the fire
equipment in petrol filling	plantations, along forest	occurrence information
stations, textile, plastic, paper and	boundaries, D'lines and	over wireless and
wood industries should be insisted	strips within forest areas.	extinguish the fire. There
upon during inspection by the		are instances of artificial
concerned authorities. Personnel		fire setting by the
of the fire brigade are well		encroachers for their self
equipped to handle any fire		needs. With that tree
hazards and regular drills and		grown would be destroyed.
training sessions are held.		In order to avoid forest fire
		at the periphery of the
		Reserve forest D'line of 10
		metre width will have to be
		fenced well in advance
		during December, January
		of every year.

6.1.8 Lightening Mitigation

Before Disaster	During Disaster	After Disaster
Installation of an effective lightning rod system	Mobilization of specialized equipment and machinery to affected areas	Arrangements for distribution of gratuitous relief and cash doles
Staying inside for at least 30 minutes after the last strike	Arrangements to be made for quick transportation of injured victims to the hospitals	Giving medical treatment for the needy
Seeking shelter in a low area and staying away from trees while being caught up in an open area	proper bills and posters to be posted in the affected area	check of damage caused and relief measures
Staying away from metal objects and tall objects, such as telephone poles, light standards, antennas and tall trees Staying away from water sources like swimming pool, ponds, lakes or rivers	Proper cautioned notice to be circulated	proper documents to be made to check loss of life and livestock

6.1.11 Industrial and Chemical Accidents

Before	During	After
Trained manpower is a	In case of Chemical,	Resuscitation and decontamination
prerequisite for medical	Biological, Radiological and	should go hand in hand. Medical
management of traumatic	Nuclear (CBRN) Disaster	stabilization is priority over
injuries. The training for	Management; contamination	decontamination.
providing basic first aid	further aggravates the status	Decontamination needs to be done
and trauma care should be	of victims as open wound	only in safe zones.
given to both health and	sites provides entering sites	Detectors are used to detect the type
non health service	for all the contaminants.	of chemical agent causing

providers.	Thus, contamination needs	contamination or radioactive
	to be removed effectively so	materials (in case of industrial
	that in spite of physical	accidents, it is already known)
	injury management, any	Removal of clothes and all the
	significant effect of the	accessory items reduce maximum
	toxic agents might not lead	contamination burden.
	to death. In addition, the	Use water only in case where you
	burns of first to three degree	are sure that chemical doesn't
	during bomb explosions add	produce any exothermic reaction
	to further casualties. Use	with water.
	appropriate deacons	Mass decontamination is done by
	solution for hazardous	water or other solvents only by fire
	chemicals to wipe it from	and emergency services special
	the body or specific deacon	CBRN trained first responders.
	systems for radioactive	Provide new uncontaminated
	materials.	clothes and evacuate them to
		hospital in an ambulance under care
		of trained nurse or doctor.

6.1.12 Rail Accident Mitigation

Before	During	After
Regular MOCK DRILLS	Calling emergency helpline	Providing food , shelter and
and rescue operations to be	and redistributing the work	rescue measure to the victims and
conducted with the	nature into the affected area.	providing transport to there the
coordination of South	Maintenance of rescue work	required place
Western Railways	on the speedy mode and	
Army K & K Sub Area	shifting of injured people to	
South Western Railway	the shelter area	
Emergency Management		
Committee		
(SDMA/DDMA)		

6.1.14 Building Collapse Mitigation

Before	During	After
District Administration has	Control rooms with wireless,	Services of Jawans, NCC
to take steps along with the	transportation and adequate	cadets, Scouts and Guides
public works department to	food supplies to be set up at	and other voluntary
ensure that any new	places affected by tremors to	organizations like Lions
constructions that are taken	keep in constant touch with	club, Rotary club, Youth

according to the standard requirement. Wherever possible old and dilapidated buildings are	up are capable of	the District Administration.	Association, Citizen forum
the Public Works Department and necessary reinforcements provided.	withstanding quakes according to the standard requirement. Wherever possible old and dilapidated buildings are subjected to inspection by the Public Works Department and necessary	First Aid and Medical facilities to be provided on	etc., to be sought. Voluntary NGO organisation to be called up immediately for rescue

6.1.15 Stampede Mitigation

- ❖ In case of a stampede may people especially the children and aged get trampled and may get badly injured which may even result in death if first-aid / medical attention is not provided immediately. Like in any emergency planning, the affected persons should be given immediate medical attention. Various precautionary measures should be taken to prevent any stampede wherever there is assembly of large crowd
- * Following are various such measures for the consideration of the district administration.
- ❖ Identify and list the events wherein a large group of people gathers at one place.
- Survey the gathering site for confinement I.e. inside temple, auditorium, building, structure etc.
- Study the layout and identify stampede prone pockets i.e. staircases, entry / exit point, narrow lobby etc.
- ❖ Estimate size of population going to gather. If the site area is not adequate to control an expected number of people, do not allow them to gather at first place.
- ❖ This can be achieved by informing people well in advance, staggering the visitors by issuing passes / identity cards.
- * Study the layout and maintain adequate space between two clusters of people.
- **&** Build temporary watchtowers for monitoring.
- ❖ Ascertain adequate ventilation in the area.
- ❖ Ascertain uninterrupted power supply in the area. Make arrangement for standby power supply. As far as possible allow event to be conducted in day time.
- ❖ Inform people by Public address System and Close circuit TV to avoid any misunderstanding, rumour, panic situation.
- Post adequate staff to control mob.
- Segregation of male and female / children in the mob.

❖ Adequate arrangement for drinking water, food etc. As far as possible provide such facilities on mobile van, trolley instead of fixed counter/ stall.

6.1.16 Food Poising Mitigation

- ❖ Food poisoning is a probable phenomenon in religious or social functions where there is mass feeding of people by setting up of temporary or make shift community kitchens. This problem is mainly due to use of sub-standard materials and the unhygienic conditions in which the food is prepared.
- On receipt of the information of the food poisoning in the district, the district administration should take following actions to instil confidence in the people.
- * Rush the food inspectors to the place of food poisoning for collection of sample and sealing of the kitchen.
- ❖ Identify the source of food poisoning and destroy the remaining stock of the contaminated food.
- Rush the affected persons to nearest hospitals for first aid / medical treatment.
- ❖ Additional medical / Para-medical personnel and additional stock of essential medicines may be mobilised from various hospitals to meet the increased demand.
- ❖ Proper information should be passed on to general public using various means of communication to prevent spread of rumours, which may result in panic situation.
- * Take preventive measures to avoid re-occurrence of such food poisoning in future.
- There should be proper control over quality control (by way of sampling / analysis or by tasting) of food samples before they are fed to masses.

6.1.17 Bomb Threat Mitigation

- ❖ To-day industrial installations, sensitive sites, public gatherings are becoming targets of the terrorist groups. Therefore the possibility of receiving bomb threats cannot be ruled out. The golden rule is consider all bomb threats as genuine and act accordingly keeping in mind the safety of the people and the property.
- **The objective is:**
- ❖ To avoid/minimise any loss or damage to lives and property.
- ❖ To eliminate panic and build up confidence.
- ❖ To be prepared for proper handling of any critical situation.
- Many of to-day's bombing incidents involve improvised explosive devices or home-made bombs.

IMMEDIATE ACTIONS:

- Bomb threats may be received in writing or may be received on phone.
- ❖ Keep the caller on the line as long as possible. Request him to repeat the message, listen carefully as every word spoken by the person has to be recorded mentally or penned down.

