# Palamu District Disaster Management Plan 2019- 20



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#### **Contents**

Chapter 1: Introduction	6
1.1 History of Palamu District	7
1.2 Administrative Features	8
1.3 Objective of plan	8
1.4 Scope of the plan	8
1.5 Need of the DDMP	8
1.6 Mandatory Provision of the DDMP	8
1.7 Limitations of the plan	8
1.8 Administrative Map of the District	9
1.9 Demographic Trend	10
Geo-climatic &Occupational Profile	11
1.10 Occupational Structure	11
1.11 Jurassic Belt	11
1.12 Climate	12
1.13 Rain fall	12
1.14 Drainage System	13
1.15 Agriculture and Animal husbandry	13
1.16 Hydrology	17
1.17 Irrigated Area	18
1.18 Flora and Fauna	19
1.19 Fisheries	19
1.20 Industrial Profile	20
Chapter 2: Hazard Risk Vulnerability Assessment	21
2.1 History of disasters in the district	21
2.2 Disaster Risk Analysis	21
2.2.1 Earthquakes:	21
2.2.2 Accidents:	22
2.2.3 Forest Fire	22
2.2.4 Wild Animal Menace	23
2.2.5 Drought	23
2.2.6. Naxalism	23
2.2.7 Lightening	24
2.3 Seasonality, Disaster Vulnerability and Impacts	24

2.4 Disaster Vulnerability and Impacts	
2.5 Review of Risk Potentialities:	26
2.6 Railway Facilities:Erro	or! Bookmark not defined.
Chapter 3: Institutional Mechanism	27
3.1 Mainstreaming DRR and CCA in development programes Error!	<b>Bookmark not defined.</b> 29
3.2 Comprehensive Water Management Plan	
3.3 District Emergency Operation System (DEOC)	
Chapter 4: Preparedness and Mitigation	
4.1 Preparedness	
4.2 Mitigation	
4.3 General Preparedness Measures	
4.4 Structural and Non-Structural Measures	40
Chapter 5: Response Plan	43
5.1 Response mechanism during Warning Stage	43
5.2 Incident Command System	44
5.3 District Incident Command System	45
5.4 Role and Responsibilities of ICS Staff	46
5.5 Role and Responsibilities of ICS General Staff	47
5.5.1 Operations Section	49
5.5.2 Planning Section	50
5.5.3 Logistics Section	53
5.5.4 Finance / Administration Section	55
Chapter 6: Capacity building and Training	56
Chapter 7: Capacity building and Training	
<ul><li>7.2 Minimum standard of relief for victim.</li><li>7.3 The Incidence Response System of the District</li></ul>	
Chapter 8: Recovery Plan and Reconstruction	67
8.1 Functions of Recovery	67
8.2 Post Disaster Reconstruction and Rehabilitation	68
8.3 Administrative Relief	68
8.4 Military Assistance	69
8.5 Medical Care	69
8.6 Epidemics	69
8.7 Corpse Disposal	69

8.8 Salvage	70
8.9 Outside Assistance	70
8.10 Special Relief	70
8.11 Information	70
8.12 Social Rehabilitation	71
Chapter 9: Budget and Financial provisions	72
Chapter 10: Review and Evaluation	73
10.1 Detail of review and evaluation Plan	73
10.1.2 Roles & Responsibilities of DDMA in Monitoring and Evaluation of DDMP	73
10.2 Post disaster Review Plan	74
10.3 Periodic updating Plan	74
10.4 Mock drill	75
Chapter 11: Co-ordination with Armed Forces, Para-military Force and Non-govern Organizations (NGOs)	
11.1 Armed Forces and Para-Military Forces	76
11.2 NDRF BNS	76
11.3 Non-Government Organisation.	77
Chapter 12: Standard Operating Procedures	80
12.1 Objective of SOPs	80
12.2SOP for Different Departments	81
12.2.1 Revenue Department	83
12.2.2 Police Department	83
12.2.3 Health Department	84
12.2.4 Water Supply Department	85
12.2.5 Irrigation Department	86
12.2.6 Agriculture Department	87
12.2.7 Electricity Department	89
12.2.8 Public Works Department	89
12.2.9 Telephone Department	90
12.2.10 Animal Husbandry	92
12.2.11 Forest Department	93
12.2.12 Department of Fire Service	94
12.3 Disaster Specific SOP's	95
12.3.1 Fire	95
12.3.2 Earthquake	95
Thankhand Disaster Management Authority	

12.3.3 Drought	95
12.3.4 Floods	96
Checklists	97
1. Checklist for DC	97
2. Checklist for Department heads	99
2.1 Preparedness Checklist for the Police Department	99
2.2 Preparedness Checklist for the Health Department	100
2.3 Preparedness Checklist for Energy Department	100
2.4 Preparedness Checklist for Water Supply Department	100
2.5 Preparedness Checklist for Irrigation Department	101
2.6 Preparedness Checklist for Telephone Department	101
2.7 Preparedness Checklist for PWD	101
2.8 Preparedness Checklist for Agriculture Department	101
2.9 Preparedness Checklist for Animal Husbandry Department	102
3. Checklist for District Emergency Operation centre (DEOC)	102
Annexure: Important Detail	103
1. Road map of District	103
2. Resource Inventory of District	103
2.1 Fire & Emergency Department	103
2.2 Urban Development Department	104
2.3Police Department	105
2.4 Drinking Water and Sanitation Department	112
2.5 Aditya Birla Chemicals (India) Ltd., Rehla	113
3.Important Telephone Number	117
3.1 Police Department	117
3.2 Aditya Birla Chemicals (India) Ltd., Rehla	118
3.3 Electricity Department	121
3.4 Engineering Department	121
3.5 District Data Center	122
4. Media & Information Management	122
5.Health and Family Welfare Department	123
6.Police Department	126
Pragya Kendra	126
Drinking water & Senitation Department	130

### Chapter 1: Introduction

Natural Disasters affect societies and nations across the world. Because of the large geographical size of the country, India often faces natural calamities like earthquake, floods, cyclones, tsunami, landslides, heat strokes, thundering and drought which are occurring fairly frequently in different part of the country. Apart from these, manmade disaster like fire hazard, terrorist attacks, building collapse, road accidents, boat capsize, mining related disasters, etc. have also been areas of concern.

It is now recognized fact that, natural disasters are beyond control of human being but losses due to such calamities can be reduced by preparedness, mitigation and prevention. Lot of human suffering and misery from a large number of natural disasters can be mitigated by taking timely actions, preventing mechanisms and undertaking capital works of long and medium terms. The social and economic losses of disasters are often very high and immeasurable. Usually the most affection sections among our society are the poor and the marginalized like the small and landless farmers, the agriculture laborers, unorganized sector workers, slum dwellers, etc. Among these, Women & children, old aged and people with disability are the most vulnerable victims of any disasters.

In view of the global environmental changes, it is likely that the frequency and impact of disasters will increase across the world. The population pressure in causing degradation of environment by interrupting the water flow, hydrological cycles, causing other landslides, floods, siltation or soil erosion. Absence of regulatory instruments in regard to safety considerations against natural hazards in planning of habitations and construction of buildings and life lines could be cited as one of the major reasons for wide spread damage observed year after year in various parts of the country. As a welfare state, the Government will have to take the lead in disaster prevention and reduction and mitigation their impact, enhancing the awareness of the coping mechanisms among the people and to prevent loss of lives and property. The overwhelming drive for industrial growth, increasing population density in urban centers, lack of coordination among various departments and various agencies and haphazard development also contributes to the problem, maintaining quality and proper maintenance are the prerequisites to prevent accidents.

Any disaster management plan developed at national level may not be able to cater the need of local administration, local community, and local factors in disaster management. It is important to evolve and design local resource based and local need based disaster management strategy to address specific preparedness, mitigation, prevention, response and rehabilitation and reconstruction need of victims. A decentralized, participative, people oriented and transparent disaster management system including not only the post-disaster response but also pre disaster prevention and preparedness actions plays a greater role in reducing the disasters and their impact. The districts are the administrative units for district administration and the District Disaster Management Authority and District Disaster Management Coordination Committees headed by the

Deputy Commissioner will eventually have to address the emergency situation in specified standard manner. In this purview, the district disaster management plan of Palamu has been prepared to spell out a standard action and operation mechanism for disaster management.

#### Palamu District at a Glance

#### 1.1 History of Palamu District

The early history of PALAMU is not authentic but we have legends about it. It is, however certain that Kharwars, Oraons and Cheros, the three aboriginal races practically ruled over the tract. The kharwars claim to be Suryavanshi Kshatriyas. They trace their decent from Ajanagara or Ayodhya. Karusa was the sixth son of Manu Vaivasata and he was assigned the eastern territory. The descendants of Karusa were called Karusas who subsequently came to be known as Karwars or kharwars. According to tradition they were the rulers of Rohtasgarh. The kharawars point to the days of the Pratapadhaval, one of the lines of chiefs who ruled there in the twelfth century A.D., during the time of their greatest prosperity. The cheros have been spoken in very high terms in the Aitareya Aranyaka along with the Vangas and Magadhas. They did not observe the Vedic sacrifices and still they are termed as revered cheros 'cheropadas. There is not much evidence to show that the Cheros came to this region from Kumaun as some think.

The administrative head quarter is Daltonganj situated on Koel River in 24 degree 3' north and 84 degree 4' east. Daltonganj has taken its name after colonel Dalton, commissioner of Chhotangapur in 1861. The distance between Daltonganj and Ranchi is 165 Km. Old Palamu District is divided in three Districts Palamu, Garhwa and Latehar.

#### 1.2 Administrative Features

The district is bounded **north** by the river Son which separates it from the districts of **Rohtas**, and by the district **Aurangabad (Bihar)**, on the **east** by the district of **Chatra**, on the **south** by the district **Latehar** on the **west** by the district **Garhwa and Chhatisgarh** state.

#### 1.30bjective of plan

The proposed District Disaster Management Plan has been prepared with the following objectives:-

- To assess the Hazard, Risk and Vulnerability of the district.
- To gather and analyze the district level data for handling the expected disasters.
- To ensure the best use of resources available in the district to handle the disastrous situations.
- To ensure disaster preparedness at all levels in the district.
- To find out suitable and viable mitigation strategies.
- To ensure the mainstreaming of the DM plan with the ongoing developmental plans in the district.
- To create an effective Incident Response System & EWS System in the District.

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#### 1.4 Scope of the plan

The plan is relevant for all the departments as well as sectors of the district. It is aimed at bringing all the strategies for disaster risk reduction under a single umbrella .The plan has a vast scope for inclusion of all the developmental strategies targeted towards the safety of all the sections of the society, especially the vulnerable groups.

#### 1.5 Need of the DDMP

Disaster = Hazard X Vulnerability.

Hazards are natural or man-made; we humans can't prevent hazards but can reduce the vulnerability to reduce the risk, known as DRR (disaster risk reduction). For better DRR and management it is important to have planning well in advance so that people can work more professionally. And for doing so, the advance planning is required at the national, state, district, block, panchayat and village and even family and individual levels.

#### 1.6 Mandatory Provision of the DDMP

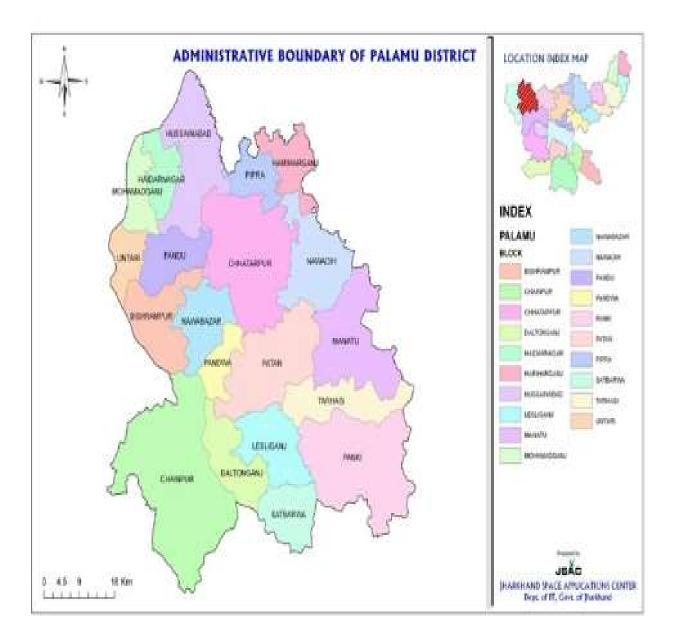
- > Every 6 months there should be counting of resources and man power availability.
- > Every year the plan should be updated based on recent events and event of last year.

#### 1.7 Limitations of the plan

The proposed plan has its own limitations that may be broadly named as – lack of coordination between the departments, lack of physical and human resources in the district, the low socio economic status of the community, poor infrastructure etc. The said limitations may stand as a hurdle in the implementation of the plan, which can only be handled by making use of all the existing resources in their full potential.

#### 1.8 Administrative Map of the District

The District of Palamu lies between 23 degree 50' and 24 degree 8' north latitude and between 83 degree 55' and 84 degree 30' east longitude. It contains an area of *4393* square KMs. The district has 3 sub-division, 20 Blocks, 19 Circles and 17 educational blocks.



#### 1.9 Demographic Trend

As per the 2011 census the district has population of 1,939,869 persons. The density of population here is 442 people per sq. km. There was change of 26.17 percent in the population compared to population as per 2001. In the previous census of India 2001, Palamu District recorded increase of 28.89 percent to its population compared to 1991.

Demographic trend of Palamu District [2001-2011]

Demographic trend of Palamu District [2001-2011]							
	Demography	2011	2001				
Α	Population						
A1	Total Population	19,39,869	15,37,465				
A1.1	Male Population	10,06,302	7,97,524				
A1.2	Female Population	9,33,567	7,39,941				
A1.3	Schedule Caste (S.C.) Families (%)		27.6				
A1.4	ScheduleTribe (S.T.) Families (%)		9.4				
	Other Backward Class (OBC)						
A1.5	families						
	Children between the age of 0-6						
A1.6	years	3,29,728	3,10,478				
A1.7	Persons above the age of 65 years						
A2	Permanent Disability						
A2.1	Handicapped Persons						
A2.2	Blind Persons						
A3	Total Number of Families						
A3.1	Total BPL families		187512				
	Literacy rate of District Palamu (In						
A4	percentage)						
A4.1	Male Literacy rate	76.27	79.82				
A4.2	Female Literacy rate	53.87	40.84				
A4.3	Total Literacy rate	65.50	61.15				
A5	Sex Ratio(per 1000)	928	928				
A5.1	Child sex Ratio (0-6 age)	945	963				

# Geo-climatic & Occupational Profile

#### 1.10 Occupational Structure

Palamu is one of the richest districts of Jharkhand in forest resources. The species of forest trees which are found in the district include Sal, Dhaura, Mahua, Kendu, Bamboo, Asan etc. The major products of forest include Timber, Palas, firewood, Sal seed, Mahua seed and Biripatta.

Workers	Male	Female	Total
Total workers	349538	183468	533006
Main workers	245317	55179	300496
Marginal Workers	104221	128289	232510
Cultivators	127082	54523	181605
Agricultural Workers			254389

#### Geography:

Rivers- Koyal, Sone, Amaanat, Auranga

The district has hilly terrain with sedimentary soil. However, the Gangetic belt and Barharwa region is fertile with alluvial soil. There is a soil variation in the district. The soils of the district can broadly be grouped into three classes:-

- a) Heavy Clays: This soil can hold moisture for a longer period and as a result considered to be favorable for Rabi crops.
- b) Sandy Soil: This soil is locally known as 'Balsundar' and consists of coarse sand to a large extent and facilitates production of Paddy, Fruits and vegetables.
- c) Loamy Soil: This soil is locally named 'Dorasa' and consists of sand and clay. This soil is suitable for growing sugarcane.

#### 1.11 Jurassic Belt

The remains of Palamu District (radio carbon dating) reflect the importance of area in past circular residential structure with the use of bricks/mud/calcium carbonates mainly. In this present time the modern construction mainly cements, concrete structures are seen. Some construction remains of houses by use of stones.