- ❖ If the caller does not indicate the location of the bomb or the time of possible detonation, it is advisable to try to ask him for this information.
- ❖ Inform the caller that the building is occupied and the detonation of a bomb would result in death or serious injury to many innocent persons.
- ❖ Pay particular attention to peculiar background noises such as motors running, background music, traf□c, aircraft, voices and any other noise which may give a clue as to from where the call is being made.
- Listen closely to the voice (male, female), voice quality (calm, excited), accents and speech impediments. Immediately after the caller hangs up report should be made to the immediate senior manager or security of □ cer on duty, nearest police station.
- Fill up the bomb threat call details in the format as given below.

BOMB THREAT REPORT

ACTIONS ON RECEIVING BOMB THREAT CALL

- 1. Do not put down receiver or cut off caller.
- 2. Put on tape-recorder, if available.
- 3. Alert nearest colleague.
- 4. Keep Form and pen ready to fill.
- 5. Note time and duration correctly.
- 6. Obtain as much information as possible.
- 7. Keep caller engaged in conversation as long as possible

(Apologise for bad line, ask him to speak up etc.)

Before	During	After
Digging of bore wells.	Water conservation.	Food: Department of Food
Providing hand pumps and	Supply of essential	and Civil Supplies is in
motor pumps wherever required.	commodities.	readiness to face any
Repair of existing hand pumps	Employment generation.	situation of drought and
and motor pumps.	Early warning systems.	has maintained stock
Digging of wells.	Health care.	register of availability of
De-silting of wells, tank beds.	Water supply to remote areas	food grains.
Providing pipelines for supply of	by tankers etc.	<u>Health:</u> Department of
water.	Emphasis on the poorer	Health has trained
Providing water to problematic	classes of society.	personnel on its rolls to
areas through water tankers and	Priority to drinking water	deal with situation of
other means.	over irrigation.	drought and forms an
Providing water storage facilities	Training to NGO's	important organ of the

at all block levels.	Volunteers and youth.	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.

6.2 Non Structural Mitigation Measures

Land Use Planning

Damage of buildings depends primarily upon the soil conditions and topology of the area which are moderately favourable in the district. Anyhow, to analyze risk within district microzonation planning should take place. It will help to guide modify land use planning in the district accordingly.

Capacity Building and awareness generation Country have a very few experts in mitigation planning. We must focus our attention to the institutionally and manpower development at all levels. There is a need to train architects, engineers, planners and masons in developing safe housing and infrastructure facilities. Manuals have also been developed outlining methodologies for new constructions and retrofitting of old ones. A strong legal and enforcement framework with appropriate incentives and punitive measures is required together with awareness programmes for general public. All these components must be taken up simultaneously; ignoring one aspect for the other could be counterproductive.

6.2.1 Early Warning System

Plan also envisages equipping community at Panchayat level by ensuring the provision of medical supply, communication such as radio, TVs, extrication equipment. Panchayat will be Encouraged to establish local early warning systems in higher vulnerable areas and for holding Community level disaster response drills. Development of response capacity at Panchayat level for first response would help in avoiding desperate situation. Creation of Sub-division level stock pile for relief and warehouses would be ensured.

Operational check-up of Warning Systems

Working with departments identified for early warning generation and dissemination, the DDMA will establish a mechanism for checking operational readiness of the early warning equipement and dissemination system. The early warning generation and dissemination will be tested at least once in a year through mock drill. Table top exercises will be carried out to

keep latest contact information of agencies and department which play roles in providing and receiving early warning.

6.2.2 Emergency Operation Centre/ Control Room

6.2.5 Insurance

Insurance brings quality consciousness in the infrastructure and a culture of safety by insisting to follow building codes, norms, guidelines, quality materials in construction. It would enforce safety standards by bringing accountability. Hazardous area should be announced, notified and publicly displayed so that people would be motivated not to settle in those areas and insurance be mandatory in insurance prone areas

6.2.6 Incentives and Resources

Community Based Disaster Preparedness

Communities are not only the \Box rst to be affected in disasters but also the \Box rst responders. Community participation ensures local ownership, addresses local needs, and promotes volunteerism and mutual help to prevent and minimize damage. The community participation for DM would be promoted on the motto of "self-help", "help thy neighbour" and "help thy community". The needs of the elderly, women, children and differently able persons require special attention. Women and youth will be encouraged to participate in decision making committees and action groups for management of disasters. Networking of youth and women based organization would be done and they will be trained in the various aspects of response such as arst aid, search and rescue, management of community shelters, psycho-social counselling, distribution of relief and accessing support from government/agencies etc. Community plans will be dovetailed into the Panchayat, Block and District plans. Preparedness to face disasters is required at all levels right from the Household to the state Government to minimize the impact of Disasters. The district administration cannot provide relief and commences rescue operation immediately at the time of disaster. Therefore the first responder of any disaster can develop some traditional coping mechanisms by the local community which reduce their vulnerabilities. The involvement of the community is the key factor in any disaster preparedness. The participation of the community is vital to sustain the activities of rebuilding the shattered community life.

Community Based Disaster Preparedness is:

A response mechanism to save life, livelihood, livestock and assets with available resources within the community.

Leads to multi pronged development interventions to address the root cause of vulnerability. Leads to a self-reliant disaster proof community.

In order to generate the preparedness and response within the people, District Disaster Management Authority, Dakshina Kannada has to take imitative for community based disaster preparedness and develop ownership for sustainability of the process effort is to be made to ensure maximum participation of all sections of the community irrespective of class, caste, sex and occupation.

6.2.7 Role of Media in Mitigation

The media plays a critical role in information and knowledge dissemination in all phases of DM. The versatile potential of both electronic and print media needs to be fully utilized. Effective partnership with the media will be worked out in the field of community awareness, early warning and dissemination, and education regarding various disasters. The use of vernacular media would be harnessed for community education, awareness and preparedness at the local level. The District information officer in consultation with the DDMA would take appropriate steps in this direction.

Chapter 7 Response Plan

FUNCTIONS OF AUTHORITIES

STANDARD OPERATING PROCEDURES

Authorities/Agencies involved: -

- > Revenue
- Police
- > Fire Services
- > Commandant, Home Guards
- > RTO
- > Health Department
- Karnataka State Pollution Control Board
- Panchayat Raj Engineering
- > HESCOM
- District Crisis Group
- Veterinary Department
- ➤ NGOs

Revenue Authorities: -

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

To manage effectively the emergency without ambiguity, it is required to entrust individual responsibility and describe them in brief. Accordingly the following emergency plan has been drawn up.

Function of Assistant Commissioner, Bagalkot/Jamkhandi -

- 1) He will be the overall in charge of Rescue shelter/Rallying post and parking yards.
- 2) He will ensure adequate food and clothing in co-ordination with Dy. Director, Food and Civil Supplies, Voluntary Organizations, Individual persons as deemed necessary in handling the situation effectively.
- 3) He 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) He will ensure adequate security and safety in co-ordination with SP (Law & Order), Bagalkot and Dy. SP, Bagalkot as the case may be.

In addition to these responsibilities, the AC will assist the CEC in all other matters as the case may be.

Function of Tahsildars of Bagalkot, Hungund, Badami, Jamkhandi, Mudhol and Bilagi.

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 coordination with respective Government Agencies, as well as voluntary organizations.

- 2) He will manage and arrange for any other requirements needed to combat the disaster 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 would be 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 relatives, 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.