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#### 1.12 Climate

The Palamu division generally lies at a lower height than the surrounding areas of Chota Nagpur Plateau. On the east the Ranchi plateau intrudes into the division and the southern part of the division merges with the Pat region. On the west are the Surguja highlands of Chhattishgarh and Sonbhadra district of Uttar Pradesh. The Son River touches the north-western corner of the division and then forms the state boundary for about 45 miles (72 km). The general system of the area is a series of parallel ranges of hills running east and west through which the North Koel River passes. The hills in the south are the highest in the area, and the picturesque and isolated cup-like Chhechhari valley is surrounded by lofty hills on every side. Lodh Falls drops from a height of 143 metres (469 ft) from these hills, making it the highest waterfall on the Chota Nagpur Plateau. Netarhat and Pakripat plateaux are physiographical part of the Pat region.

Palamu district is Hot in summer. Palamu District summer highest day temperature is in between 24  $^\circ$  C to 45  $^\circ$  C. Average temperatures of January is 16  $^\circ$  C , February is 20  $^\circ$  C , March is 25  $^\circ$  C , April is 30  $^\circ$  C , May is 35  $^\circ$  C .

#### 1.13 Rain fall

The district falls under unsure rainfall zone and hence receives monsoon rains during June to September. The average annual rainfall of the district is less than 1200 mm as it comes under the rain shadow part. More than 80% of the precipitation is received during the monsoon months. The district is characterized by warm climate in March to June and later on there is a gradual decline in temperature from October onwards to December. January is the coolest month of the year. March, April and May are the hot and dry months of the district. During winter season the district records temperature between 16 to 18 degrees centigrade and during summer the temperature increases up to 41 degrees centigrade.

Month	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Normal Rainfall(in mm)	26.5	31.8	16.7	8.5	13.1	152.4	344.7	388.1	206.7	49.3	14.4	4.9
Actual Rainfall(in mm)	0.0	9.8	0.0	7.9	0.0	84.2	135.9	202.5	71.1	135.8	0.0	0.0
Year 2013												
Actual Rainfall(in mm)	7.2	30.6	4.9	0.0	13.6	40.6	151.6	171.6	114.0	13.8	0.0	5.3
Year 2014												
Actual Rainfall(in mm)	12.5	0.1	6.2	13.0	0.7	44.2	439.5	165.3	41	4.0	0.0	4.4
Year 2015												
Actual Rainfall(in mm)	19.5	0.0	18.7	0.0	7.9	52.35	319.6	486.6	255.9	41.3	0.0	0.0
Year 2016												
Actual Rainfall(in mm)	0.0	0.0	0.0	0.0	0.0	30.3	440.0	18.4	42.1	9.4	0.0	0.0
Year 2017												
Actual Rainfall(in mm)						57.9	255.4	180.7	133.1	0.0		
Year 2018												

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#### 1.14 Drainage System

Palamau is drought-prone area. There was severe drought in palamau in 1993. in the reserve there are 322 water holes almost evenly spread in the area. List of Waterholes in given in annexure-8. Many water holes do not dry even during summer season. There are few aquifers also. There are two perennial rivers which flow across the reserve ---North Koel and Burha. There are many streams, Nallahs, Chuans also. Satnadiya, Pandra, Panchhadia, are longest streams. These water holes are regularly maintained during summer. A few water holes get dried. There is no scarcity of water even during pinch period.

The general slope of the district is from south to north. Geologically the hill areas are made of metamorphic rocks with sandstones, conglomerates and lava capping having thick mantle of laterite at some places. Alluvium is found in the lower parts of the district. The district is drained by the river North Koel and its tributaries the Auranga and Amanat. The general line of drain is from south to north towards river Sone.

#### 1.15 Agriculture and Animal husbandry

Palamu district is primarily rural with the large population still residing in the villages. Agriculture is the main source of economy for the rural people of the district. However, agriculture is mainly for subsistence and is yet to be taken up on a commercial basis due to lack of adequate assured irrigation facility and other infrastructure bottlenecks.

#### **Classification of Workers 2001 census**

- (a) Cultivators 1553958
- (b) of (a) small and marginal farmers 130865
- (c) Agricultural Labour 139273
- (d) Artisans 47039
- (e) Household cottage industries 4210
- (f) Other workers 348480

#### **Animal Husbandry (As per Livestock Census 2003)**

- (a) Plough animals 288317
- (b) Dairy animals
- (i) Cows 499527
- (ii) Buffaloes 97567
- (iii) Sheep/Goat/Pig 391216
- (iv) Poultry 396798

# AGRICULTURE DEPARTMENT FARMERS DATA

S.no	Name of block	No of Big Farmers	No of Marginal Farmers	No fo Small Farmer	Other	Remarks
1	Daltonganj	34	20958	2408	1666	
2	Chainpur	31	19197	2332	1519	
3	Panki	23	13501	1656	1127	
4	Lesliganj	19	11153	1368	931	
5	Patan	22	12327	1584	1078	
6	Pandwa	19	11013	1368	931	
7	Tarhasi	18	9392	1152	784	
8	Manatu	16	10566	1296	892	
9	Vishrampur	20	11739	1540	980	
10	Pandu	14	8218	1008	706	
11	Nawabazar	16	9389	1152	784	
12	Satbarwa	14	8019	997	686	
13	Hussainabad	23	13501	1656	1127	
14	Untari road	15	8805	1079	735	
15	Hariharganj	22	12914	1584	1078	
16	Pipra	13	7631	936	647	
17	Chatterpur	28	16436	2016	1372	
18	Nawdiha bazar	16	9069	1167	787	
19	Mohamadganj	17	9979	1224	833	
20	Haidernagar	18	11309	1241	842	
	Total	398	235116	28764	19505	

#### Land use pattern of Palamu District

Kharif Land Use		Rabi Land Use		
Item	Area, Hectare	Item	Area, Hectare	
Total Land use	130,510	Total Irrigated Land	12097.79	
Paddy	47,000	Total Area under Rabi	7056	
Pulses	45,872	Wheat	15500	
Oilseed	3,412	Vegetables	7546	
Maize	26,680	Oilseed	18945	
Marua		Pulses	7300	
Vegetables	7,546	Gram	11500	
Sugar cane		Others		
Others				
Total left Fallow	12,962.11			
Total Land owned	1,43,472.11			

#### **Livestock & Poultry:**

#### **ANIMAL POPULATION DATA**

Sl. No.	Name of Block	No. of Buffalo	No. of Cattle	No. of Sheep/Goat	Poultry	Remarks
1	Chainpur	9769	54416	35790	40459	
2	Sadar Medininagar	3200	22140	12543	7146	
3	Satbarwa	1753	15387	9570	11154	
4	Panki	11284	53598	30054	29183	
5	Lesliganj	3186	28524	14056	10963	
6	Patan	5464	42903	20354	20885	
7	Manatu	3238	14436	9781	8443	
8	Tarhasi	4625	24330	10584	14250	
9	Hussainabad	8409	36479	18193	15902	
10	Haidarnagar	2871	16306	11003	4317	
11	Mohammadganj	1803	12155	7458	2381	
12	Bishrampur	3023	31406	17456	11655	
13	Untari Road	1546	10492	4259	2115	
14	Pandu	3234	18676	18110	3603	
15	Hariharganj	3942	17246	10863	6294	
16	Nawa Bazar	2600	14047	9998	5400	
17	Pipra	2932	15505	7911	4038	
18	Chhattarpur	7731	46760	21043	16863	
19	Nawdiha Bazar	4604	27373	13642	7879	
20	Pandwa	2204	12203	5721	6376	

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Irrigation is a critical input in agriculture. The need for increased food-grain production in the district relates to development of water resources and its management. Ground water resources are more sustainable even under period of moisture stress and, therefore, greater emphasis is being laid on the optimum development and efficient management of these resources on scientific lines. Most importantly, irrigation acts as a buffer under drought conditions, whereby the protective irrigation can prevent crop loss.3.7 Crops

The total geographical area of the district is 524690 ha. Of this forest area is 226850 ha, current fallow is 78000 ha, other than current fallow is (i.e. Up to 2 to 5 years) 48140 ha, cultivable wasteland 9960 ha. Apart from 31590 ha is under barren and unutilised land. The major crops grown in the district are as follows:

Sl No	Crops	Kharif	Rabi
1	Cereals	Rice, maize	Wheat
2	Pulses	Arhar, Urad, Moong,	Gram, Linseed,
		Kurthi	Lentil
3	Oilseed	Groundnut, Niger	Mustard, Sunflower
4	Vegetables	Bhindi, Chilli	Potato, Onion,
			Brinjal, Tomato

The major crops of Palamu District in agriculture land areas under.

Crops	Sowing	Reaping
Paddy	Jun-Jul	Nov-Dec
Wheat	Nov- Dec	Mar- April
Maize	Jun-Jul	Aug-Sep
Arhar	Jun- Jul	Mar-April
Grams	Oct-Nov	Feb-Mar
Vegetables	As per Season	As per Season
Mustard	Oct-Nov	Jan-Feb
Rai	Oct	Jan

**Crop Pattern Data** 

S.no	Month	Season	Type of Crop	Quantity (in	Quantity (in	Remarks
			Produced	Lac Quintal)	ac Quintal)13-	
				12-13	14	
1	April to	Kharif	Rice, Paddy	1.451	0.338	2012-13
	September		Maize	0.305	0.561	was
2			Pulses	0.247	0.287	Normal
3			Oilseed	0.018	0.019	year
			Vegetables	1.634	1.815	and
4	October to	Rabi	Wheat	0.241	0.266	2013-14
	March	Season				
6			Pulses	0.124	0.127	was
7			Oil seeds	0.102	0.097	Drought
8			Vegetables	7.779	8.622	year

#### 1.16 Hydrology

The general line of drainage is from south to north towards the river Koyal and Sone. Koyal forms the eastern boundary and Sone forms northern boundary of the district. There are also a host of smaller streams, most of which are from mountain currents with rock stream beds. Other important rivers of the district are Danro, Sarsatiya, Tahale, Annaraj, Urea, Bai Banki, Bellaiti, Pando, Biraha, and Sapahi. Other notable river is Kanhar which forms south eastern boundary of the district for about 80 K.M. Due to its Geographical formation Palamu district is rich in water resources.

The district is underlain by hard rock belonging to the Precambrian period and recent alluvium along river courses. The geology and structure of underlying basement controls the occurrence and movement of groundwater. The groundwater occurs in secondary porosities like joints, fractures and their inter-connected extensions. Groundwater occurs in the district within weathered mantle of hard rocks. The limited volume of groundwater in alluvial deposits occurs along the Sone and North Koel rivers. The thickness of weathered mantle varies from 5 to 16 mbgl in general. The source of groundwater recharge is entirely by rainfall. As the rivers of the district are effluent which do not contain appreciable amount of water during lean period to recharge groundwater at lower reaches. The rainfall over the area is fairly high but because of its topography major part of the rainwater goes as run off.

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#### 1.17 Irrigated Area

The soils occurring in different landforms have been characterised during soil resource mapping of the state on 1:250,000 scale (Haldar et al. 1996) and three soil orders namely Entisols, Inceptisols and Alfisols were observed in Palamu district.

Alfisols were the dominant soils covering 53.9 percent of TGA followed by Entisols (21.5 %) and Inceptisols (20.0 %).

Agriculture is not only an important driver of macro- economic; it is an essential element in the strategy to make growth more inclusive. The National Policy for farmers, 2007 calls for a paradigm shift from a purely commodity cantered approach to a human centric approach for agriculture development. This requires improving economic viability of farming by substantially increasing the net income of farmers. In this backdrop, the District Agriculture Plan for Palamu district has been prepared with the vision to develop agriculture and allied sectors in a comprehensive way.

- (a) Net Irrigated area 34124 ha.
- (b) By Channels 8675 ha.
- (e) By dug well 12783 ha.
- (g) By other sources 11446 ha.

S.No	District	Total Area ( in Lac. hactare)	Cultivated Area ( in Lac. hactare)	Jungle Area (in lac hactare)	Marshy Land (if any) Area (in lac hactare)	Uncultivated Land Area (in lac hactare)
1	PALAMAU	436024.803	151909	157765.97		126349.83

#### 1.18 Flora and Fauna

Palamu is one of the richest districts of Jharkhand in terms of forest resources. About 43 percent of the total area of the district is covered by forests. The area under forests is estimated at 226850 hectares. The species of forest trees which are found in the district include Sal, Dhaura, Mahua, Kendu, Bamboo, Asan etc. The major products of forest include Timber, Palas, Firewood, Sal seed, Mahua seed, Biripatta etc. These forests are a source of revenue for the government and also help to meet the demand for timber, firewood, fodder etc. The extensive forest is abode of so many types of wild animals. In the thick forest of Bhandariya and Ranka wild animals like Elephant, Leopard, Hyena, Jackal, Fox, Dear, Boar, Rabbit, Monkey, Beer, are found.

#### 1.19 Fisheries

- i) The district has five fish seed production centers with the current production being about 100 lakh fingerlings every year.
- ii) There are four exclusive fish markets in the district.
- iii) There are at present 22 Fishermen's Cooperative Societies in the district. Of these there are 18 societies based near the water body and 4 are Block level Samitis.
- iv) District Fisheries Department sends fish farmers for training to Fisheries Research Centre at Ranchi and also provides training at the district headquarters. 81 fish farmers were trained during the year 2007-08. The number of fish farmers targeted to be trained during the 2008-09 is 179 of which 19 should belong to Schedule Caste.
- v) The fish productivity in the district is reported to be about 1700-2000 kg./ ha. However, after proper renovation of existing ponds and by using scientific methods of fish culture, the productivity could be increased to about 2500 kg. / Hectare.
- vi) 42 Matsya Mitra has been identified by the Fisheries Department and 37 of them have been trained. They were utilized for survey of ponds, tanks, distribution of seeds and monitoring of fish culture in Government assisted ponds.

Sl. No	Category	No.	Area (In Hector)
1	Private Ponds	2200	2704
2	Govt. Ponds	128	135
3	Reservoir	16	2895
4	Other Water bodies	9029	137
5	Total	2373	5871

No. of Fish Seed producing centers	15
Production Capacity	2240 Mega tons
No. of Fishermen	1.00,000
No. Of Fish Market	35

#### 1.20 Industrial Profile

The district is rich in minerals in a few minerals. The important minerals being commercially mined are limestone, dolomite and coal. There is no heavy industry in the district. There is, however, two medium industries in the district the famous being the Bihar Caustic and Chemicals Ltd. Company of the Aditya Birla Group. There are about 36 registered Small Scale Industries. Further, there are other small industries which are agro based, mineral based, chemical based and engineering and allied based. There are about 287 food processing units, 38 leather based industries and 49 metal based units. The growth in industrialization, however, is not very encouraging mainly due to infrastructure bottlenecks the primary being lack of electricity.

The Plant of Bihar Caustic and Chemicals Ltd were formally inaugurated by then Prime Minister, Late Smt. Indira Gandhi on 5th September 1984. The main products of the company are

- a) Caustic soda lye Rayon Grade
- b) Liquid chlorine,
- c) Hydro-chloric acid,
- d) Sodium Hypo Chlorite and
- e) Electricity.

The Company's Products are having great demand by Aluminum, Paper, Textiles, Soaps, water treatment Plants and others Chemical industries. Major customers are Hindalco, Tisco, Zindal, Usha Martin and NTPC. We have also been exporting our products to Bangladesh and Nepal.