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 convey 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.

Police 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 sub ordinate 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.

Police Inspector, Bagalkot: -

- 1) The officer will receive information from SP, Bagalkot.
- 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 requires.

Function of Inspector (Traffic), Bagalkot: -

- 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 availability of adequate number of vehicles fitted with public address system/wireless etc. and directly supervise manning of routes and parking yards.
- 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 based on the circumstances.

Functions of Fire Services, Bagalkot: -

- 1) The Regional Fire Office is located at Bagalkot.
- 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 immediately 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 first aid and treating the patients
- 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 controlling measures undertaken, salvage operation, rescue methods, etc. And any other information required by the CEC on continuous basis.

Take any other appropriate actions as deemed fit necessary in controlling of emergency.

Functions of Police Inspector/Sub Inspector, Bagalkot: -

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), Bagalkot: -

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 co-ordination 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 and efficient drivers in consultation with RTO, KSRTC, Truckers Associations and Home guards etc., as the case may be.

Functions of Fire Station Officer, Bagalkot: -

A fire station is established at Bagalkot. 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. Contact the Divisional Fire Officer and inform 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 for 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, Bagalkot: -

- 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 Bagalkot 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, Bagalkot: -

- 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 (L7O)/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, Bagalkot: -

- 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 in arranging transportation of vehicles in co-ordination with KSRTC, Truckers Association, Travel Agencies, etc, also ensure availability of adequate number of skilled efficient drivers and advise the Inspector (Traffic).
- 4) Workout the requirement of heavy earth moving equipment like cranes etc., and mobilizes the same in co-ordination 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, Bagalkot: -

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 members 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.
- 5) They will also advise CEC on the message to be given to Public/Press on technical matters.

Functions of HESCOM, Bagalkot: -

- 1) The Executive Engineer will be responsible for all electrical power supplies and illumination of places like site of incident, rescue shelter, rallying posts, parking yard, temporary medical centres, emergency route, etc.
- 2) In case of need to establish the temporary power supply points he will do so as advised by CEC and ensure adequate continuous power supply.
- 3) Assist any other agency such as water works, PRED, Urban bodies, BTDA etc., as and when needed.

Functions of Panchayat Raj Engineering, Dept. Bagalkot: -

- 1) The Executive Engineer will be over all in charge for providing adequate sanitation facilities such as dry latrines, soap-pits, etc. at the temporary rescue shelters.
- 2) Ensure maintenance of hygienic conditions at all such places including the site of incidence.
- 3) Ensure adequate supply of potable water to all places such as rescue shelters cum rallying post, parking yard, and temporary medical centres.
- 4) Assist other agencies as advised by CEC as and when needed.

SPECIFIC SETTING INFORMATION AND GUIDELINES OF MOCK DRILL.

Four specific settings will be covered in this section. A structural framework for each setting is briefly outlined. Which enlists the main bodies responsible for undertaking the mock drill in each setting.

The specific settings are as follows:

- A. Urban Setting
- B. Rural Setting
- C. Industrial Setting (On-Site/Off-Site)
- D. School Setting

The community being the first respondent to disaster, their participation in formulation of preparedness plans and sharing of disaster preparedness cost is pivotal in the community based disaster management planning process. **Community Based Disaster Preparedness** (CBDP) includes awareness generation; vulnerability analysis; assessment of available resources; capacity building of stakeholders including PRI members, NGOs, CBOs, local administration and line departments; and preparation of disaster management plans, which is required at all levels. **Community Based Disaster Plan** should incorporate the following:

- Adoption of a participatory approach
- Preparation a resource inventory
- Increased coordination between disaster management committees and reduce communication gaps.
- Formation of community task forces with sufficient knowledge of their specific roles.
- Establishment of a chain of disaster management volunteers.
- Coordination with other related institutions within the community.
- Involve the people representatives appropriately at all levels, stating from members of G.P, T.P, Z.P, Urban local bodies, MLA's, MLC's and M.P.

During the mock drill the community members should understand and learn how to use the disaster management plan. After the mock drill, the Disaster Management Committee should update the disaster management plan.

URBAN SETTING

Urban communities are becoming increasingly vulnerable to various hazards due to growing population density, rapidly expanding commercial and industrial activity, deteriorating ecological and environmental conditions and changing lifestyle habits. These urban areas are also characterized by sub-standard construction and poor infrastructure such as health care and sanitation facilities. These factors coupled with natural and human made hazards put urban communities at further risk.

An urban community is formed of individual members and families placed at different levels i.e. home, neighborhood and ward. Due to the large size and particular characteristics of the urban community, formation of community based disaster management committees would be difficult. Therefore, in order to strengthen preparedness disaster management committees are normally formed at both the City and Ward levels. At times at the ward level, committee members are replaced by Resident Welfare Association (RWA) representatives.

There are two levels at which mock drills can be conducted in urban communities: firstly, for ESF support teams at the city administrative level and secondly, for community response at the neighborhood / ward level. These two types of mock drills can also be carried out in tandem.

At the City Administrative Level

The City Disaster Management Committee (CDMC) is the key decision making body at this level. The committee is formed with representation from all emergency support function departments who work in coordination for effective action during an emergency.

The main functions of the CDMC are as follows:

- To act as a source of information for hazard safety.
- To review the hazard and risk related situations which may be experienced during the drill.
- To prepare recommendations identified during the drill.
- To inspect and coordinate the activities at all levels.

Evaluation exercises may be undertaken to understand the perceptions about disaster response during the drill in terms of

- Adequacy of training
- Alert and warning system
- Control Room functions
- Communication plans
- Security
- Recovery procedures
- Monitoring

The CDMC is headed by the Municipal Commissioner, Mayor, Divisional Commissioner or District Collector. There are four task forces which are convened to support the CDMC-

- i. Awareness Generation
- ii. Training and Capacity Building
- iii. Techno-legal Regime
- iv. Emergency Response

The emergency response task force is responsible for coordinating the Emergency Support Function (ESF/s) Teams Project Director DUDC, Assistant Commissioner, Tahasildar, Municipal Commissioner, Chief Officer of local urban bodies are responsible for preparation of town plan in all 12 local urban bodies of Bagalkot District.

VDMC

Responsibility of formulating and preparing the plan is entrusted to Tahasildar, Taluk Panchayat Executive Officer, Village Accountant, Gram Panchayat Secretary and other under the supervision of concerned Assistant Commissioners. Assistant Commissioners responsible for preparation of village level plan.

Disaster Preparedness at the rural level is carried out through Village Disaster Management Committee (VDMCs). A VDMC is formed in each village and is responsible for initiating disaster preparedness activities. It consists of local elected representative, grass root level government functionaries, local Non-Government Organizations (NGOs)/Community Based Organizations (CBOs), members of youth groups, women's self help groups etc. The representation of members in the committee would be decided based on the population size of the village. The VDMC would take the lead in mobilizing the community for formulating the CBDP plan.

Village level Disaster Management Teams (DMT/s) / Task Forces are formed to outline coordinated response during crisis situation. DMTs have sectoral focus such as early warning, shelter management, evacuation and rescue, medical and first aid, water and sanitation, carcass disposal, counseling, damage assessment and relief and coordination.

Village Disaster Management Plans to be prepared with the following information:

- *Physical/Social/Infrastructure Profile of village*: Demographics, Area Details, Housing Profile, Land Form, Livelihood, Occupation Pattern etc.
- Resource Inventory of village: Skilled Manpower, Health Care, Education, Water Facilities, Transportation, Communication Infrastructure etc.
- *Disaster Risk Profile of village:* History of Disaster, Elements at Risk, Hazard Assessment, Vulnerability of Area.
- *Contact Information of village:* Village Disaster Management Committee, Village Task Force Members, Taluka Leval Officials, Village Level Skilled Personnel, Emergency Resource Owners etc.

- Standard Operating Procedure of village task forces: Operating Procedures and Methodology, Roles and Responsibilities in Pre, During and Post Disaster Period
- CEO.ZP AND EO'S of taluk panchayats are responsible for preparation of there plans in consultation with District Administration and Taluk Administration.

INDUSTRIAL SETTING (ON SITE/OFF SITE)

Recognizing that natural disasters constitute the biggest threat to financial viability, economic well-being and production processes for the industrial sector; development of on-site and off-site disaster management plans for industrial establishments is essential. Periodic conduction of mock-drills in industrial settings to enhance preparedness levels is critical.

Due to the exponential nature of industrial disasters, industrial units are not only mandated to develop on-site DM Plans to respond to and to meet any emergency within their premises but also establish working relationships, linkages and coordination with the surrounding communities.

Every industrial unit needs to develop an on-site and off-site disaster management plan on the basis of hazards and vulnerabilities likely to affect the community. On-site emergency plans are prepared for dealing with accidents that occur on sites where industrial activities are carried on, while Off-site emergency plans are prepared in anticipation of events spreading outside the boundary of the industry. The plans would assess the probability of occurrence, the severity and the possible consequences of industrial disasters in vulnerable zones.

Mock drills in an industrial set-up are carried out at the following levels-

C1. On Site

Mock drills which simulate an internally contained disaster are managed by the Incident Command System which is headed by the Safety Officer.

C2. Off-Site

Large scale mock drills which simulate the effect of an industrial disaster on the community (e.g. a chemical leak due to an earthquake) can be carried out by the District Commissioner/District Magistrate's Office with participation by the ESFs of all line departments and the community itself.

At the District Level

- District Collector / Municipal Commissioner (Chairman)
- Inspector of Factories
- District Energy Officer
- Chief Fire Officer
- District Information Officer

- Controller of Explosives
- Chief Civil Defense
- Trade Union Representative
- Deputy Superintendent of Police
- District health Officer/Chief Medical Officer
- Commissioner, Municipal Corporation
- Representative of Public Health Engineering Department
- Industrial Safety and health Expert Commissioner, Transport
- Industry Representative
- Chair Person/Member Secretary of Local Crisis Groups

At the Local level

- Sub Divisional Magistrate/Assistant Commissioner /District Emergency Authority (Chairperson)
- Inspector of Factories
- Representatives of Local Industries
- Hazardous Chemical Transporters
- Fire Officer
- Station House Officer (Police0
- Block Development Officer
- Representative, Civil Defense
- Primary Health Officer
- Editor of Local Newspaper
- Community Leader/Sarpanch
- NGO Representative
- Local Doctors

Jurisdictional Inspector of Factories and Boilers have been entrusted with this responsibility in Bagalkot.

SCHOOL SETTING

School going children are among the most vulnerable groups during any disaster. A large number of public and private schools are built in congested areas, non-regulated land zones and housed in unsafe structures. They are therefore, exposed to various hazards.

The mock drill in a school setting is carried out by the School Disaster Management Committee. It is headed by the Principal who oversees the whole process. Members include administrative staff, teachers, students and members of the Parent Teacher Association (PTA). The teachers are further divided into sub-committees (task forces) to deal with different emergency functions such as

Evacuation and First Aid.

- Principal (Chairperson)
- Vice Principal
- Heads of Primary and middle school
- Education Officer/District Education Officer for the zone
- Parent Teacher Association President
- 1-2 parents
- 4 Students (Disaster awareness group student leader, Disaster response group student leader, head boy and Head girl)
- Representative of Relief/Revenue/Disaster Management Department/District Administration/Municipal Corporation
- Representative form Fire Service
- Representative from Police
- Representative from Health Department
- Warden from Civil Defense
- Representative from Red Cross/St. Johns Brigade
- Administrative/Logistics Officer/Estate Manager from School Office
- Resident Welfare Association representative
- Local NGO representative
- Market Trade Association representative
- Local Doctors
- Volunteer Groups (NDD, NSS, Scouts and Guides, NYKS etc.)

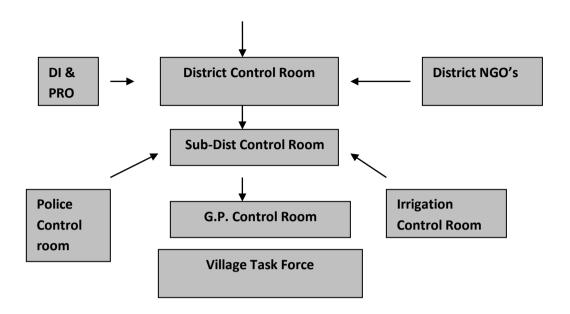
The school setting has its known district structure of task forces. These can vary depending on the management structure of school (e.g. Government, Aided, Public etc), the location, capacity to house students (e.g. in-house boarding/day scholars) and school infrastructure (e.g. transportation facilities, sports and recreation facilities etc).

The following different kinds of drills can be carried out at the school level:

- Duck, cover and hold in which everybody gets under a desk or table for 60 seconds and holds on to it
- Evacuation—in which only that response is tested
- "Walk through"—in which actions and responsibilities of each team are discussed by all and coordinated
- "Shock"—in which first aid response to injuries is tested
- Full Scale—Actual field test of a complete plan during a simulated disaster

DDPI at the district is responsible for preparation of the school level plan in Bagalkot District.

Early Warning System



Chapter 8 Communication Plan

Identified Locations for Installation of Communication System

Sl. No.	Location for Installation of VHF/HAM systems, etc		
1	Deputy Commissioner Officer Navanagr Bagalkot		

Check list for Control Room:

Activities	Page no. Reference	Yes/No
 Assessing of duty. Maintain inventory of resources. Provide information who need it. Service division and assign duties. Receive information on a routine basis and record. Receive preparedness report from various relevant dept. Basing on the reports feedback to the district authority and others. Vulnerable area map displayed. Imp. Phone numbers. 	 (REGISTRAR MAINTAINED) At least two external telephones (one incoming and the others one out going fitted with simultaneous/selective boards casting systems) with a PABX. Wireless/Radio equipment (VHF/mobile). Inundation/vulnerability maps indicating risk zones, assembly points, alternate evacuation routes, safe areas, rehabilitation centers etc., Telephone directory of emergency response system. 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. List of ambulances, base medical facilities, hospitals, rehabilitation centers etc., Reference books/chemical dossiers. Copies of Disaster Management Plan. 	YES

Evacuation, Search and Rescue:

Early Warning Management

Actions	Responsibility
Obtain early warning inputs from IMD,	
CWC, MHA /	In charge – DEOC
NDMA / KSNMDC/INCOIS/GSI control	
rooms,	
Notify the early warning to Chairman and	
the members of	In charge – DEOC
the DDMA, Nodal of cers of the line	
departments, ADCs, AC, SP	
Disseminate early warning to divisions,	
blocks and Panchayats	ADC/AC./Superintend ent of Police
Flash warning signals on all television and	
radio networks	District Information Officer
Establish disaster dash board on the	
official district website	District Information Officer
Inform communities / public / villagers	
about the disaster warning using vehicles	
mounted with loudspeakers	Tahsildars
Use PA systems facilities at Temples,	
Mosques, and Churches to announce about	T 1 111
the impending disasters	Tahsildars
Share early warning information with	Tologida.
educational information and instruct	Tahsildars
closure of institutions if required	
crossic of monitations if required	