Sl. No.	Type of Industries	No. of Unit	Employment
1	Agro based	77	365
2	Readymade Garments and	34	105
	Embroidery		
3	Cotton Textile	19	145
4	Wooden based Furniture	60	250
5	Paper & paper based	01	006
6	Chemical based	15	213
7	Mineral based	30	355
8	Metal based (Steel feb)	21	109
9	Engineering Units	52	301
10	Electrical Machineries and	08	043
	Equipment		
11	Repairing and Servicing	228	462
12	Others	26	119

# Chapter 2: Hazard Risk Vulnerability Assessment

#### 2.1 History of disasters in the district

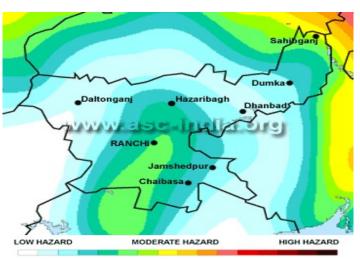
#### **Disaster Vulnerability of the District**

Hazard	Severity	Last incidence(mm/yy)
Earthquake	Low	NA
Forest Fire	Low	NA
Lightning	High	2013, 2014, 2015,16, 17, 18, 19
Drought	High	2013-2014, 14-15, 15-16, 18-19
Heat stroke	Medium	2014, 2016
Naxalism	High	2013, 2016
Flash flood	Medium	2015, 2016

#### 2.2 Disaster Risk Analysis

#### 2.2.1 Earthquakes:

Palamu district is located on relatively stable tectonic plates and in recorded history has never been the epicenter of an earthquake. The district is marginally or least affected by earthquakes in neighboring areas. In recent years, much of the seismic activity in the state of Jharkhand has been in the north, at the Himalayan foot hill zone of Ganga-Damodar region lying at northern side of Jharkhand. The 2011 Sikkim earthquake also known as the 2011 Himalayan earthquake was a magnitude 6.9 (Mw) earthquake centered within the Kanchenjunga Conservation Area, near the border of Nepal and the Indian state of Sikkim, at 18:10 IST on Sunday, 18 September 2011. 60 people were reportedly killed in Sikkim alone. At least 7 people have died in Bihar, while 6 deaths have been reported from West Bengal. The earthquake shocks were also felt in Palamu in substantial way.



ms 02 03 04 05 06 07 08 10 13 16 20 25 30 40 60 ms Source: www.asc-india.org

According to GSHAP data, the state of Jharkhand falls in a region of low to medium seismic hazard. As per the 2002 Bureau of Indian Standards (BIS) map, this state also falls in Zones II, III & IV. Historically, parts of this state have experienced seismic activity in the M5.0 range.

#### 2.2.2 Accidents:

The state highway and national highway no 75 and 98 pass through the district. The District along the state highway and District along the national highway are highly accident-prone.

#### 2.2.3Forest Fire

Forest fires constitute a major threat, as the forests of the districts are mostly dry deciduous and are prone to forest fires in the summer season. The longer the interval between two successive fires, the more is the damage due to the higher fuel build up. Both natural and man-made causes are responsible for forest fires. High atmospheric temperature and low humidity is a dangerous combination. The fires caused by Mahua collectors are common in March and April and are the cause of wide spread fire damage to the forest growth. The fires are usually surface blazes that were controlled using the traditional method of clearing the area of dry leaves and then dousing the fire by beating the bushes. In 2011, fires broke out in as many as 14 places, including Palamau Tiger Reserve, Saranda, Latehar and Garhwa. According to forest department officials, the blazes had been doused at most places.

The severity of the disaster may be estimated by having a glance of the following data:-

S.No.	Origin	Year	Area burnt (In
			hector)
1	Natural	2005-06	161.50
2	Accidental due to human	2006-07	12.00
	activities		
3	Intentional traditional causes	2007-08	25.00
4	Unknown	2008-09	24.00
5		2010-2011	4.00
6		Total	226.50

Jharkhand Disaster Management Authority

The following steps are being taken by the forest Dept. for prevention and management of forest fires:-

- Formation of Divisional Fire region Cell in the summer season.
- Formation of Village Fire Management Committee (VFMC)- 313 committees functional
- Implementation of seven Micro Water Shed Projects 5284.34 hectors treatable.

#### 2.2.4 Wild Animal Menace

Among wild animals, blue-bulls (nilgais), monkeys, jackals, bears, bores, porcupines cause great damage to the standing crops. They are controlled by fencing, by scaring away, by means of drums and scare-crows. In some cases crop is saved by means of guns. Wild elephants in certain areas create occasional havoc by destroying crops, particularly paddy. The wild elephant menace is definitely on the increase.

#### 2.2.5 Drought

Palamu district, located in the western part of the Jharkhand, is one of the drought prone districts of the State where agriculture is characterized by low productivity and subsistence and marginal farming. Irrigation is a critical input in agriculture and the need for increased foodgrain production in the country has accelerated all activities related to development of water resources and its management. Groundwater resources, in particular, have become an invaluable resource for agricultural development and rural water supply schemes in the country.

It is a well known fact that timely irrigation boosts crop yields and allows intensive use of land besides providing scope for altering the cropping pattern in favor of high value crops. Most importantly, irrigation acts as a buffer under drought conditions, whereby the protective irrigation can prevent crop loss. The fluctuating trend in rainfall over the past few years coupled with the above facts are primarily responsible for the large extent of mono-cropped area in the district, which in turn has led to the deficient food-grain production in the district. The last decade has shown the increasing severity of Drought situation in the entire state of Jharkhand including Palamu district. The total food production has also decreased significantly. The district has faced deficit of rainfall in the year 2010, 2015, majority of area could not have plantation of paddy.

#### 2.2.6. Naxalism

In last few years internal conflict has intensified in India along most of its regions along the east coast spreading from Nepal border to Tamil Nadu. Though started 40 years ago, it ceased to die out and instead had grown ominously. This region largely includes dense forests, tribal areas and consists of 92,000 sq. km. popularly called the Red Corridor; this area is under the heavy influence of left wing extremists – called Naxals. Red Corridor:

The area where the Maoists operate has grown dramatically in last two decades. In the early 1990s the number of districts affected by varying degrees of Maoist violence stood at just 15 in four states. This rose to 55 districts in nine states by the end of 2003 and to 156 districts in 13 states in 2004. Maoists are currently believed to be operating in around 200 districts (of a total of 604 districts in the country) in 17 states. The worst affected states are

Jharkhand, Chhattisgarh, Bihar, and Orissa and Palamu is one of worst naxalism affected district in the state of Jharkhand.

#### 2.2.7 Lightening

The district of Palamu is highly prone to lightening disaster, especially in the pre monsoon period. The labourers are often victimized during the sowing season. The barren land areas with long isolated trees are the main reason for lightening disaster. Severity of the disaster can be estimated with the help of the following data:-

be estimated w	be estimated with the help of the following data							
Year	No of deaths due to Lightning	Area of accident						
2010-2011	5							
2011-2012	2							
2012-2013	1							
2013-2014	3	Vishrampur, Husainabad, Mohamadganj						
2014-2015	2	Mohamadganj, Chainpur						
2015-2016	6	Husainabad, Vishrampur, Satbarwa, Patan						
2016-2017	31	Husainabad, Vishrampur, , Patan, Pipra,						
		Chainpur, Naudiha bajar, Chhatarpur,						
		Manatu, Panki						
2017-2018	10 Persons and 25 Animal	Vishrampur, , Patan, Pipra, Chainpur,						
		Naudiha bajar, Chhatarpur, Manatu, Panki						
2018-2019	18 Persons and 24 Animal	Patan, Lesliganj, Chainpur, Naudiha bajar,						
		Chhatarpur, Manatu, Panki, Pandwa,						
		Tarhasi, Mohamadganj, Hariharganj						

#### 2.3 Seasonality, Disaster Vulnerability and Impacts

Disaster	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Forest Fire				✓	✓	✓						
Lightening					<b>√</b>	✓	✓	<b>√</b>	✓	✓		
Drought for							✓	✓	✓			
agriculture												
Drought for				✓	✓							
drinking												
water												
Heat wave				✓	✓	✓						
Heavy rain							✓	✓	✓			

#### 2.4 Disaster Vulnerability and Impacts

Type of Disaster	Seasonality	Potential Impact	Vulnerable Areas	
Earthquake	Any time	Loss of life, livestock, property and Infrastructure	Entire Region	
Forest Fire	Mostly during Summer season April- June  Loss of forest, environment degradation		Forest cover in the District	
Lightning	During Rainy Season	Loss of human life, property and animal	Anywhere in the District	
Drought for drinking water	April – June	Lake of drinking water for people and Livestock	Rural Areas are more vulnerable	
Drought for agriculture	July – Sept	Loss of crop and Livestock	Rural Areas are more vulnerable	
Heat Stroke	April – June	Loss of life, Illness	Heat Stroke	
Naxalism	Anytime	Loss of life, Government infrastructure, threat to villagers, development process halted in affected areas	Rural Areas in the District.	

#### **Disaster History**

S.no	Disaster	Month & Year	Damages	
		(Last Occurrence)		
1	Earthquake	-	-	
2	Cyclone	12/10/2013	No critical damage to human life	
3	Flash Flood	17/07/2015	Damages of road, small bridge, House	
		August 2016	and agriculture	
4	Firm fire	-	-	
5	Road Accident	12/05/2014,	4 dead 7 injured	
		Chattarpur		
6	Drought	2013-14, 2015-	Not threatened life but damages of crops	
		16, 2018-19		
7	Naxal attacks	2014, 27.01.16	6 Police man dead	
8	Lightening	2013, 2014, 2015,	Damages to personnel and cattle in	
		2016, 2017	Rural	

#### 2.5 Review of Risk Potentialities:

Type of Disaster	Major impact	Damage Prone	No. Of vulnerable
		Area-wards	families living in
Earthquake			
Forest Fire	Yes	Forest and Firm field	
Drought	Yes	Rural areas	
Road Accident	Yes	NH-75, 98 and Major SH	
Naxal Attacks	Yes	Rural Areas	
Cyclone			
Lighting	Yes	Rural Areas	

#### 2.6 Railway Facilities:

List of Trains at Daltonganj stations:

	Train No	Train name	Source	Destin ation	Expected arrival
1	53343	GMO-CPU PASS	GMO	CPU	13:57
2	18613	RNC CPU EXPRESS	RNC	CPU	14:38
3	84369	TRIBENI EXPRESS	BRWD	BE	15:54
4	11447	SHAKTIPUNJ EXP	JBP	HWH	16:22
5	12874	ANVT HTE EXPRESS	ANVT	HTE	18:07
6	53358	DOS-BRKA PASSENGER	DOS	BRKA	19:25
7	12873	HTE-ANVT EXPRESS	HTE	ANVT	19:39

# Expected departure 13:59 14:40 15:59 16:27 18:09 19:30 19:41

#### Map of Railway network:



Jharkhand Disaster Management Authority

# Chapter 3: Institutional Mechanism

#### Palamu District Disaster Management Authority:-

For prevention and mitigation effects of disasters and for undertaking a holistic, coordinated and prompt response to nay disaster situation it has been decided by the Government. The Disaster Management Act, 2005 provides for the effective management of disasters and for other matters connected therewith or incidental thereto. The Disaster Management ACT, 2005 under section 3, 14 & 25 seek to provide for establishment of National, State and District Disaster Management Authorities.

In line to Disaster Management Act 2005, Palamu District Disaster Management Authority will be constituted as per notification of Government of Jharkhand vide letter no.2/DM-40/2010-824/DM-Ranchi dated 22.09.10 as below –

1. Deputy Commissioner, Palamu - Chairperson

2. Chairperson, Zila Parishad - Co-Chairperson

3. Additional Collector - Chief Executive Officer

4. Superintendent of Police - Member

5. Deputy Development Commissioner - Member

6. Chief Medical Officer - Member

7. Executive Engineer, DW&SD - Member

The District Disaster Management Authority will act as the District planning, coordinating and implementing body for Disaster Management and take various measures for the purpose of Disaster Management in the District in accordance with the guidelines laid down by the National or State authority. Powers and Functions of District Authority as per Section 30 of DM ACT, 2005 are as under:-

- i. Prepare a disaster management plan including district response plan of the district
- ii. Coordinate and monitor the implementation of the National Policy, State Policy, National Plan, State Plan and District Plan
- iii. Ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the Government at the district level as well as by the local authorities
- iv. Ensure that the guidelines for prevention of disasters, mitigation of its effects, preparedness and response measures as laid down by the departments of the Government at the district level and the local authorities in the district
- v. Give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary
- vi. Lay down guidelines for prevention of disaster management plans by the department of the Government

Jharkhand Disaster Management Authority

- at districts level and local authorities in the district:
- vii. Monitor the implementation of disaster management plans prepared by the Departments of the Government at the district level;
- viii. Lay down guidelines to be followed by the Departments of the Government at the district level for purpose of integration of measures for prevention of disaster and mitigation in their development plans and projects and provide necessary technical assistance therefore;
  - ix. Monitor the implementation of measures referred to in clause
  - x. (x)Review the state of capabilities for responding to any disaster or threatening disaster situation in the district and give direction to the relevant departments or authorities at the district level for their up gradation as may be necessary
  - xi. Review the preparedness measures and give directions to the concerned departments at the district level or other concerned authorities where necessary for bringing the preparedness measures to the level required for responding effectively to any disaster or threatening disaster situation;
- xii. Organize and coordinate specialized training programmes for different levels of officer, employees and voluntary rescue workers in the district;
- xiii. Facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non- governmental organizations;
- xiv. Set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public;
- xv. Prepare, review and update district level response plan and guidelines;
- xvi. Coordinate response to any threatening disaster situation or disaster;
- xvii. Ensure that the Departments of the Government at the district level and the local authorities prepare their response plans in accordance with the district response plan;
- xviii. Lay down guidelines for, or give direction to, the concerned Department of the Government at the district level or any other authorities within the local limits of the district to take measures to respond effectively to any threatening disaster situation or disaster;
- xix. Advise, assist and coordinate the activities of the Department of the Government at the district level, statutory bodies and other governmental and non-governmental organization in the district engaged in the disaster management;
- xx. Coordinate with, and give guidelines to, local authorities in the district to ensure that measures for the prevention or mitigation of threatening disaster situation or disaster in the district are carried out promptly and effectively;
- xxi. Provide necessary technical assistance or give advice to the local authorities in the district for carrying out their functions;
- xxii. Review development plans prepared by the Departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation;
- xxiii. Examine the construction in any area in the disaster and, if it is of the opinion that the standards for the prevention of disaster or mitigation laid down for such construction is not being or has not been followed, may direct the concerned authority to take such action as may be necessary to secure compliance of such standards;
- xxiv. Identify buildings and places which could, in the event of any threatening disaster situation or disaster, be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places;
- xxv. Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;
- xxvi. Provide information to the State Authority relating to different aspects of disaster management;

Jharkhand Disaster Management Authority

- xxvii. Encourage the involvement of non-governmental organizations and voluntary social-welfare institutions working at the grassroots level in the district for disaster management;
- xxviii. Ensure communication systems are in order, and disaster management drills are carried out periodically;
- xxix. Perform such other functions are the State Govt. Or State Authority may assign to it or as it deems necessary for disaster management in the District.

#### 3.1 Mainstreaming DRR and CCA in development Programes-

Mainstreaming DRR is a process of integrating DRR and CCA at all levels of decision-making including national, provincial and local government & community levels, empowering for evidence based decision-making for hazard assessment and vulnerability assessment at all levels, creating appropriate incentives, including regulatory and incentive based instruments for disaster management, for risk reduction, creating appropriate public-private partnerships at different levels and creating direct linkages with international and regional commitments. It aims at mainstreaming DRR and CCA into development policies and frameworks and programs - global, regional, national, provincial and local, in all disaster interventions including pre and post disaster interventions and in all program and project phases including appraisal, project design, implementation, monitoring and evaluation.

The countries of the region have appreciated the close link of disaster and development and committed to mainstream disaster risk reduction all developmental activities. They have endorsed the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters which envisages "integrating risk reduction into development policies and plans at all levels of Government including poverty reduction strategies and multi-sectoral policies and plans". The have adopted the Comprehensive Framework on Disaster Management which identifies "mainstreaming disaster risk reduction into the development policies and practices of the government at all levels" as one of the key priority areas for developing resilience to disasters. They have also developed national disaster management frameworks which commit mainstreaming disaster risk reduction in development. All these are significant steps forward, but there are lots which remain to be done to translate these commitments into action.