Search and Rescue

During and after the course of action

Actions	Responsibility
Undertake sub division wise / block wise / tehsil wise relief	
needs assessment in terms of food, water, shelter, sanitation,	
clothing, utensils, medical and other critical items	ADC/AC
Identify suitable and safe facilities and establish relief	
camps	ADC/AC/Tehsildar
Establish adequate lighting arrangement at the relief camps	HESCOM
Ensure adequate security arrangement at the relief camps	District Superintendent

and for the affected communities	of
Ensure adequate water and sanitation facilities in relief	OI .
camps and other affected communities	SE – Irrigation
<u> </u>	SE - Illigation
Set up RO plants / water purification plants or other suitable	CE Indianation
facilities for immediate water supply	SE- Irrigation
Supply, procure and provide food to the affected	D:
communities	District Supply Officer
Airdrop dry and un perishable food to inaccessible location	
safe drinking water. Provide essential items lost due to	
disasters such as utensils	-
Supply, procure and provide water to the affected	
communities	SE – Irrigation
Make required shelter arrangements including temporary	
camps	/AC/Tehsildar
Establish medical facilities at relief camps and at	DHO/MO / Red Cross /
communities	108 Ambulance
Ensure suitable vaccination to prevent disease outbreak	DHO/MO
Arrange for psychosocial support for victims at the camps	DHO/MO
Ensure child friendly food for the children in the camp	DD Food
Ensure nutritious food for pregnant and lactating mothers in	
the camps	DD Food
Ensure medical care facility for pregnant women for safe	
delivery	DHO/MO
Levelve and accordinate NCO neutralization. Dut in place	
Involve and coordinate NGO participation. Put in place	AC / T-1-111-
grievance handling mechanism to prevent discrimination	AC / Tehsildar
Ensure adequate availability of daily need items such as	
food, medicine, consumables etc to ensure their access to	
affected communities	/AC/DD Food
Provide adequate and weather, gender, culture appropriate	
clothing to the affected communities and especially address	
the needs of women, children, aged and physically	
challenged	AC/Tehsildar
Ensure adequate transportation facility to transport relief	District RTO
items	/AC/Tehsildar
Maintain proper records of and documents of beneficiaries	
and relief distribution	
Engure adequate and appropriate heating facilities	
Ensure adequate and appropriate heating facilities	DEO
depending on the weather situation	DFO
Cumply fine wood english and DOI for the little	DD Food
Supply fire wood, cooking gas, POL for the kitchen	DD Food

Record and maintain documents of ex-gratia payments	/AC/Tehsildar	
Provide first aid and medical treatment to the injured animals. Establish animal shelters wherever required		
Arrange fodder for animals .Wherever required involve Animal Welfare Board and the Civil Society Organizations	Director Animal Husbandry	
Establish banking facilities for people to withdraw cash	District Lead Bank	

Guidelines for setting and running the Relief Camps:

- ➤ On receipt of report from Revenue officials, the DC/AC will order to set up a relief camp at pre-decided location as per District/ Sub-divisional disaster management plan.
- ➤ In case new location is to be selected for the camp due to circumstances, following points should be considered for arriving at a decision.
- ➤ Camp should preferably be set up in an existing built up accommodation like a community hall. It should be located at a safe place which is not vulnerable to landslides, Food etc.
- ➤ It should be accessible by motor vehicles, if possible.
- Adequate space for roads, parking's, drainage, should also be there.
- > The area should not be prone to endemic disease like malaria.
- Wide publicity should be given about the location of the camp and affected people
- > Should be evacuated and brought to the camp directly.
- Emergency relief materials which include drinking water, food, bedding (mattress, sheets & blankets), baby food, mosquito repellents etc. should be arranged as early as possible.
- ➤ Control room/ help desk should be setup in the relief camp immediately.

Shelter

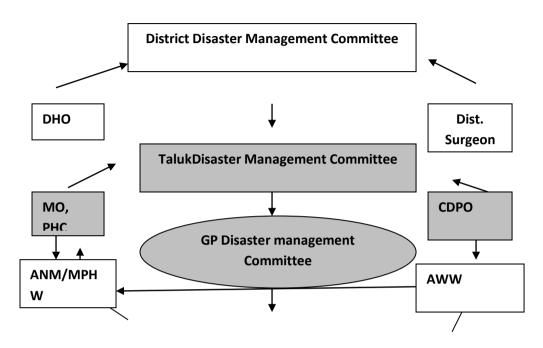
- ➤ The shelter should be such that people have sufficient space for protection from adverse effects of the climate.
- Ensure sufficient warmth, fresh air, security and privacy for their health and wellbeing.
- > Tents should not be constructed too closely together and reasonable distance should be kept between the camps to provide some form of privacy.
- ➤ Priority should be given to widows and women headed households, disabled and elderly people in tent/room distribution.

General Administration of the Camp

One responsible officer preferably CO/ASO should be designated as Camp Officer by the DC/AC who will ultimately be responsible for general management of the Relief Camp .He/She will co-ordinate & supervise the works of other officers in the camp.

Administrative structure of the camp should be as follows:

One help desk/ control room/ officer room should be designated where inhabitants can register their complaints.



First aid & Health Services

A. Medical and First Aid:

B. Carcass/Dead bodies disposal

Guidelines for Disposal of Animal Carcasses:

Guidelines for Burial

- > Burial shall be performed in the most remote area possible.
- ➤ Burial areas shall be located a minimum of 300 feet down gradient from wells, springs and other water sources. Burial shall not be made within 300 feet of streams or ponds, or in soils identified in the country soil survey as being frequently flooded.
- The bottom of the pit or trench should be minimum 4 to 6 feet above the water table.
- ➤ Pits or trenches shall approximately be 4 to 6 feet deep. They should have stable slopes not steeper than 1 foot vertical to 1 foot horizontal.
- Animal Carcasses shall be uniformly placed in the pit or trench so that they do not exceed a maximum thickness of 2 feet. The cover over and surrounding shall be a minimum of 3 feet. The cover shall be shaped so as to drain the runoff away from the pit or trench.
- ➤ The bottom of trenches left open shall be sloped to drain and shall have an outlet. All surface runoff shall be diverted from entering the trench.
- > Burial areas shall be inspected regularly and any subsidence or cavities filled.