**Promotion of MDRRD in Key Sectors:** While MDRRD should penetrate into all sectors of development, the national governments should identify key sectors that should receive priorities in respective countries. Some of the key sectors, along with some illustrative activities under each sector may be as under:

#### Agriculture and livelihood:

- Developing crop varieties that are resistant to drought and can withstand flood and saline conditions
- Creating stand by employment opportunities in non-farm sectors in hazard prone areas
- Providing insurance cover for crops and animals

#### **Education:**

- Initiating School Safety programme
- Including disaster management in school curricula
- Conducting simulation drills and first aid training for students
- Preparing school level Disaster Management Plan

#### **Environment:**

• Integrating Disaster Impact Assessment (DIA) in Environment Impact assessment (EIA)

Jharkhand Disaster Management Authority

- Ensuring that eco-system conservation is part of all developmental activities, particularly in environmentally sensitive areas such as coastal and hill areas etc
- Integrating Disaster Risk Reduction in Climate Change Adaptation Programmes

#### **Housing:**

- Developing disaster resistant Land Use Plans and Building Codes
- Enforcing zoning and building regulations

#### **Health:**

- Initiating Hospital safety initiatives
- Encouraging Hospital Emergency Preparedness Plan

#### Risk Transfer and Risk Insurance:

- Promoting social and public funded insurance schemes
- Developing innovative micro-insurance services and products

#### **Critical Infrastructure:**

- Ensuring that all new critical infrastructure projects like roads, bridges, power, water, communication etc compulsorily comply with the safety standards of disaster reduction
- Ensuring that all existing infrastructure projects are retrofitted from future disasters, to the extent possible

#### 3.2 Comprehensive Water Management Plan -

The Indian Irrigation Commission described Palamau as the driest and probably the poorest district of the Province. The frequent droughts and famines or scarcity conditions that have visited this district within the last century support this observation. As mentioned elsewhere the main economy of the district is agricultural. The people, though agriculturists, are not adequately supported by the produce of their holdings but depend also on labour, *mahua* and jungle produce for eking out their existence. The district falls within the retreating range of the south-west monsoon and as such rainfall is wholly dependent upon local conditions and local winds which are seldom favorable to the district. Consequently the district suffers from regular droughts and famines.

The rainfall in Palamau is not only scanty but very capricious in its distribution. Ideal conditions postulate some premonitory showers in Mayor June to enable the land to be prepared, abundant rain in the end of June and at intervals during July and August to allow transplantation and growth of seedlings and after an interval of comparatively fair weather during which weeding may be done, enough rain in September to allow grain to develop and mature fully. The weather then should shed off to fair in October to allow harvesting to be done. For the *rabi* crops periodical showers from December to February are essential. The agriculturists of the district are fairly conscious of changes in weather and they most accurately forecast their agricultural prospects.

#### Rescheduling of the irrigation rosters:

Elaborate rosters are generally prepared by assuming normal rainfall and availability of discharge in the canal systems. However, during excessive rainfall deficit, rescheduling is called upon to optimize use of depleted water supplies and high demand. During field visits in the States and direct interaction with the farmers, it was observed that 40-50% of the canal-tails did not receive water even for one irrigation whereas other tails were lucky in having 2-3 irrigations. Assuring at least one irrigation in each tail will make a lot of difference for saving or sowing the crops on a very large area. This would require determined, motivated and skilled management by the managers and operators of the canal system. Similarly, within a branch, the tail-enders did *Jharkhand Disaster Management Authority* 

not receive any irrigation whereas those located at the beginning of the tail enjoyed 3-4 irrigations. This will also require proper enforcement of modified operation system by the Irrigation Department so that all farmers of a tail get their share equitably and this will also result in over-all higher production Desalting, repairing, renovation and construction of new conveyance system by utilizing opportunities under NREGA, BRGF, MPLAD funds, etc. may be undertaken. In the reservoir based systems like that of Bhakra, Tehri, Nagarjuna Sagar, etc. extended release of water may be re-planned both for the existing kharif and subsequent rabi season.

#### Ground-water utilization:

Bore wells/dug wells energized by electricity and diesel have multiplied in recent years and following points are very important for optimizing services of these heavily invested utilities.

Efficiency of the electric pumps is higher than the diesel pumps. However, because of the subsidised or free supply of electricity, the farmers do not care for the efficiency of the motors or pump-sets and look for cheaper options in the market. Since supply of power is getting limited year by year, farmers should be advised to go in for more efficient but relatively expensive pumping systems. After all they will be able to irrigate more areas for a given supply of electricity.

#### ii) Uninterrupted supply of electricity:

Frequent tripping of the supply was complained to almost all the teams who visited various States and interacted with the farmers. Frequent tripping leads to repeated irrigation of the same spot whereas rest of the field remained uncovered. Farmers were less interested in 8 or 9 hour supply but are very particular about continuous supply without any break so that they are able to complete the entire field with the limited water supply.

- iii) Proper maintenance of the motors and pumping sets to reduce friction by way of greasing and other maintenance should be advised for efficient pumping.
- iv) Sharp bends and excessive height of the delivery pipes also yield less water.
- v) As per the existing electricity tariffs and diesel prices operational expenditure on irrigation by diesel pumps is 4-5 times of the electric pumps. There are several possibilities to derive maximum benefits by proper maintenance and installation of diesel pump-sets. Ultimately, diesel pumps may be phased out by linking with RGGVY (rural electrification) scheme.
- vi) In case of rice, continuous standing of water is required only in the initial 15-20 days so as to suppress growth of weeds. However, later on, irrigating one day after disappearance of water is the most economical and efficient way of scheduling irrigation.
- vii) Sowing of cotton, soya bean, maize, etc. on the ridges and furrows and letting water in alternate furrows can save 20-30% water.
- viii) Sprinklers for cereal crops like wheat and drip system for widely spaced crops sown in lines like sugarcane, cotton, maize etc. can give an efficiency of 80-90%.
- ix) Harvested rainwater stored in unlined tanks and ponds should be used for pre-sowing or first irrigation to ensure uniform germination. Storing this water for later period will result into infiltration and evaporation losses.

#### Use of poor quality water:

Rainwater is the ultimate source of surface and ground water resources. Because of deficient and scanty monsoon rainfall in most parts of the country, recharging of ground water is not taking place. Water management issues of current concern, therefore are: (i) less exploitation of ground water for irrigation, (ii) increased concentration of salts in the soil profile and groundwater, (iii) increased concentration of specific toxic ions like fluorides and nitrates in water and (iv) non-availability/less availability of drinking water for animals in natural storage structures such as ponds, lakes, tanks etc.

#### In-situ rain water conservation

Jharkhand Disaster Management Authority

Land shaping (if the soil depth permits), contour cultivation, field/contour bonding, tie ridging, digging of trenches, ridges and furrow system of sowing, raised on sunken beds are important practices for conserving and managing rain water for realizing higher productivity.

#### Tanks and farm ponds:

About 11-37 % run-off is generated even by the delayed monsoon and should be stored in the farm ponds or tanks. These will recharge ground water during normal or excessive rainfall year. Rainwater stored in self sealing or lined ponds can be used for irrigation if there is long break in the rainfall or for pre-sowing of the rabi crops to ensure proper germination.

#### Contingent cropping:

Selection of crops, cropping sequences and agronomic practices are very important. Relatively more drought tolerant, deep rooted and short duration crops, varieties and cultivars are available for different agro-ecological and rainfall situations. If the rain is excessively delayed or main crop has failed cultivation or re-sowing with fodder is the best option. Fodders can be harvested at any stage keeping in view sowing of the next rabi season crop.

#### Voluntary Water Conservation Measures:

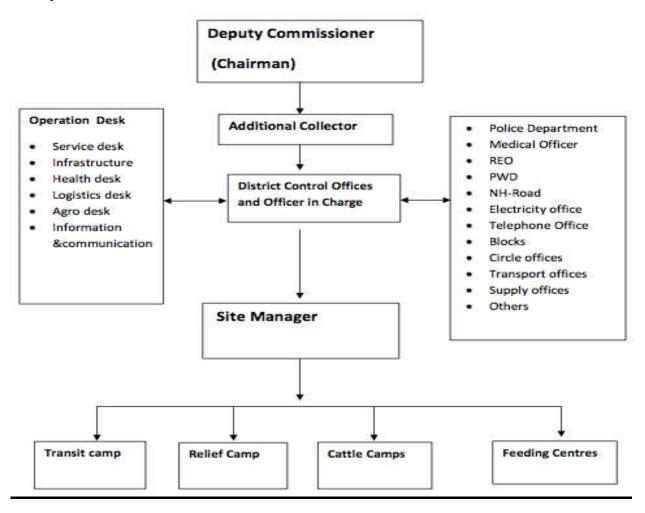
To be implemented During the Moderate Drought Phase

- 1. Eliminate the washing down of sidewalks, walkways, driveways, parking lots, tennis courts and other hard surfaced areas;
- 2. Eliminate the washing down of buildings for purposes other than immediate fire Protection;
  - 3. Eliminate the flushing of gutters;
  - 4. Eliminate the domestic washing of motorcycles, motorbikes, boats, cars, etc.;
- 5. Eliminate the use of water to maintain fountains, reflection ponds and decorative water bodies for aesthetic or scenic purposes, except where necessary to support aquatic life
- 6. Reduce watering of lawns, plants, trees, gardens, shrubbery and flora on private or customer property to the minimum necessary. Encourage outdoor watering to be done during off-peak hours.
  - 7. Reduce the amount of water obtained from fire hydrants for construction purposes,
- 8. Discontinue fire drills or for any purpose other than fire-fighting or flushing necessary to maintain water quality;
- 9. Limit normal water use by commercial and individual customers including, but not limited to, the following: Stop serving water in addition to another beverage routinely in restaurants; Stop maintaining water levels in scenic and recreational ponds and lakes, except for the minimum amount required to support aquatic life
- 10. Cease water service to customers who have been given a 10-day notice to repair one or more leaks and have failed to do so.
  - 11. Intensify maintenance efforts to identify and correct water leaks in the distribution system.
  - 12. Cease to install new irrigation taps on the water system.
  - 13. Continue to encourage and educate customers to comply with voluntary water conservation.

#### 3.3 Emergency Operation Centre

Palamu district will have an exclusive Emergency Operation Centre (EOC) at District Head Quarter other than the revenue control room. The District EOC is functional of Six days in a week during office hours and is manned by an Emergency Officer. EOC will have certain equipment for dealing with any unforeseen disasters. Considering the unique responsibility of the district Emergency Operation Centre, the equipments provided to it shall not be taken to any purpose other than disaster management. This centre is intended to coordinate all disaster related activities in the district starting from preparedness to rehabilitation and reconstruction.

During Emergency, EOC will coordinate with Nodal Officer of Emergency Support Functions and they shall be provided with sufficient telephone connections for effective coordination during crisis. Only the Nodal ESFs are to sit in the EOC and coordinate the disaster management activities in the district with their support agencies. On the basis of the message received from the forecasting agencies, warning has to be issued by EOC for the general public and the departments, which play a vital role during emergencies. Issuing correct and timely warning would be one of the prime responsibilities of EOC. For effective dissemination of warning EOC should have a well-planned line of communication.



Jharkhand Disaster Management Authority

# Chapter 4: Preparedness and Mitigation

In disaster management cycle, preparedness and mitigation are the two important stages before the occurrence of disaster. It has a great importance in reduction of loss of life and property if proper preparedness and mitigation strategies are followed.

#### 4.1 Preparedness

This protective process embraces measures which enable governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes the formulation of viable emergency plans, the development of warning systems, the maintenance of inventories and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be at risk from a recurring disaster. Preparedness therefore encompasses those measures taken before a disaster event which are aimed at minimizing the loss of life, disruption of critical services, and damage when the disaster occurs. All preparedness needs to be supported by appropriate legislation with clear allocation of responsibilities and budgetary provisions.

#### 4.2 Mitigation

Mitigation embraces all measures taken to reduce both the effect of the hazard itself and the vulnerable conditions to it in order to reduce the scale of a future disaster. Therefore mitigation activities can be focused on the hazard itself or the elements exposed to the threat. Examples of mitigation measures which are hazard specific include modifying the occurrence of the hazard, e.g. water management in drought prone areas, avoiding the hazard by sitting people away from the hazard and by strengthening structures to reduce damage when a hazard occurs. In addition to these physical measures, mitigation aims at reducing the physical, economic and social vulnerability to threats and the underlying causes for this vulnerability.

Proper preparedness and mitigation measures instantly help to respond a disaster in time. So disaster wise preparedness and mitigation is highly required. These are normal time activities. A prepared community is the best community to minimize the loss and damage caused by the disasters. Mitigation focuses on various ways and means of reducing the impacts of disasters on the communities through damage prevention. It is hazard specific including both structural and non-structural issues. It is also very strategic rather than the description of various methods of resistant construction technologies.

#### **Preparedness and Mitigation Measures**

Preparedness and mitigation measures towards various disasters certainly help to reduce the risk as well as loss and damage of the life and properties caused by different disasters.

#### **4.3 General Preparedness Measures**

#### 1. Establishment of the Control Rooms

The district administration should ensure the operation of control rooms. The control rooms which are presently run by major line departments at revenue, police, Hospital, etc. at block and district level should be function able.

#### 2. Plan Updation

and contact numbers, necessary equipments, medicinal stock, daily necessities, list of drought prone areas etc. All these things have to be updated after a certain interval of time.

#### 3. Communication System

Training is given for search and rescue teams, first aid teams, disaster management teams at village, taluka and district level. These teams will provide timely help during any type of disaster. To make provision of wireless sets at all Sub-division and Taluka Offices for effective communication of cyclone/heavy rainfall/heat waves. Fire Brigades at all the Municipal Offices. Widespread community awareness programmes in drought so that villages are sensitized about the consequences and measures to address drought.

#### 4. Training for Disaster Management Team Members

Each of the DMTs comprise groups of women and men volunteers and are assigned with a specials task the Search and Rescue Teams, First Aid Teams formed at the three levels should be provided training from time to time so that their timely help can be used during disaster.

#### 5. Organization of Mock Drills

Mock drill is an integral part of the Community based disaster management plan, as it is a preparedness drill to keep the community alert. Mock drills are organized in all the villages of the district to activate the DMTs and modification of the DM plan. Mock drill is organized once in six months as per the seasonality calendar of natural disaster events that is likely to occur.

#### 6. Community Awareness on Various Disasters

- Construction of Earthquake Resistant Structures
- retrofitting the weak structures
- House insurance
- construction of watershed structures
- Rehabilitation of people in safe places
- development of plans for shifting people from vulnerable area to safer area

The contingency plan for Disaster Management is based on past experiences as well as according to the instructions given by the Deputy Commissioner of the district. The mitigation strategy has been developed keeping in view the pre, during and post disaster situation. The district is divided into three sub divisions and senior level officers of the district will work as zone officers who will look after the rescue and relief operations and monitor the day to day situation under the direct supervision of the Deputy Collector.