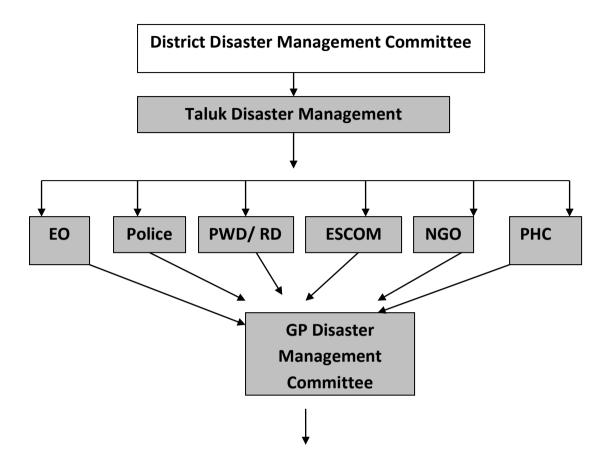
Guidelines for Composting:

- > Select site that is well drained, at least 300 feet from water sources, sinkholes, seasonal seeps or other landscape features that indicate hydrological sensitivity in the area.
- ➤ Lay 24-inch bed of bulky, absorbent organic material containing sizeable pieces 4 to 6 inches long. Wood chips or hay straw work well. Ensure the base is large enough to allow for 2-foot clearance around the carcass.
- ➤ Lay animal in the centre of the bed. Lance the rumen to avoid bloating and possible explosion. Explosive release of gases can result in odour problems and it will blow the cover material off the compositing carcass.
- ➤ When disposing large amounts of blood or body fluid, make sure there is plenty of material to absorb the liquid. Make a depression so blood can be absorbed and then cover, if a blood spill occurs, scrape it up and put back in pile.
- ➤ Cover carcass with dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process). Make sure all residuals are well covered to keep odours down, generate heat or keep vermin or other unwanted animals out of the window.
- ➤ Reuse the composted material for carcass compost pile, or remove large bones and land apply.
- ➤ Site cleanliness is the most important aspect of composting; it deters scavengers, and helps control odours and keeps good neighbourly relations.
- Note: Animals that show signs of a neurological disease, animals that die under quarantine and those with anthrax should not be composted.

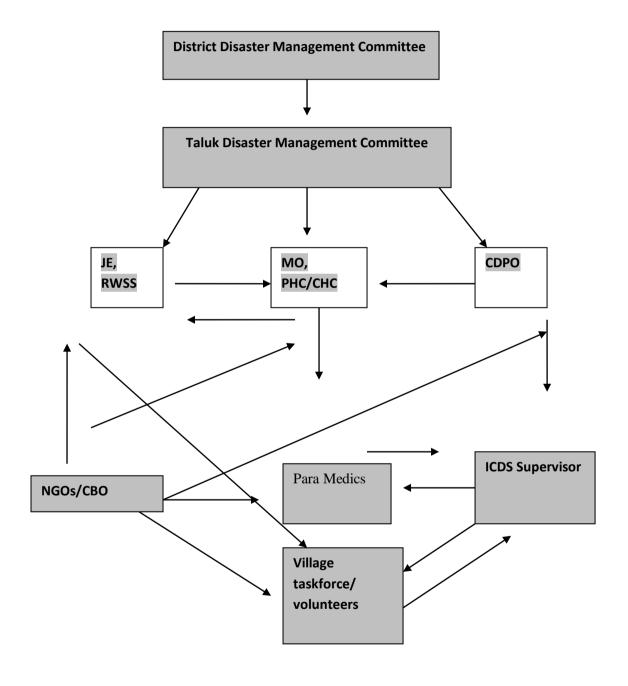
Shelter Management

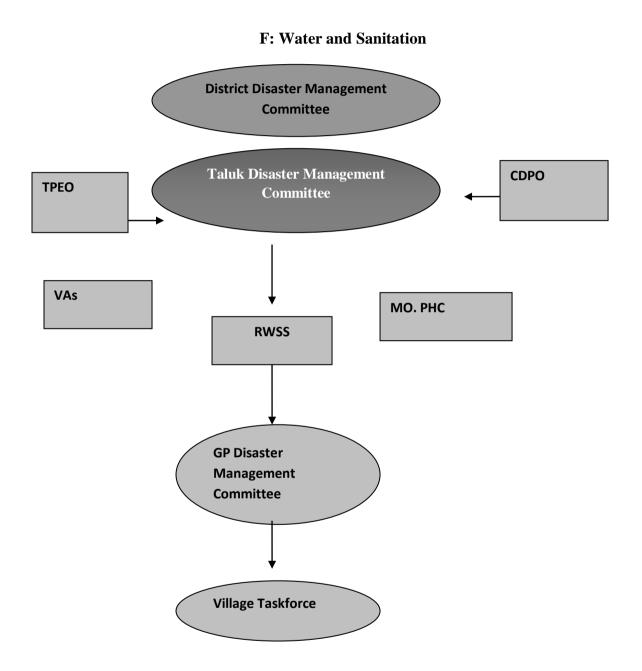
- > Construction of shelters for cattle and development of infrastructure for storage and
- > transportation of dry and green fodder etc.:
- Ensuring provision of medicines and critical health care in the risk prone areas during
- drought for humans and animals;
- Ensuring efficient functioning of the PDS in drought affected areas;
- > Provision of adequate infrastructure for dissemination of weather based advisories to the
- ➤ farming community on real-time basis in regional languages through extension machineries; Providing credit promptly in the drought affected areas and extending marketing and
- > price support to farmers;
- ➤ 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;
- > 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)

Shelter Management



Water and sanitation Response

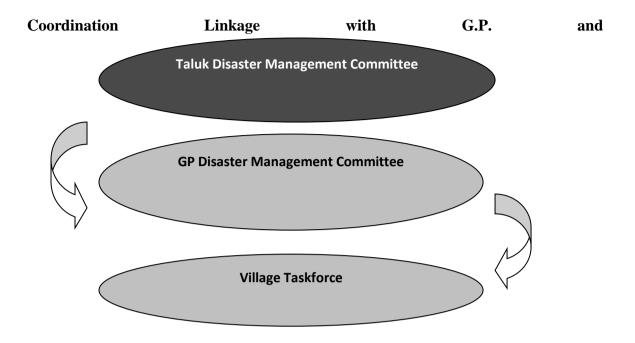




G: Relief

Phase Activities Officials involved During disaster Disseminating information 1st 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 Fire services, Police, Revenue, Veterinary.

Sl.No.	Departments	Relief Operation - Response			
		Preparedness	Pre (after	During	Post
			Warning)		
1	Dist. Admin	DDMA	TASK	DDMA	TASK
			FORCE		FORCE
			TEAM		TEAM
2	Taluk	PDO and TP	TASK	PDO and TP	TASK
			FORCE		FORCE
			TEAM		TEAM
3	DHO	District level	TASK	District level	TASK
			FORCE		FORCE
			TEAM		TEAM
4	CDVO	District level	TASK	District level	TASK
			FORCE		FORCE
			TEAM		TEAM
5	KUWS&DB	District level	TASK	District level	TASK
			FORCE		FORCE
			TEAM		TEAM
6	DSWO	District level	TASK	District level	TASK
			FORCE		FORCE
			TEAM		TEAM
7	NGO/	District AND	TASK	District AND	TASK
	Volunteer	TALUK level	FORCE	TALUK level	FORCE
			TEAM		TEAM



Check List for Control Room:

Actions	Responsibility
Obtain early warning inputs from IMD, CWC, MHA / NDMA /	
KSNMDC/INCOIS/GSI control rooms,	In charge – DEOC
Notify the early warning to Chairman and the members of	In charge - DEOC
the DDMA, Nodal officers of the line departments, ADCs, AC, SP	
	ADC/AC./Superintend ent
Disseminate early warning to divisions, blocks and Panchayats	of Police
	District Information
Flash warning signals on all television and radio networks	Officer
	District Information
Establish disaster dash board on the official district website	Officer
Inform communities / public / villager s about the disaster warning	
using vehicles mounted with loudspeakers	Tahsildars
Use PA systems facilities at Temples, Mosques, and	Tahsildars
Churches to announce about the impending disasters	
Share early warning information with educational information and	
instruct closure of institutions if required	Tahsildars