Jharkhand Disaster Management Authority

#### 1. Pre Disaster Period

Preparation	Objective	Action initiated by
Convening District level committee on Natural calamity- in the month of May.	To suggest the least of relief work to be undertaken, advise on the precautionary Measures measures to be taken, directions for stocking of food grains in strategic or key points.	District Emergency Operation Center
Identification Of vulnerable points according to the Expected disaster.	Repairing of breaches, Stocking of the sand bags, Alerting people near highly vulnerable pockets.	Additional Collector, Cos, BDOs, Executive Engineers
Identification & indent of essential commodities for The inaccessible/scarcity pockets	Stocking of food grains and other essential things in GP head quarter.	Cos ,BDOs
Selection of shelters	Arrangements for shelter During emergency	Additional collectors, Cos, BDOs through PRIs and local People.
Requirement of medicines, formation of mobile teams, Identifying epidemic areas.	Stocking of medicines And Deputation of personals.	Civil Surgeon
Arrangement of food and fodder for the cattle	Stocking of the same	
Organizing Mock drills	Awareness generation And practice	District level officers

#### 2. Immediate pre disaster

Preparation	Objective	Action initiated by	
Receipt of information	From IMD/SRC Control	DEOC	
	room/DEOC		
Dissemination of information	From DEOC to all Cos/BDOs/line	DEOC, Head of line depts,	
	depts.	sub collectors, BDOs ,	
		Tahsildars	
Immediate setting and	To evacuate vulnerable people to	Civil defiance unit, Police	
Operational zing of control	identified shelters and Logistic	personals, Armed forces, fire	
Roo			
m round the clock.	arrangements	officers, Redcross team ready	

Jharkhand Disaster Management Authority

Rescue and evacuation		with rescue kits which are to be made available to them through the DEOC.
Arrangement of free kitchen	To provide immediate feeding to the evacuated people	BDOs/ CDPOs/ NGOs
Sanitation and medicines	To prevent epidemics And infections	Executive engineer of PHED/ Civil Surgeon
Ensuring transportation of relief materials to affected Pockets	To ensure that the relief materials reach in time to the affected people	DSO/ SDM/ BSOs/DTO
Ensuring safety of life and belongings	To prevent antisocial activities	SP/ DSP/Inspector and SI of the affected block/ NGOs
Ensuring available of safe water, drinking provision of health facilities and minimum sanitation	To check the onset of epidemics	CS/ Executive engineers Of PHED
Meeting of field level officers in every 24 hours to review the situation	Better coordination	DC, DDC at dist level and SDM at sub divisional level
Collectio n of information by the core group of the EOC And daily reporting to concerned officers	Triangular linkage between field, dist and state control room	Core group of EOC/ Officers of line depts
Estimation of number of vehicles – Light/Medium/Heav y	To ensure smooth Transportation for relief works	DTO
Arrangement of Road Cleaners/power sow and Other essential equipments.	To clean the roads, cut the fallen trees, clear the debris etc.	DTO , Executive Engineer, Executive officer – Nagar Panchayat
Arrangement of trucks loaded with generators	To move to the field immediately After the disaster is over.	DTO

Jharkhand Disaster Management Authority

#### 3. During disaster

Preparation	Objective	Action initiated by
Alertness & readiness to gear	To rescue the trapped and	All the stakeholders
up in action ,immediately after	injured persons	
the disaster		
Control room functional round	To mitigate the effects of the	District control room, all line
the clock	disaster	depts., BDOs, COs
Monitoring	To review the rescue and	DC , SDM
	relief work	

#### 4. Post disaster

Follow up Action	Objective	Action initiated by
Distribution of relief as per provisions	To provide food and other essential commodities for survival	SDM, BDOs, Eos, NGOs
Assessment of damage	To ascertain the exact loss for reporting to the govt.	All line Depts., Cos, BDOs, Executive engineers ,Sub collectors
Monitoring the relief operations organized by external agencies/UN agencies/Red Cross/NGOs/Other states etc. by the dist. authorities	To maintain uniformity of relief administration	DC, SDM
Restoration of communication- Roads and railways	For timely and prompt delivery/transportation of relief articles/ deployment of rescue teams	Executive engineers Of concerned depts, Military and paramilitary forces, police
Restoration of electronic communication system	To Ensure Proper coordination linkage	BSNL, Technocrats of Police signals
Immediate arrangement of free kitchen for the effected people	To avoid starvation	Sub collectors/ BDOs/ Line depts/PSUs
Documentation of the entire event-Written, Audio, Video	For reporting purposes And institutional memory	SDM/BD O
Monitoring	To review the relief works and remove the bottlenecks	DC/DDC/AC

Jharkhand Disaster Management Authority

#### Mitigation Plan for the vulnerable groups

Activity	Directly responsible	Sub division monitor	District Monitor
ICDS centers must run without fail	CDPO	Sub collector	DSWO
NPEGEL schools , orphanages must run without fail	Project Director, NPEGEL	Sub collector	DEO/DSWO
UninterruptedMDM must be provided in all schools	BEEO/BDO	Sub collector	DEO/DSWO

**Epidemic Control and Animal Diseases** 

Ī	Activity	Directly Responsible	Sub	divisional	District monitor
Į			monitor		
	Steps taken on war footing for control of epidemics	Medical officer	ACMO		CS
	Prevention and control of Animal diseases	Block Animal Husbandry Officer	SAHO		DAHO

Plan for Capacity Building and Awareness Generation

Activity	Agency Responsible
Training Programme on Search and rescue for	SP, Dist. Fire officer, Civil Defiance, NGOs
the teams	
Training programme on disaster preparedness	NGOs, CS, DSWO
for the frontline workers of the line	
depts.(AWW, ANM,Sahiya)	
Training on first aid, Health care, Sanitation	CS, BDOs, NGOs
for the panchayat members	
Mock drills in govt. and non govt. schools	DEO, District fire officer
Wall paintings, street plays	CS- Through field agencies
	BDOs- Through CBOs/ volunteers
	NGOs- Through block level NGO network
Slide in cinema halls	DPRO and BDO
Hand bills, Paper advertisement, press release	DPRO and BDO
Meetings and group discussions by community	DPRO and BDO
leaders	

Jharkhand Disaster Management Authority

#### 4.4 Structural and Non-Structural Measures

Both structural and non-structural measures shall be taken as part of mitigation plan. Structural mitigation refers to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural mitigation refers to policies, awareness, knowledge development, public commitment, information sharing which can reduce risk.

As mentioned in the NDMA Guidelines, following are the measures to be taken for prevention and mitigation purposes:-

Hazard-specific Structural & Non-Structural Measures

Hazard	Structural Measures	Non-Structural Measures
Flood	i. Strengthening/ construction of embankments, flood walls and flood levees  ii. Proper regulation of lakes, dams and other water storage reservoirs iii. Improvement of channels iv. Proper desilting/dredging of rivers in order to keep the rise of the river beds minimum  v. Drainage improvement in order to avoid congestion  vi. Diversion of flood water in order to lower water levels in the rivers  vii. Catchment area treatment/ afforestation, building up of check dams/detention basins in order to reduce the flood peaks and control the suddenness of the	i. Flood plain zoning to regulate land use in the flood plains ii. Flood proofing iii. Flood forecasting and warning iv. Integrated Water Resource Management such as water resources assessment, socio-economic assessment, water resources planning, implementation of action plans, day-today water resources management (adjustments of the plans) and water resources protection and conservation v. Medical preparedness in terms of aftereffects of floods requiring medical attention vi. Creating awareness to the type of illnesses and other health problems that can result in the aftermath of floods, to
	runoff viii. Anti-erosion works such as revetment or pitching along with launching apron and spurs of earth protected by armour of stones or spurs of loose stones or stones in wire-mesh crates ix. Alignment, Location, Design and Provision of Waterway i.e. Vents, Culverts, Bridges and Causeways in National Highways, State Highways, District and Other Roads and Railways Embankments x. Inspection, rehabilitation and maintenance programme to ensure that the design capabilities are maintained	all the medical teams and the community at large vii. Creation of trained medical first responders for first aid and resuscitation measures

Jharkhand Disaster Management Authority

Earthquake	i. Seismic strengthening of existing structures ii. Prioritization of structures especially critical/ lifeline structures iii. Structural safety audit of critical lifeline structures iv. Retrofitting of weak buildings v. Earthquake-resistant construction in rural and semi-urban areas	i. Development of Rapid Visual Screening procedures and Detailed Vulnerability Assessment  ii. Regular conduction of Fire Safety Audits and Electrical Safety Audits  iii. Public Awareness Campaigns  iv. Techno-legal regime for ensuring compliance of earthquake-resistant design and construction practices in all new constructions  v. Licensing and certification of professionals  vi. Compliance review by professionals of PRIs and ULBs  vii. Medical preparedness
Drought	i. Water management including water harvesting and conservation     ii. Cloud seeding in drought-prone areas     iii. Micro-irrigation including drip and sprinkler irrigation     iv. Afforestation with bio-diesel species through the National Afforestation Programme	i. Drought-prone area delineation at block level based on rainfall, cropping pattern, available supplement irrigation, satellite derived indicators, soil map, groundwater availability map, cattle population and fodder demand and socio-economic data  ii. Gradation of drought-prone areas based on the frequency of occurrence of droughts, sensitivity to rainfall variation and vulnerability of community  iii. Monitoring of drought based on rainfall and other parameters, crop health, available ground water and migration and impact on community
Fire	i. Establishment of Fire-stations as per Fire Safety Bye-laws	iv. Insuring of crops  i. Implementation of Fire Act  ii. Updating basic infrastructure and adopting modern technologies  iii. Improving outreach of fire services  iv. Provincialisation and formation of state level fire services  v. Making the fire services a multi-hazard response unit  vi. Training of community members in fire-fighting techniques  vii. Putting in place audit system  viii. Compulsory fire hazard evaluation of all types of buildings old and new  ix. Planning and calendar of evacuation drills/ mock drills in vital installations/ industrial plants/ government buildings

			x.	/ schools and critical infrastructure like hospitals, etc. Enforcement of fire approvals as per the provisions contained in National Building Code (NBC) 2005 for new constructions
Chemical & Industrial Accidents	i.	Creation of appropriate infrastructure as mentioned in Off-site and On-site plans including Public Address system	ii. iii. iv. v.	Enforcement of code of practices, procedures and standards Audits of On-site & Off-site Emergency plans at regular intervals Statutory inspection, safety audit and testing of emergency plans Safety Auditing Hotline telephone connection with nearby emergency services Awareness generation among community regarding HAZMAT Training of specialized Medical First Aid Responders
Biological Disasters	i.	Installing High Efficiency Particulate Air (HEPA) filters in the ventilation systems of important buildings in order to prevent the entry of microbes Enforcement of biosafety measures in labs	ii. iv. v. vi. vii. xi.	Surveillance Systems in district for issuing public health measures Regular survey and proper maintenance of water supply and sewage pipeline Creation of awareness about personal hygiene Vector control programmes Burial/disposal of dead bodies Training of Rapid Response teams (RRTs) under IDSP Provision of Personal Protective Equipment (PPE) to all health care workers prior coming in contact with the patients

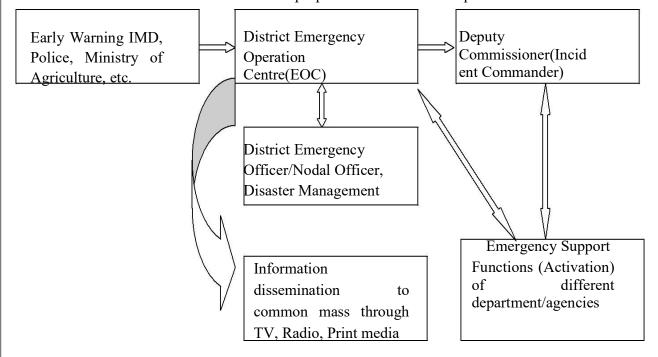
#### Chapter 5: Prepadness Measures

The onset of an emergency creates the need for time sensitive actions to save life and property, reduce hardships and suffering, and restore essential life support and community systems, to mitigate further damage or loss and provide the foundation for subsequent recovery. Effective response planning requires realistic identification of likely response functions, assignment of specific tasks to individual response agencies, identification of equipment, supplies and personnel required by the response agencies for performing the assigned tasks. A response plan essentially outlines the strategy and resources needed for search and rescue, evacuation, etc.

Considering all this points, this response plan has been developed. For the first time Incident Command System (ICS) has also been introduced in response plan along with the resource inventory that is directly linked to the website. In fact, during disaster the ICS management tool will be more effective to handle the situation in proper way within limited time.

#### 5.1 Response mechanism during Warning Stage

At district level, before the occurrence of disaster and immediately after the disaster, the district administration will activate the district control room so that proper information will be provided to the concerned authorities.

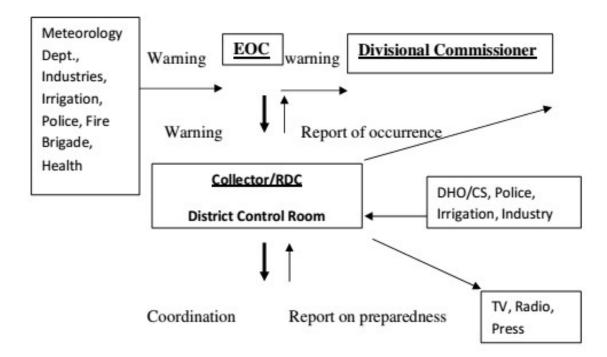


Jharkhand Disaster Management Authority

#### **5.2 Incident Command System:**

The Incident Command System (ICS) is a management system and an on-scene, all-risk, flexible modular system adaptable for natural as well as man-made disasters. The ICS has a number of attributes or system features. Because of these features, ICS has the flexibility and adaptability to be applied to a wide variety of incidents and events both large and small. The primary ICS management functions include:

- 1. Command
- 2. Operations
- 3. Logistics
- 4. Planning
- 5. Finance / Administration



The ICS seeks to strengthen the existing disaster response management system by ensuring that the designated controlling/responsible authorities at different levels are backed by trained Incident Command Teams (ICTs) whose members have been trained in the different facets of disaster response management.

The five command functions in the Incident Command System are as follows:

#### 1. Incident Commander

The Incident Commander is responsible for all incident activity. Although other functions may be left unfilled, there will always be an Incident Commander.

#### 2. Operations Section

Develops tactical organization and directs all the resources to carry out the Incident Action Plan.

#### 3. Planning Section

It is responsible for the collection, evaluation, and display of incident information, maintaining status of resources, and preparing the Incident Action Plan and incident related documentation.

#### 4. Logistics Section

Provides resources and all other services needed to support the organization.

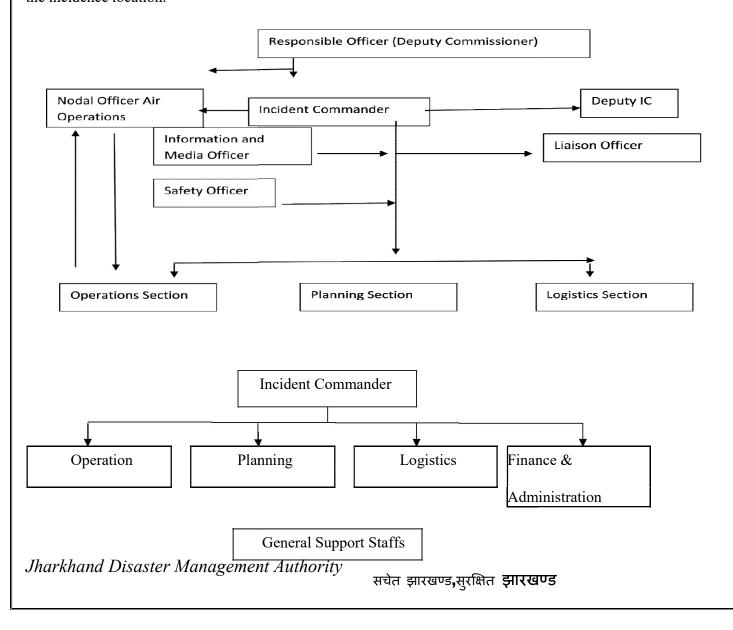
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#### 5. Finance / Administration Section

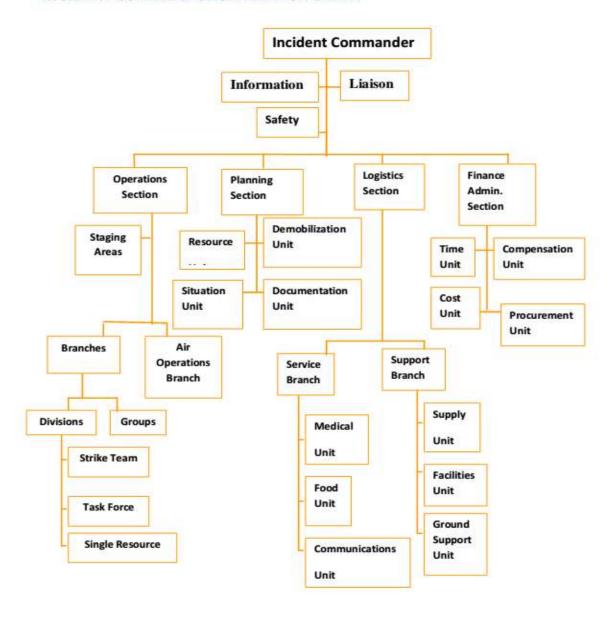
Monitors costs related to the incident, provides accounting, procurement, time recording, cost analysis, and overall fiscal guidance.

#### **5.3 District Incident Command System**

At the district level, there will be one District Headquarters Team with the primary function of assisting the Deputy Commissioner in handling tasks like general co-ordination, distribution of relief materials, media management and the overall logistics. Suitable officers from the district administration will be carefully selected and professionally trained for the different ICS positions in order to constitute the District Level Incident Command Teams (DICTs). The teams will focus on the operational aspects of response management, duly supported by other functions in ICS, e.g. Planning, Logistics, Finance/Administration, etc. The officers drawn for this assignment will be carefully selected by the Deputy Commissioner depending upon their fitness, ability and aptitude for any of the DICT positions and they will be professionally trained to fulfill their assigned roles. Arrangements will also be made for ensuring their mobilization in a time-bound manner for their deployment to the incidence location.



#### INCIDENT COMMAND ORGANIZATION CHART



Jharkhand Disaster Management Authority

#### **5.4 Role and Responsibilities of ICS Staff**

The following represents the major responsibilities and duties of the Incident Commander. The incident commander's responsibility is the overall management of the incident. The Incident Commander may have a deputy who may be from the same agency, or from an assisting agency.

	Major respon	sibilities and duties of Incident Commander
	i.	Assesses the situation and/or obtain a briefing from the prior Incident
		Commander.
	ii.	Determine incident objectives and strategy.
	iii.	Establish the immediate priorities.
	iv.	Establish an incident command post.
	v.	Establish an appropriate organization.
	vi.	Ensure planning meetings are scheduled as required.
<u> </u>	vii.	Approve and authorize the implementation of an Incident Action
nd		Plan.
<u> </u>	viii.	Ensure that adequate safety measures are in place.
	ix.	Co-ordinate activity for all Command and General Staff.
<b>E</b>	х.	Coordinate with key people and officials.
	xi.	Approve requests for additional resources or for the release of
		resources.
	xii.	Keep agency administrator informed of incident status.
le l	xiii.	Approve the use of students, volunteers, and auxiliary personnel.
	xiv.	Authorize release of information to the news media.
Incident Commander	XV.	Order the demobilization of the incident when appropriate.

# Information Officer

The information officer is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Reasons for the IC to designate an Information Officer

- An obvious high visibility or sensitive incident media demands i. for information may obstruct IC effectiveness.
- Media capabilities to acquire their own information are increasing. ii.
- iii. Reduces the risk of multiple sources releasing information.
- Need to alert, warn or instruct the public iv.
- The Information Officer should consider the following when v. determining a location to work at the incident.
- Be separate from the Command Post, but close enough to have access vi. to information.
- An area for media relations and press/media briefings must be vii. established.
- viii. Information displays and press handouts may be required.
- Tours and photo opportunities may have to be arranged. ix.

# Liaison Officer

Incidents that are multi-jurisdictional, or have several Agencies involved, may require the establishment

of the Liaison Officer position on the Command Staff.

The Liaison Officer is the contact for Agency Representatives assigned to the incident by assisting or co-operating agencies. These are personnel other than those on direct tactical assignments or those involved in a Unified Command.

Reasons for the IC to designate a Liaison Officer

- When several agencies send, or plan to send, agency representatives to an incident in support of their resources.
- ii. When the IC can no longer provide the time for individual coordination with each agency representative.
- When it appears that two or more jurisdictions may become involved iii. in the incident and the incident will require on-site liaison.

# Safety Officer

The Safety Officer's function on the Command Staff is to develop and recommend measures for assuring personnel safety, and to assess and/or anticipate hazardous and unsafe situations.

Only one Safety Officer will be assigned for each incident. The Safety Officer may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities such as air operations, hazardous materials, etc. The Safety Officer will correct unsafe situations by working through the chain of command. However, the Safety Officer may exercise emergency authority to directly stop unsafe acts if personnel are in imminent life-threatening danger.

#### 5.5 Role and Responsibilities of ICS General Staff

#### The General Staff consists of the following positions:

- 1. Operations Section Chief
- 2. Planning Section Chief
- 3. Logistics Section Chief
- 4. Finance/Administration Section Chief

#### 5.5.1 Operations Section

The Operations Section is responsible for managing all tactical operations at an incident. The build-up of the Operations Section is generally dictated by the number of tactical resources involved and span of control considerations.

The Operations Section consists of the following components:

- Ground or surface-based tactical resources
- Aviation (Air) resources helicopters and fixed-wing aircraft
- Staging Areas

#### Ground or Surface-based Tactical Resources

There are three ways of organizing tactical resources on an incident. The determination of how resources will be used will be determined on the application area and the tactical requirement. Resources can be used as:

- Single Resources
- Task Forces
- Strike Teams

Depending on the need, tactical resources can be placed into an operations organization made up of:

- Resources reporting to the Incident Commander or Operations Section
- Chief
- Divisions or Groups
- Branches

#### Aviation (Air) Resources

Jharkhand Disaster Management Authority

Many incidents require the use of tactical or logistical aircraft to support the incident. In ICS, all aviation resources assigned for exclusive use of the incident are assigned to the Operations Section. These include aircraft providing logistical support.

The Operations Section Chief may establish a separate Air Operations Branch when

- The complexity of air operations and/or the number of aircraft assigned to the incident requires additional management support
- The incident requires both tactical and logistical use of air support
- When the air operations organization is formally established on an incident, it will be set up as an Air Operations Branch within the Operations Section.

#### Staging Areas

The third component of the Operations Section is the Staging Area.

An ICS Staging Area is a temporary location for placing resources available for incident assignments. All resources within the Staging Area belong to the incident.

Resources assigned to a Staging Area are available on a three minute basis to take on active assignment.

Staging Area are temporary facilities. They can be set up at any appropriate location in the incident area and moved or deactivated as needed.

Staging Area Managers report to the Operations Section Chief or to the Incident Commander.

#### 5.5.2 Planning Section

In ICS, the Planning Section is responsible for managing all information relevant to an incident. When activated, the Planning Section Chief who is a member of the General Staff manages the Section

The Planning Section collects, evaluates, processes, and disseminates information for use at the incident. Dissemination can be in the form of the Incident Action Plan, formal briefings, or through map and status board displays.

Some incidents may require personnel with specialized skills to be temporarily assigned to the Planning Section. These persons are called Technical Specialists such as

- Chemist
- Hydrologist
- Geologist
- Meteorologist

Jharkhand Disaster Management Authority

• Training Specialist

#### There are four units within the Planning Section that can be activated as necessary:

- 1. Resources Unit
- 2. Situation Unit
- 3. Documentation Unit
- 4. Demobilization Unit

#### Common responsibilities of Unit Leaders are listed below:

- Obtain briefing from the Section Chief
- Participate in incident
- Determine current status of unit activities
- Confirm dispatch and estimated time of arrival of staff and supplies Assign specific duties to staff, supervise staff
- Develop and implement accountability, safety, and security measures for personnel and resources
- Supervise demobilization of the unit, including storage of supplies
- Provide Supply Unit Leader with a list of supplies to be replenished
- Maintain unit records, including Unit Log

#### Resources Unit

This Unit is responsible for maintaining the status of all assigned resources at an incident. It achieves this through:

- Overseeing the check-in of all resources
- Maintaining a status-keeping system indicating current location and status of all the resources.
- Maintenance of a master list of all the resources, e.g. key supervisory personnel, primary and support resources, etc.

#### Situation Unit

The collection, processing, and organizing of all incident information takes place within the Situation Unit. The Situation Unit may prepare future projections of incident growth, maps, and intelligence information. Three positions report directly to the Situation Unit Leader

Jharkhand Disaster Management Authority

- Display Processor maintains incident status information obtained from Field Observers, resource status reports, etc. information is posted on maps and status boards as appropriate.
- Field Observer Collects and reports on situation information from the field.
- Weather Observer Collects current weather information from the weather service or an assigned meteorologist.

#### Documentation Unit

The Documentation Unit is responsible for the maintenance of accurate, up-to-date incident files. Duplication services will also be provided by the Documentation Unit. Incident files will be stored for legal, analytical, and historical purposes.

#### **Demobilization Unit**

The Demobilization Unit is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. Planning for demobilization should begin at the early stages of an incident, particularly in the development of rosters of personnel and resources, thus ensuring the efficient and safe demobilization of all the resources.

#### **Technical Specialists**

Certain incidents or events may require the use of Technical Specialists who have specialized knowledge and expertise. Technical Specialists may function within the Planning Section, or be assigned wherever their services are required.

In the Planning Section, Technical Specialists may report to the following:

- Planning Section Chief
- A designated Unit Leader

Some examples of the more commonly used specialists are:

- Meteorologist
- ➤ Environmental Impact Specialist
- > Flood Control Specialist
- ➤ Water Use Specialist
- ➤ Fuels and Flammable Specialist
- ➤ Hazardous Substance Specialist
- ➤ Fire Behavior Specialist
- > Structural Engineer
- > Training Specialist

Jharkhand Disaster Management Authority

#### 5.5.3 Logistics Section

The Logistics Section is responsible for the following:

- Facilities
- Transportation
- Communications
- Supplies
- Equipment maintenance and fueling
- Food Services
- Medical Services
- Ordering Resources

The Logistics Section Chief manages the Logistics Section. On very large incidents, or on incidents requiring a great deal of equipment or facilities, the Logistics Section may be divided into two branches – Service Branch and Support Branch. This is most often done for span of control reasons, resulting in a more manageable organization.

Six Units may be established within the Logistics Section:

- Supply Unit
- Facilities Unit
- Ground Support Unit
- Communications Unit
- Food Unit
- Medical Unit

#### Supply Unit

The Supply Unit is responsible for ordering, receiving, processing and storing all incident-related resources.

All off-incident resources will be ordered through the Supply Unit, including:

- Tactical and support resources (including personnel)
- All expendable and non-expendable support supplies.

Two Managers report directly to the Supply Unit Leader:

- Ordering Manager places all orders for incident supplies and equipment.
- Receiving and Distribution Manager receives and distributes all supplies and equipment (other than primary tactical resources) and is responsible for the service and repair of tools and equipment.

Jharkhand Disaster Management Authority

#### Facilities Unit

This unit is responsible for set-up, maintenance, and demobilization of all incident support facilities except Staging Areas. These facilities are:

- Incident Command Post
- Incident Base
- Camps
- Other facilities within the incident area to be used for feeding, sleeping, and sanitation services.

The Facilities Unit will also provide security services to the incident as needed.

Three managers report directly to the Facilities Unit Leader. When established at an incident, they have important responsibilities.

- a. <u>Security Manager</u> provides safeguard necessary for protection of personnel and property from loss and damage.
- b. <u>Base Manager</u> ensures that appropriate sanitation, security, and facility management services are in place at the Base.
- c. <u>Camp Manager</u> On large incidents, one or more camps may be established. Activities at the camps may include many of those regularly performed at the Base. Camp Managers are responsible for providing non-technical coordination for all the units operating within the camp.

#### **Ground Support Unit**

The Ground Support Unit is responsible for the maintenance, service, and fueling of all mobile equipment and vehicles. The Unit also has responsibility for the ground transportation of personnel, supplies, and equipment and the development of the Incident Traffic Plan.

#### Communications Unit

The Communications Unit is responsible for developing plans for the use of incident communications equipment and facilities, installing and testing of communications equipment, supervision of the Incident Communications Center, and the distribution and maintenance of communications equipment.

#### Food Unit

The Food Unit is responsible for supplying the food needs for the entire incident, including all

Jharkhand Disaster Management Authority

remote locations as well as providing food for personnel unable to leave tactical field assignments. Planning is essential to the efficient supply of food. The Food Unit must anticipate the number of personnel to be fed and develop plans for supplying food to all incident areas.

#### Medical Unit

The Unit will develop an Incident Medical Plan, develop procedures for managing major medical emergencies, provide medical aid, and assist the Finance/ Administration Section with processing injury-related claims.

#### 5.5.4 Finance / Administration Section

The Finance/Administration Section is responsible for managing all financial aspects of an incident. There are four units, which may be established within the Finance/Administration Section:

- Time Unit
- Procurement Unit
- Compensation /Claims Unit
- Cost Unit

#### Time Unit

The Time Unit is responsible for ensuring the accurate recording of daily personnel time, compliance with specific agency time recording policies, and managing commissary operations if established at the incident.

#### Procurement Unit

All financial matters pertaining to vendor contracts, leases and fiscal agreements are managed by Procurement Unit. The Procurement Unit establishes local sources for equipment and supplies, manages all equipment rental agreements and processes all rental and supply fiscal document billing invoices.

#### Compensation / Claims unit

The Claims Unit is responsible for investigating all claims involving property associated with or involved in the incident. This can be an extremely important function on some incidents.

Two Specialists report to the Compensation / Claims Unit Leader :

- <u>Compensation –for- injury Specialist</u> Administers financial matters arising from serious injuries and deaths on an incident. Work is done in close cooperation with the Medical Unit.
- <u>Claims Specialist</u> manages all claims related activities (other than injury) for an incident.

#### Cost Unit

The Cost Unit provides all incident cost analysis. It ensures the proper identification of all equipment and personnel requiring payment, records all cost data, analysis and prepares estimates of incident costs, and maintains accurate records of incident costs

Jharkhand Disaster Management Authority

### Chapter 6: Capacity bulding and Training

#### **Training Plan.**

Another important factor in the mitigation process is the adequate training of human resources and thereby building the capacity of a district. A series of training programmes shall be organized for specialized groups like district level officers, sub division and community level office bearers, teachers and principals, doctors and engineers, architects and masons and builders and contractors etc. Even the community could be trained on construction of buildings and other earth quake resistant structures through awareness, sensitization, orientation and developing skills. A basic firefighting training is compulsory to all employees, consultants, contract personnel and catering staff in order to have a fundamental knowledge of first aid, firefighting and to respond to the fires in the incipient stage.

At the district-level, assistance will be provided by consolidating the know-how and practical training provided by SDRF (State Disaster Response Force), Civil Defense and NGO and Self Help Groups (SHGs) and disseminating it within the communities.

	AWARENESS PROGRAM IN MULTI-HAZARDS PRONE DISTRICT Palamu								
	Proposed Training from April 2018 to March 2019								
S.		No. of		Unit	Total	Quater			
N.	Activites	Unit	Activitie s	Cost	Budget	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>rd</sup>
	PROGRAMME COST								
1	District level sensitization workshop with department head about DRR mainstreaming and climate change	Trainings	1	18000.0	18,000.0	1.0			-
2	Sensitization training of all BEO and one BRP about importance of school safety plan	Training/ worksho p	1	18000.0	18,000.0	1.0			
3	School awareness Program about fire safety		16	5500.0	88,000.0	4.0	4.00	4.0	4.0
4	Sensitization training of Health department about DRR issue	Trainings	2	12500.0	25,000.0	_	1.00		1.0
5	Technical training to School Safety focal teachers/ BRPs on first-aid and life-saving skills	Trainings	2	16000.0	32,000.0	1.0	1.00		-
6	Sensitization training of Lightening safety for all BEOs and Some BRPs	Training	1	18000.0	18,000.0		1.00		

Jharkhand Disaster Management Authority

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	Total				711,500.00	18.0	20.0	16.0	15.0
10	Media and local leaders sensitization about role in disaster	Lumpsu mp	1	13000.0	13,000.0	1.0	1		-
9	DRR sensitization training in all block Mukhiya and Panchyat samit	Training	18	11000.0	198,000.0	4.0	5.00	5.0	4.0
8	Training of Panchyat samiti and Mukhiya about NDRF/ SDRF norm and process of claim in disaster	training	18	11000.0	198,000.0	4.0	5.00	5.0	4.0
7	DRR sensitization training in all anchal CI and Revenue worker	Training	9	11500.0	103,500.0	2.0	3.00	2.0	2.0
			2 /						

Proposed awareness from April 2018 to March 2019

Pro	Proposed awareness from April 2018 to March 2019							
S.N.	Activites	Unit	No. of Activities	Unit Cost	Total Budget			
	PROGRAMME COST							
1	Earth quake , Fire , Drought and Lighting related brochure printing for awareness	Lumpsump	1	200000.00	200,000.00			
2	Earth quake , Fire , and Lighting safety week calibration	Rally	18	10000.00	180,000.00			
3	Fire safety awareness program with Police department (Fire bridged)		10	7000.00	70,000.00			
4	Fire safety awareness in all 18 anchal ( Banner with iron stand )	No.	18	10000.00	180,000.00			
5	Display Material for workshop and other meeting Place	Lumpsump	1 set	40000.00	40,000.00			
	Total				670,000.00			

Jharkhand Disaster Management Authority

### Chapter 7: Response and Relief Measures

Response and Relief measures are most important activities after disaster. District administration takes all action for victim relief and support for coming normal life. Activities start by all departments to reduce lake of food item, health issue, drinking water and other problem.