CHECKLIST FOR VARIOUS DEPARTMENTS

a) Collector and District Magistrate:

Activities	Pre- Disaster	During Disaster	Post Disaster
• Vulnerable and risk	DEOC-NIC	DEOC-NIC	DEOC-NIC
assessment map	POLICE DEPT	POLICE DEPT	POLICE DEPT
• Cut off area with safe route	FOOD DEPT	FOOD DEPT	FOOD DEPT
map	FOOD DEPT	FOOD DEPT	FOOD DEPT
 Storing facilities 			
 List of dealers for food 	DEOC	DEOC	DEOC
 List of volunteers 	FIRE	FIRE	FIRE
Control room set up	NEWKRTC	NEWKRTC	NEWKRTC
Boat and transport for rescue	DEOC	DEOC	DEOC
Transportation for food supply	DEOC	DEOC	DEOC
 Pre-positioning of staff 	AC/TASHILDAR	AC/TASHILDAR	AC/TASHILDAR
 Site operation centres/ staff 	AC/TASHILDAR	AC/TASHILDAR	AC/TASHILDAR
	AC/TASHILDAR	AC/TASHILDAR	AC/TASHILDAR
	AC/TASHILDAR	AC/TASHILDAR	AC/TASHILDAR
people	AC/TASHILDAR	AC/TASHILDAR	AC/TASHILDAR
Coordination and linkage	DEOC	DEOC	DEOC
Damage assessment	DDMA	DDMA	DDMA
Address and telephone list	DDMA	DDMA	DDMA
Alternative communication system			
• Pulling resources from outside if required			
Having network with neighboring blocks			

b) President Zilla Panchayat:

Activities	Pre	During Disaster	Post
	Disaster		Disaster
Approval of DM plan in the Panchayat	Task force	DDMA	RELIEF
Generation	to be made	DECISION	PLAN
Awareness generation	MOCK	ACTION PLAN	Relief plan
	DRILLS	to be made	

c) DHO

Activities	Pre Disaster	During	Post Disaster
		Disaster	
Stock position of live saving	At Hospital	make necessary	make accessibility to
drugs, ORS, IV fluids and other	and PHC	arrangement at	proper beds and medical
equipment	At Hospital	hospital and	facilities and provide
Distribution of ORS, Halogen to	and PHC	PHC	sufficient doctors at

field areas	At Hospital	service
• List of contact address of field	and PHC	
staff	At Hospital	
List of Volunteers	and PHC	
• List of epidemic/ risk prone	At Hospital	
areas	and PHC	
List of site operation areas	At Hospital	
Mobile health unit	and PHC	
• List of Dist./health control	At Hospital	
rooms	and PHC	
List of private and local doctors		
Awareness through propagation		
of healthy practices during the		
disaster time.		
• Trained the village taskforce on		
use of medicine and first aid.		
Daily disease report collection		
and analysis		
 Preventive measures 		
 Taking help of others/dist 		

d) Executive Engineer Irrigation

Activities	Pre Disaster	During	Post
		Disaster	Disaster
Stock piling or repair materials			
like sand, bags, bamboo at			
vulnerable points (Place name			work for
etc.)	stocking of sand		improvement
Provision of guarding of weak	bags and	activate to the	of the
points	necessary	DEOC and	diseased area
List of volunteers	equipments are	follow the	and work on
Taking help of community for	arranged at the	instructions	the
maintenance of the embankments	headquarters		rebuilding of
• Taking proper measures for			the works
protecting the weak points			
Co-ordination with others			

e) DD Agriculture

Activities	Pre Disaster	During	Post Disaster
		Disaster	
 List of different areas to be affected by different hazards Crop pattern with land holding List of irrigation points with status Alternative crop Trained for food preservation and protection Assessment of damage Provision of seeds and others Helping in raising of community nursery for seedling/sapling Crop insurance Generate seed bank/grain bank at village level Coordinating with others. 	make checklist of the victimized area and people affected by the drought and floods area and taking control of the affected area	affected and demarcate the area with the necessary	coordinate with the line department and make necessary changes to the affected area

f) VO

Activities	Pre Disaster	During Disaster	Post Disaster
Animal population with categories.	stockpiling	take control of the	make
Possible problems related to different	the fodder and	diseased area and	necessary
hazards	making	make necessary	documents
 Dealer of feeds/fodder 	necessary	medical	and provide
 List of cow sheds 	miniskits to	assistance stocks	funds to the
 Site camps with volunteers 	the affected	available for not	victimized
Programme for mass vaccination	area	to spread disease	
• Trained the taskforce to use of		to other animals	
medicine			
Coordination with others			

g) Executive Engineer/ (RD/PWD)

Activities	Pre Disaster	During Disaster	Post Disaster
Identification of weak points			
Repair the weak points before hazards			

season	
 Stockpiling of building materials 	
 List of dealers for building materials 	
• Promotion/training of people on	
retrofitting / resistance building	
• Arrangement of equipment for road	
clearance.	
 Plan for vulnerable reduction 	
 Coordination with others 	

CHECKLIST: DO'S AND DON'T'S

a) Operational Guidelines of what to do in the event of a flood.

Do's	Don'ts
Preventive steps: Certain advance measures are taken to	Delay in Authority Delegation and
prevent extensive damages caused	mismanagement
by floods. ◆ Embankments	Late and rescue operations delay
 Flood ways and diversions of rivers. Protection of river banks. Community-cum-shelter buildings. 	Cancellation of the electricity around the area
 ◆ Desiltation of river coast 	

b) Operational Guidelines of what to do in the event of a Cyclone.

Do's	Don'ts
The action that need to be taken in the	stay alert for the next 24 hours as a cyclone alert
event of a cyclone threat can broadly be	means that the danger is within 24 hours.
divided into.	
1. immedeiatly before the cyclone season	
2. When cyclone alerts and warnings are	
communicated.	
3. When evocation are advised.	
4. When the cyclone has crossed the coast.	

c) Operational Guidelines of what to do in the event of a Drought.

Do's	Don'ts
 Digging of bore wells. Providing hand pumps and motor pumps wherever required. Repair of existing hand pumps and motor pumps. De-silting of wells, tank beds. Providing pipelines for supply of water. Providing water to problematic 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.

d) Operational Guidelines of what to do in the event of a Earthquake

Do's		Don'ts
 The main hurdle planning are as followed. Structural planning buildings. Communication lines. Electricity and water. Health hazards. Loss of life, employment. Preventive steps are following areas: Public structures. Dams. Roads. Maintenance of prevention of epidem 	ws: of individual s. supply. property and required in the	Ignoring the basic aspect of Human Casualties and not taking precautionary measures. listing the area under the zone and preparing mitigation plan for the same

Chapter 9

Budget and Financial Arrangements for Disaster Management

Existing sources of Funds for Disaster Management in the District:

State Disaster Response Fund (SDRF): SDRF is a fund constituted under section 48(1) (a) of the Disaster Management Act, 2005 (53 of 2005), these guidelines are being issued under section 62 of the DM Act, 2005.

Calamities Covered under SDRF:

The SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims of cyclones, drought, earthquake, are, flood, tsunami, hailstorm, landslide, avalanches, cloud burst and pest attack.

Section 48 of DM ACT 2005 UNDER CLAUSE (b) and (d) of sub-section (1) are available to the District Authority

National Disaster Response Fund (NDRF):

NDRF is a fund constituted under section 46 of the Disaster Management Act 2005. These Guidelines are issued under section 46 (2) of the Disaster Management Act, 2005 (hereinafter DM Act, 2005), to supplement funds from the State Disaster Response Fund (SDRF) of a State, to facilitate immediate relief in case of calamities of a severe nature.

Calamities Covered under NDRF:

Natural Calamities of Cyclone, drought, earthquake, are, flood, tsunami, hailstorm, avalanches, Cloud burst and pest attack considered being of severe nature by Government of India and requiring expenditure by a State Government in excess of the balances available in its own State Disaster Response Fund (SDRF), will qualify for immediate relief assistance from NDRF.

Flexi-funds under Centrally Sponsored Schemes:

NITI Aayog has issued instructions for Rationalization of CSS, vide OM No. O-11013/02/2015-CSS & CMC dated 17th August, 2016. These instructions are applicable for Centrally Sponsored Schemes with one of the key objective "To undertake mitigation/ restoration activities in case of natural calamities, or to satisfy local requirements in areas affected by internal security disturbances. Therefore the CSS mentioned in Chapter 4 of this plan are one potential source of funding for mitigation/restoration activities.

Funds to be created under DM Act 2005

District Disaster Response Funds (DDRF)

DDRF is proposed to be created at the District Level as mandated by Section 48 of the DM Act. The disaster response funds at the district level would be used by the DDMA towards meeting expenses for emergency response, relief, rehabilitation in accordance with the guidelines and norms laid down by the Government of India and the State Government.

District Disaster Mitigation Funds (DDMF)

District Disaster Mitigation funds would be created at the District Level as mandated under Section 48 of the DM Act 2005.

Responsibilities of the State Departments and Agencies

All State Government Departments, Boards, Corporations, PRED and ULBS have to prepare their DM plans under Section 40 of The DM Act 2005. These Departmental DM Plans are already under preparation at the State Level including the financial projections to support these plans. The necessary financial allocations will be made as part of their annual budgetary allocations, and ongoing programmes. They will also identify mitigation projects and project them for funding in consultation with the SDMA/DDMA to the appropriate funding agency.

Techno-Financial Regime

Considering that the assistance provided by the Government for rescue, relief, rehabilitation and reconstruction needs cannot compensate for massive losses on account of disasters, new financial tools such as catastrophe risk financing, risk insurance, catastrophe bonds, micro-finance and insurance etc., will be promoted with innovative fiscal incentives to cover such losses of individuals, communities and the corporate sector. In this regard, the Environmental Relief Fund under the Public Liability Insurance Act, 1991, enacted for providing relief to chemical accident victims is worth mentioning. Some financial practices such as disaster risk insurance, micro-finance and micro-insurance, warranty on newly constructed houses and structures and linking safe construction with home loans will be considered for adoption.

Other Financing Options

DDMA in coordination with the departments will identify other financing options for restoration of infrastructure/livelihoods, like utilization of flexi fund within Centrally Sponsored Scheme for mitigation/restoration activities in the event of natural calamities in accordance with the broad objective of the Central Sector Scheme.

Opportunities of Corporate Social Responsibility (CSR) & Public-Private Sectors funds investments would also be explored and elaborated by the DDMA for increasing disaster resilience.

Chapter 10 and 11 Standard Operating Procedures (SOP) for each Dept & Officers

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. Director, 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), Bagalkot and Dy. SP, Bagalkot as the case may be.

In addition to these responsibilities, the 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, Bagalkot
- 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 team 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.
- 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 Bagalkot
- 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 crew members 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 bagalkot 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 co-ordination 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 accordingly.
- 4. They will render adequate and timely technical guidance and assist CEC and other agencies involved in the control of emergency.

Chapter 12 Contact Persons and Addresses

Important Name and Telephone Numbers: Bagalkot District

Sl.	Name of the Officer	Name of the Office	Office	Mobile
No.				
1	DR. K .Rajendra	Deputy Commissioner	235091	9480031234
2	Gangubai Manakar	CEO, ZP	235576	9480851000
3	Lokesh jagalsar	S.P. Bagalkot	08354 235077	9480803901
4	Mahadev Muragi	ADC,Bagalkot	235093	8971219588
5	Shree Gangappa	A.C.Bagalkot	220352	9845457614
6	Siddu Hulloli	A.C.Jamkhandi	08353 222677	9731303048
7	S Kankanwadi	DD FOOD		9449614907
8	S S Ingale	Tahsildar, Badami	08357 220037	9901505090
9	Hiremath	Tahsildar, Bagalkot	220374	9731683910
10	Basavaraj	Tahsildar, Hungund	08351 260234	9611646161
11	Bimappa Ajur	Tahsildar, Bilagi	08425 275227	9900929883
12	Prashant changond	Tahsildar, Rabakavi Banahatti		9482896370
13	S.S.Ingale	Tahsildar, Jamakhandi	08353 220023	9449095334
14	S B Badagi	Tahsildar, Mudhol	08350 283034	8050979076

15	Mutalik	Tahsildar,Ilkal		9481416536
16	G M Kulakarni	Tahsildar,Guledgudd		8971702189
17	C Patil	Agriculture J.D.	236378	8277933500
18	Praburaj Hiremath	DD Horticulture	235515	944899233
19	Ravindra hegade	DD AHVS		9611585781
20	Mithun	Fisheries		99022203684
21	Bandivaddar	Fire Officer	236101	9611352932
22	S.B.Kankanavadi	Food D.D.	235094	94489-92015
23	kerur	EE RWS ZP bgk		9448144947
24	Ganapati Patil	PD DUDC		9902407759
25	D.N.Marol	BTDA, CE,Bagalkot	233353	9483339888
				9480849220
26	Jagadeesh Hebballi	Social Wefare, D. O.	235526	
27	Melinamani	Sports & Youth Services	235896	9448408103
28	Basannavar	Women&Child,D. D.	235708	9480019061
29	choudari	Home Guards Commandant	235052	9686644526
30	Biradar	DDPI	235112	94489-99324
			236188	
31	Anant Desai	DHO	235379	9449523036
32	Savita Kale	Dist. Disable Office	235556	9986901586
33	Basarigidad	E.O., T.P., Bagalkot	220327	9480851105
34	punit	E.O., T.P., Badami	08357 220022	9480851100
35	Pushpa kummar	E.O., T.P., Hungund	08351 260227	94808-51115
36		E.O.T.P., Bilagi	08425	9480851110

			275226	
37	Basarigidad	E.O. T.P., Mudhol	08350 280116	9480851125
38	Sanjay	E.O.T.P. Jamkhandi	08353 220009	9480851120
39	Hemalata	CDPO, Bagalkot		97416-10749
40	Annapoorna	CDPO, Badami	08357 220356	9481704699
41	Madhavananda C	CDPO, Hungund I/c	08351 260116	8310216874
42	M M Isranal	CDPO, Bilagi	08425 275321	9449908180
43	Junjarwad	CDPO, Jamkhandi	08353 220265	8983989708
44	Shobha Mantoor	CDPO, Mudhol	08350 280161	9632763272
45	Divater	Statistical Officer	235030	9886485688
46	Shambulingayya	RTO, Bagalkot	08354 201392	9449864029
47	Hiremath	D. S. ZP,	235591	9480851002
48	smt kattimani	PRED ZP,		9620376669
49	Iddalagi	GLBC		94480-21559
50	Bahubali Kondali	District Disaster Management Professional		8951676742