#### 7.1 Response Plan vis a vis Various Disasters

# i. The DC shall ensure calling to tenders through advertisement in at least one English and one vernacular newspaper by end of April for supply of potable drinking water throughout the district. ii. The DC shall ensure identification of suppliers and fixation of rates for transportation of drinking water through tankers/tractors Sub-division wise by the first week of April in case of poor rainfall during the preceding winter and otherwise

by end of May.

#### iii. The DC shall authorize the SDMs for issuing orders for supply of drinking water through tankers as per need.

### iv. The DC shall identify nearest market in adjoining district/ state from where fodder (Straw is easily available and direct SDMs to advise people to procure fodder from such place.

## v. The DC shall submit report to the Government regarding crop loss due to drought and seek funds for utilization in employment generation.

#### vi. The DC shall submit report to Government with regard to situation of drinking water supply.

- vii. The DC in consultation with Animal Husbandry dept. shall assess requirement of fodder on the occurrence of drought and submit report to the Government.
- viii. The DC shall constitute joint emergency Sub-Division level and Tehsil level teams consisting of Executive Magistrate, Doctor, SDO (I&PH) for monitoring outbreak of water borne diseases.
- ix. The DC shall issue direction regarding cleaning of Traditional water Bodies prior to onset of summer and succeeding rainy season.
- x. The DC shall review availability of stock in all fair price shops in view of crop failure.
- xi. The DC shall issue prohibitory orders with regard to sale of over ripe/rotten fruits and vegetables.
- xii. The Health Department shall ensure stocking of medicines for

# Response Action of Administration

Jharkhand Disaster Management Authority

	water borne diseases in all health institutions.  xiii. The I& PH Department shall ensure availability of Chlorine tablets and bleaching powder at the village/ Panchayats level.  xiv. The DC shall converge various programmes and schemes of government for tackling drought situations.
Response Action of SDM	<ol> <li>i. SDM shall submit weekly report regarding drinking water availability in respective jurisdiction from first week of May to the DC.</li> <li>ii. SDM shall prepare route chat for distribution of drinking water in consultation with the Executive Engineer I&amp;PH department.</li> <li>iii. SDM shall identify source of drinking water in consolation with the I&amp;PH dept. from where shall take their supply.</li> <li>iv. SDM shall direct deployment of water tankers for supply of drinking water.</li> <li>v. SDM shall monitor smooth supply of water through tankers. There shall be made at least two trips in a day by the tankers.</li> <li>vi. SDM shall keep record of movement of water tankers in coordination with the I&amp;PH dept.</li> <li>vii. SDM shall constitute a team comprising of panchayat Pradhan, Patwari and Veterinary Doctors at local level for verification of fodder procured.</li> <li>viii. SDM shall ensure proper voucher/ invoice/ bill produced for providing transport subsidy as per relief manual.</li> <li>ix. SDM shall have the drinking water transportation bills verified through the I&amp;PH dept. and release payment for the same.</li> </ol>
Response Action by I&PH	<ol> <li>i. The XEN shall submitted weekly reports of status of water supply in departmental schemes from the week of May to the Superintendent Engineer.</li> <li>ii. The SE shall compile status of water in the district and submit same to the DC on weekly basis.</li> <li>iii. The XEN shall submitted demand of supply of water through tankers to the SDM.</li> <li>iv. The XEN shall identify source for filling of water tanker.</li> <li>v. The XEN shall ensure chlorination of such water supply.</li> <li>vi. The XEN shall ensure purification of natural water sources and all departmental schemes.</li> <li>vii. The XEN shall deploy personal (eg. Water guard) with each tanker to ensure proper and equitable distribution of water.</li> <li>viii. The XEN shall maintain a register of movement and supply by each tanker which shall be verified by officer authorized by him.</li> <li>ix. The XEN shall try to install more hand pumps in areas which chronically face water scarcity during summer.</li> </ol>

#### The Agriculture Officer shall monitor the situation for impact of drought on crop growth and consequent yield. The Agri. Officer shall submit weekly report starting from last ii. week of May and first week of January regard to status of Kharif and Rabi crops. **Response Action** iii. The Agri. Officer shall prepare contingency plan for any crop failure due to drought and submit same to the Government and by **Agriculture** DC. **Department** iv. The Agri. Officer in view of drought shall organize extensive field camps to advise farmers on alternative crop and strategies. The Deputy Director Horticulture shall monitor the situation for impact of drought on tree growth and consequent fruit ii. The Deputy Director shall submit weekly report starting from last week of May and first week of January with regard to **Response Action** status of fruit beating trees. by Horticulture The Deputy Director shall prepare contingency plan for any iii. **Department** crop failure due to drought and submit same to the Government and DC. iv. The Deputy Director shall view of drought shall organize extensive crop and strategies. i. The CMO shall ensure all medical institutions are stocked with adequate medicines, especially for water borne diseases. The CMO shall constitute emergency medical teams at all PHC ii. level to attend to outbreak of any epidemic (eg. Water borne disease.). **Response Action** iii. The CMO shall convene a meeting under the DC of all Health by concerned departments including Revenue, Rural Deptt. I&PH, **Department** Ayurveda with regard to prevention of water borne diseases. The CMO shall ensure issuance of notification banning sale of iv. over ripe/rotten and uncovered fruits/vegetables/flood by the District Magistrate.

#### ROAD ACCIDENT The SDM shall immediately inform the DC of occurrence of accident. ii. The SDM shall immediately direct SHO concern to rush Police personnel to sport. The SDM shall immediately direct the Tehsildars/Naibiii. Tehsildar to rush to the spot. The SDM shall immediately put the Health Dept. on the alert by iv. information CMO/BMO concerned. The SDM shall depend upon the magnitude of the accident v. request for assistance from Commandant Home Guard, PWD The SDM shall depend upon the magnitude rush to the spot of vi. the accident. The SDM shall arrange for search & rescue on the spot taking vii. assistance of Police, Home Guard, Fire Brigade, PRIs, NGOs and local population. The SDM shall evacuate people directly involved in the viii. accident and also general public if it is deemed necessary. Response The SDM shall direct the health dept. to depute ambulance and ix. **Action by SDM** paramedical and medical staff to the spot immediately for on the spot treatment and first aid. The SDM shall arrange for dead van if so required. х. xi. The SDM shall coordinate between the Police, Health dept. Victims and their kith and kin for search and rescue, low and order, traffic management post shall coordinate with the health dept. For conduct of immediate post mortem and early handing over of dead bodies to kith and kin. The SDM shall ensure submission of a brief and comprehensive xii. detailed report of the accident within 12 Hrs to the DC. The report shall contain the following information. Location and details of vehicle involved in the accident. Prima facie cause of accident. Detail of passengers with identification if any. Detail of relief provided in from of medicines and cash. xiii. The SDM shall keep the DC informed on action being taken on the spot from time to time. The CMO on receiving information regarding the i. accident shall immediately put on casualty/ emergency Response ward of District Hospital for referred cases. Action for The CMO shall inform the BMO concerned and the ii. SMO of the concerned sub-divisional hospital for Health similar action. **Department** The CMO shall arrange for immediate movement of iii. ambulance with medical and paramedical staff to the site

	of accident.
	iv. The CMO shall ensure portable stretchers are available
	site for evacuation on the injured and the dead.
	v. The CMO shall ensure availability of first Aid on the
	spot.
	vi. The CMO shall depute doctors from surrounding
	PHC/CHC to the CHC where the injured have been
	evacuated if staff strength is not enough at that health
	institution.
,	vii. The CMO shall maintain a detail of victims admitted to
	various health institutions including those referred to
	specialized health institutions outside the district. The
	CMO submit in writing to the DC such detail including
	status if health within 12 Hrs. in consultation with the
	SDM.
	SDIVI.
	i. The SHO shall immediately inform the SDM, SP and
	DC regarding the incident with details of site.
	ii. The SHO shall immediately deputy a team of police
	personal to the site
	•
	the site and personally coordinate search and rescue,
	evacuation, traffic regulation, low and order.  iv. The SHO shall communicate factual information to the
	iv. The SHO shall communicate factual information to the SP on reaching the spot on the following.
	- Exact location
	- Prima facie cause of accident
	- Vehicles involved, transport company
	- No. of injured
	- No. of fatalities
	- Status of driver and conductor
Response	- Status of injured
Action of SHO	- Status of injured
	v. The SHO shall arrange for search and rescue in
	consultation with the SDM.
	vi. The SHO shall ensure smooth movement of traffic.
,	vii. The SHO shall divert the traffic if required in
	consultation with the SDM.
v	iii. The SHO shall arrange for a guard to protect the
	property of the victims at the site.
	ix. The SHO shall take necessary legal action as low and
	also initiate an inquiry into the causes of the accident.
	x. The SHO shall arrange for early post mortems and quick
	release of bodies to the kith and kin.
	xi. The SHO shall submit a brief and comprehensive report
	regarding the accident in consultation with the SDM to
	the SP with in 12 Hrs of the accident.

Response Action of PWD	<ul> <li>i. The XEN concerned shall provide equipment and manpower to the SDM at the accident site on request.</li> <li>ii. Equipment such as crane, JCB, Bulldozer, Gas cutter etc shall be provided by the XEN as per request of the SDM.</li> <li>iii. The XEN/SDO/JE shall supervise such operations at site depending upon the magnitude of the accident as assessed by the SDM.</li> <li>iv. The XEN shall ensure manpower is provided at site on the request of the SDM.</li> </ul>
Response Action of Home Guards	<ul> <li>i. The Commandant shall ensure movement of fire brigade immediately to the site when called for by the SDM.</li> <li>ii. The Commandant shall provide manpower for assistance in search and rescue, removal of dead, traffic management, first aid etc.</li> </ul>

#### 7.2 Minimum Standards of Relief

DDMA Palamu shall render relief of Victims as per minimum standards of relief according to the guidelines issued by NDMA

SL No	-	Steps to ensure Minimum Standards
1	Shelters	<ul> <li>Identification of relief centers in each block district. Each relief centers shall be temporary in nature and must have 3.5 Sqm of covered area per person</li> <li>Each centers have basic facilities like toilets water supply, Electricity supply as well as power back up with fuel etc.</li> <li>District Nazarat office shall be in MOU with supplier provide all the items may require in case of disaster.</li> <li>Safety of inmates and special arrangements differently able persons old and mentally sensuous patients should be given most priorities</li> </ul>
2 Food		<ul> <li>Each relief centers must have adequate quantity of food especially for Aged &amp; children</li> <li>Arrangements of milk and dairy products shall be Provide to the children and lactating mother</li> <li>Hygiene at community and at camps kitchen</li> <li>Date of manufacturing and date of expiry on the packed food items shall be kept in view before distribution</li> </ul>

Jharkhand Disaster Management Authority

		• Supplied food with calories 2400 k cal per day for adults and 1700 k cal per day for infants
3	Water	<ul> <li>Sufficient quantity of water shall be provided in the relief camps for persons at cleanliness and hand wash.</li> <li>Minimum supply of 3 liters of water per person per day is made available in the relief camps.</li> <li>In case of safe drinking water is not possible at least double chlorination of water needs to be ensured.</li> <li>Maximum distance from the relief camp to the nearest water point shall not be more than 500 miters</li> </ul>
4	Sanitation	<ul> <li>One toilet for 30 persons may be arranged or built.</li> <li>Separate toilet and bath area for women and children.</li> <li>15 liters of water per persons needs to be arranged for toilets/ bathing.</li> <li>Hand wash facilities in the toilets should be ensured.</li> <li>Dignity kits for women shall be provided with sanitary napkins and disposable paper bags with proper labeling.</li> <li>Steps may be taken for control of spread of diseases.</li> <li>Toilets shall not be more than 50 m away from the relief camps.</li> <li>Pit latrines and soak ways shall be at least 30 m from any ground water source and the bottom of any latrines has to be at least 1.5 m above the water level.</li> <li>Drainage or spillage from the defecation system shall not run towards any surface water source or shallow ground water source.</li> </ul>
5	Medical cover	<ul> <li>Steps shall be taken to avoid spread of any communicable diseases.</li> <li>Helpline should be set up and contact number and details shall be adequate published.</li> <li>For pregnant women arrangement of basic arrangement for safe delivery.</li> <li>All the hospital, Doctors and paramedical staff are available in short notice. Doctors and paramedical staff should be available on 24x 7 basics in the relief camps in case of referral case to the hospitals suitable transportation shall be arranged.</li> <li>Medical emergency / contingency plan should be activated in case of mass casualty.</li> </ul>
6	Relief for widows & Orphans	<ul> <li>Special care shall be given to widows and orphaned who are separated from the family.</li> <li>Separate register duly counter signed by officials having complete details women who are widows and for children who are orphaned due to disaster shall be maintains and kept it permanent records.</li> </ul>

#### 7.3 The Incidence Response System of the District

#### **District level Head Quarter Team**

Position	Name	Designation	Mobile/phone no	Email ID and address	Officer in charge case of absence	
District Response Officer	Dr. Shantanu Kumar Agrahari	DC, Palamu	7250826612 06562-224033	dc-pal@nic.in	D.D.C, Palamu	
Head Quarter Coordinator	Mr. Bindu Madhaw Prasad Singh	DDC, Palamu	09430741495 06562-224021	drdapalamu2019@gm ail.com	AC, Palamu	
Liason Officer	Mr. Pradeep Kumar Prasad	AC, Palamu	9431333931	officeadditional@gmai l.com	SDO, Sadar Medini Nagar, Palamu	
Information Officer	Mr. Ranveer Singh	DIO, Palamu	9471747990	jhrpal@nic.in	D.P.O. Palamu	
Planning Section Chief	Mr. Arvind Kumar	DPO, Palamu	9431180922		DIO, Palamu	
Logistic Section Chief	Mr. Jaideep Tiga	DSO, Palamu	9431157055		DPRO, Palamu	
Air Operation Chief	Mr. Nand Kishor Gupta	SDO, Sadar	09431138170 06562- 224027	sdomdnagar@gmail.co m	DCLR, Palamu	
Section Chief	Mr. Sushil Kumar	DEO, Palamu	7004353450	deo.palamu@gmail.co	DSE, Palamu	
Situation Unit Leader	Mr. Shanti Pandey	DPRO, Palamu	9431339031	dpropalamu2012@gm ail.com	DSO, Palamu	

Jharkhand Disaster Management Authority

#### **District Level Incident Response Team**

Position	Name	Designation	Mobile/phon e no	Email ID and address	Officer in charge in case of absence
Asst. Response Officer	Mr. Pradeep Kumar Prasad	AC, Palamu	9431333931	officeadditional@gma il.com	SDO, Palamu
Liason Officer	M. Nand kishor Gupta	SDO, Sadar	09431138170 06562- 224027	sdosadar@gmail.com	LRDC, Sadar Medini Nagar, Palamu
Information Officer	Mr. Ranveer Singh	DIO, Palamu	9471747990	jhrpal@nic.in	D.P.R.O., Palamu
Safety Officer	Mr. Dileep Ram Keshri	District Fire Brigade officer, Palamu	Cont-Room 9304953439 Privet- 9431765760		Ex Engineer REO, Palamu
Planning Officer	Mr. Arvind Kumar	DPO, Palamu	9431180922		DPRO, Palamu
Logistic Section Chief	Mr. Jaideep Tigga	District Transport Officer, Palamu	9431157055		SDO,Chattar pur Palamu
Air Operation Chief	Mr. Rameswar Prasad Singh	Sub Registrar, Palamu	8541073353		DSO, Palamu
Finance/admi n. Section Chief	Mr. Shailesh Singh Kumar	NDC Palamu	9771575134		DSWO, Palamu
Situation Unit Leader	Mr. Arivend Kumar Mishra	DWO, Palamu	7488724521		Executive Officer, Palamu Municipality
Resource Unit Leader	Dr. Kalanand Mishra	Civil Surgeon, Palamu	9431138224 9939872333		EE Building, Palamu
Ex. Officer, Municipality	Mr. Veenit	Ex. Officer, Municipality Council Medininagar	7352355196 , 8340265925 ,		DWO, Palamu

Jharkhand Disaster Management Authority

# Chapter 8: Recovery Plan and Reconstruction

Rehabilitation and reconstruction comes under recovery phase immediately after relief and rescue operation of the disaster. This post disaster phase continues until the life of the affected people comes to normal. This phase mainly covers damage assessment, disposal of debris, disbursement of assistance for houses, formulation of assistance packages, monitoring and review, cases of non-starters, rejected cases, non-occupancy of houses, relocation, town planning and development plans, awareness and capacity building, housing insurance, grievance consideration and social rehabilitation etc.

Disaster recovery is a continuous process from relief/short term recovery through to medium/long term recovery to the resumption of normal business. This strategy has been developed to be flexible and to enable scaling up and down of recovery processes as required. The district committee is responsible for developing this District Community Recovery Plan.

#### Scope

This recovery strategy has been developed to:

- include all functions of recovery (human-social, infrastructure, economic and environmental);
- define broad parameters for the effective coordination of recovery operations within the district; and
- Identify constraints to the coordination of recovery operations within the district.

#### 8.1 Functions of Recovery

For the purpose of effective coordination aspects of recovery are conceptually grouped into four functions. It is important to acknowledge that the four functions of recovery overlap and recovery arrangements must reflect the inter-relationship between each of these functions.

#### **Economic:**

Economic recovery includes renewal and growth of the micro economy (within the affected area) and the macro economy (overall economic activity of the state). Economic recovery includes individual and household entities (e.g. employment, income, insurance claims), private and government business enterprises and industry. It includes assets, production and flow of goods and services. It includes capacity for the export of goods and services from the affected region, and securing confidence of overseas markets.

#### **Environment:**

Environment, or natural environment, recovery includes restoration and regeneration of biodiversity (species and plants) and ecosystems, natural resources, environmental infrastructure, amenity/aesthetics (e.g. scenic lookouts), culturally significant sites and heritage structures. It includes management of environmental health, waste, contamination and pollution and hazardous materials.

Jharkhand Disaster Management Authority

#### **Human-social:**

Human-social recovery includes personal support and information, physical health and emotional, psychological, spiritual, cultural and social well-being, public safety and education, temporary accommodation, financial assistance to meet immediate individual needs and uninsured household loss and damage.

#### **Infrastructure:**

Infrastructure, or built environment, recovery includes repair and reconstruction of residential and public buildings, commercial, industrial and rural buildings and structures, government structures, utility structures, systems and services (transport, water, sewage, energy, communications) and other essential services.

#### **Parameters and Constraints**

In many instances multiple agencies may be involved in the delivery of specific community recovery services. This is particularly the case with more significant or complex disaster events. In providing community recovery services agencies can adopt either a lead agency role or a support role.

#### **Operational and Action Plans**

Where a recovery team is formed and which undertakes recovery as the result of an event, a Recovery Group Implementation Plan is to be developed and forwarded to the DDMA for review and approval.

#### 8.2 Post Disaster Reconstruction and Rehabilitation

Post disaster reconstruction and rehabilitation should pay attention to the following activities for speedy recovery in disaster hit areas. The contribution of both government as well as affected people is significant to deal with all the issues properly.

- Damage assessment
- Disposal of debris
- Disbursement of assistance for houses
- Formulation of assistance packages
- Monitoring and review
- Cases of non-starters, rejected cases, non-occupancy of houses
- Relocation
- Town planning and development plans
- Reconstruction as Housing Replacement Policy
- Awareness and capacity building
- Housing insurance
- Grievance redress

#### 8.3 Administrative Relief

The district is the primary level with requisite resources to respond to any natural calamity, through the issue of essential commodities, group assistance to the affected people, damage assessment and administrating appropriate rehabilitation and restoration measures. The district level relief committee consisting of official and non-official members including the local legislators and the members of parliament review the relief measures. A district is sub-divided into sub-divisions and tahsils or talukas. The head of a sub-division is called the Sub-Division Officer (SDO) while the head of a Tahsil is known as a Tehsildar. When a disaster is apprehended, the entire machinery of the district, including the officers of technical and other departments, swings into action and maintains almost continuous contact with each village in the disaster threatened area.

Jharkhand Disaster Management Authority

Reconstruction of Houses Damaged / Destroyed

Houses should be reconstructed in the disaster hit areas according to the following instructions:

- Owner Driven Reconstruction
- Public Private Partnership Program (PPPP)
- Under the PPPP the houses are reconstructed by the NGOs for the beneficiaries to be registered in the joint names of the husband and wife.
- All the houses should be insured.
- Financial, technical and material assistance provided by the government.
- The designs for seismic reconstruction of houses provided by the government.
- The material assistance provided through material banks at subsidized rates.
- Design of 20 model houses provided to the public tochoose from with an option to have one's own design.

#### 8.4 Military Assistance

If the district administration feels that the situation is beyond its control then immediate military assistance could be sought for carrying out the relief operations.

#### 8.5 Medical Care

Specialized Medical Care may be required to help the affected population. Preventive medicine may have to be taken to prevent outbreak of diseases.

#### 8.6 Epidemics

In the relief camps set up for the affected population, there is a likelihood of epidemics from a number of sources. The strategy should be to subdue such sources and immunize the population against them. The public health centers, health departments can practice vaccination drives, public awareness to drink boiled water, use chlorine tablets to purify the water sources.

#### 8.7 Corpse Disposal

Disposal of dead bodies is to be carried out as a part of the operation to prevent outbreak of epidemics. Minimum official requirements should be maintained as it is a very sensitive issue.

The following points may be considered by the concerned authorities at the time of corpse disposal:-

- Mass photographs of corpses,
- Consent of the relatives or hand over to them
- Make a panchnama of concerned localities.

Jharkhand Disaster Management Authority

#### 8.8 Salvage

A major effort is needed to salvage destroyed structure and property. Essential services like communications, roads, bridges, electricity would have to be repaired and restored for normalization of activities.

#### 8.9 Outside Assistance

During disaster situations, considerable relief flows in from outside, thus there is an immediate need to coordinate the relief flows so that the maximum coverage is achieved and there is no duplication of work in the same area.

#### 8.10 Special Relief

Along with compensation packages, essential items may have to be distributed to the affected population to provide for temporary sustenance.

#### 8.11 Information

Information flow and review is essential part of the relief exercises. Constant monitoring is required to assess the extent of damage, which forms the basis of further relief to the affected areas.

#### 8.12 Social Rehabilitation

#### 1-Disabled persons:-

#### Responding to the needs of persons with disabilities

Several studies show us that including the needs and voices of persons with disabilities at all stages of the disaster management process, and especially during planning and preparedness, can significantly reduce their vulnerability and increase the effectiveness of Government response and recovery efforts. However, despite an increasing worldwide focus on disaster risk reduction as opposed to mere disaster response, most city and related Government agencies fail to adequately plan for – or include – persons with disabilities in their disaster management activities. This causes severe inequities in access to immediate response, as well as long-term recovery resources for people who have disabilities prior to the disaster and those who acquire a disability as a result of the disaster.

Rehabilitation and reconstruction efforts must not only be inclusive and responsive to the needs of all people, including persons with disabilities, but should include the participation of persons with disabilities, to ensure that their needs and rights are respected. Women with disabilities are a particularly vulnerable group whose needs should be included at all stages of recovery and reconstruction efforts.

- Artificial limbs fitted to affected persons.
- Modern wheelchairs, supportive devices provided.

#### 2-Children

- Orphaned children are fostered.
- Day centers set up
- Orphanages established.
- Child help lines established.

#### 3-Paraplegics

• Pension scheme introduced for paraplegics.

Jharkhand Disaster Management Authority

- Physiotherapy under continuous supervision of doctors.
- Old Persons
- Aged persons given pensions.
- Old Age Homes established.

#### 4-Women

- Pension sanctioned.
- Women's Livelihood Restoration Project started.
- Self-employment Schemes for Women.

#### 5-Infrastructure

- Power
- Water supply
- Public buildings
- Roads and Bridges
- Dams and Irrigation.

# Chapter 9: Financial Resources for Implementation of DDMP

#### **Budget and other financial allocations:**

(According to ACT No. 53 of 2005 – the Disaster Management Act, 2005, Chapter IX, Finance, Account and Audit)

48-Establishment of funds by the State Government

The State Government shall immediately after notifications issued for constituting the State

Authority and the District Authorities establish for the purposes of this Act the following funds, namely:-

- i. The fund to be called the District Disaster Response Funds
- ii. The fund to be called the District Disaster Mitigation Fund

50 – Emergency procurement and accounting

Where by reason of any threatening disaster situation or disaster, the National Authority or the

District Authority is satisfied that immediate procurement of provisions or materials or the immediate application of resources are necessary for rescue or relief, -

- i. It may authorize the concerned department or authority to make the emergency procurement and in such case, the standard procedure requiring inviting of tenders shall be deemed to be waived;
- ii. A certificate about utilization of provisions or materials by the controlling officer authorized by the National Authority, State Authority or District Authority, as the case may be, shall be deemed to be a valid document or voucher for the purpose of accounting of emergency, procurement of such provisions or materials.

Special budget at district, taluka and village level should be allocated for training of various teams against disaster, purchasing of equipment to save the life and property of the people, organizing mock drills to create awareness among the people, updating the disaster management plans, etc.

Fund allocation should be made by Zilla Parishad, Panchayat Samiti and Gram Panchayat to carry out the following DRM activities:-

- a) To train Search and Rescue, First Aid groups
- b) To create awareness among the people
- c) To procure search and rescue materials
- d) To evacuate and set up temporary shelter for disaster victims

  Jharkhand Disaster Management Authority

# Chapter 10: Review and Evaluation

### 10.1 Detail of review and evaluation Plan

The District Disaster Management Plan shall be reviewed periodically and also after every disaster that occurs in the district or in a neighboring district where support relief was provided by Palamu district. The effectiveness of the DDMP and Sub-plans shall be reviewed against the below mentioned criteria:

- The plan specifies roles and responsibilities of all lead combat and support agencies in response and recovery.
- The plan identifies key individuals by title who are responsible for carrying out specific functions in response and recovery.
- The plan identifies individuals by title with responsibility for plan development and maintenance.
- The plan includes a logical aim.
- The plan is consistent with higher level plans.
- The plan provides for special needs of vulnerable community groups (e.g. the aged, disabled or destitute).
- The plan is reviewed and agreed to by all agencies assigned responsibilities.
- Provision is made for distribution of amendments to all plan holders.
- Private sector and voluntary organizations that can provide assistance are identified.

The DDMA will be responsible for the proper monitoring and evaluation of the DDMP. The purpose of monitoring and evaluation of DDMP is to determine

- i. adequacy of resources District Disaster Management Plan, Palamu
- ii. co-ordination between various departments/ agencies
- iii. community participation
- iv. partnership with NGOs
- v. partnership with insurance companies

### 10.1.2 Roles & Responsibilities of DDMA in Monitoring and Evaluation of DDMP:-

- 1. Identify and ensure implementation of DRR into all developmental projects and schemes.
- 2. Monitor the functioning and adequacy of the resources present in the district every six months.
- 3. Based on the analysis, the DDMA has to procure/purchase/borrow resources from the concerned authorities and replace the dilapidated and non-functioning resources using the developmental funds
- 4. Ensure that all the departmental plans are operational and checked by the respective nodal officers.
- 5. Monitor that all the officers of the frontline departments have to be trained as per their requirement.
- 6. Monitor that all prevention, mitigation, preparedness and response measures are properly implemented within the district.
- 7. All departmental heads at the district level must ensure to identify their suitable and relevant schemes (centrally-sponsored or state-funded) which will be suitable to be used in disaster management, keeping in view of their parameters of the central sponsored schemes.

The monitoring and evaluation could be done through various audits such as:

i. Electrical Safety Audits of critical infrastructure

Jharkhand Disaster Management Authority

- ii. Fire-Safety Audits of critical infrastructure
- iii. Enforcement of National Building Code in construction of lifeline buildings
- iv. Audit reports of various departments such as environment, irrigation (regarding canals), labor (Industrial Safety & Health)
- v. All on-site emergency plans of the respective industries which fall within the district
- vi. Off-site emergency plan of the district

### 10.2 Post disaster Review Plan

The District Disaster Management Plan is to be reviewed and updated after the occurrence of a disaster in the district. The main objective of the review is to record the event facts and first hand experiences of the department personal. This activity will help to make the DDMP better by identification of gaps and suggestions for filling of the same.

The DDMA will be responsible for the review of the DDMP. This needs constant review and updation based on the following requirements:-

- i. Major change in the operational activities and location
- ii. Valuable inputs from actual disasters
- iii. Lessons learnt from training
- iv. Inputs from mock drills/ simulation exercises
- v. Lessons learnt from near-miss incidents
- vi. Changes in disaster profile
- vii. Technological developments/innovations in identifying potential hazards
- viii. Changes in regulatory requirements
- ix. Updation of databases using GIS
- x. Change in demography of surrounding population
- xi. Changes in geo-political environment

### 10.3 Periodic updating Plan

Palamu DDMP is an effective document for the District and the ADC and District Revenue Officer, Palamu along with the help of the nodal officers of the frontline departments will update it on a biannual basis taking into consideration:-

- i. Inventory of equipment in the district (DDMRI), District Disaster Management Plan, Palamu
- ii. Human Resources, their addresses and contact numbers (DDMRI),
- iii. Medicinal stock,
- iv. List of disaster prone villages,
- v. Technology to be used,
- vi. Coordination issues from the lessons learnt

The District Disaster Management Plan is to be reviewed every 6 months. This is to check for changes in the district conditions from the past 6 months and update based on the impacts of these changes. The updation is to be undertaken by all the Functional Departments at their levels. The following schedule is to be followed for periodic updation.

Month	Activity
Feb	Review of DDMP by departments
Mar	Submission of recommendations to DDMA
Apr	Amendments are distributed to all stakeholders

Jharkhand Disaster Management Authority

### 10.4 Mock drill.

Palamu DDMP is an effective document for the District and the ADC and District Revenue Officer, Palamu along with the help of the nodal officers of the frontline departments will update it on a biannual basis taking into consideration:-

- i. Inventory of equipment in the district (DDMRI), District Disaster Management Plan, Palamu
- ii. Human Resources, their addresses and contact numbers (DDMRI),
- iii. Medicinal stock,
- iv. List of disaster prone villages,
- v. Technology to be used,
- vi. Coordination issues from the lessons learnt

Jharkhand Disaster Management Authority

# Chapter 11: Co-ordination with Armed Forces, Para-Military Force and Non-government Organizations (NGOs)

### **Involvement of Defense, Para Military Forces and NGOs:**

At district level whatever help would be required during disaster that will be immediately informed to the various departments by the district collector and possible support NGOs and other line agencies in the district would be tapped up. If the District Collector thinks that it cannot cope with the disaster then he can ask help from the defense and paramilitary force.

### 11.1 Armed Forces and Para-Military Forces

Sr No	Officer in charge name	<b>Battalion Name</b>	Phone/Mobile no	Equipment no
1	SH Arun Dev Sharma,	134 BN, CRPF	Cont-Room 06562-	Nil
	Commandant		235066 P -	
			09431815884	
2	Shri Ramesh Kumar	112 BN, CRPF	07360001970	Nil
	Commandant			
3	Nodal Mejar Vinit/	Sikh regiment	9582588116	
	Abhishek Singal	Ramgarh	35.ramgarh@gmail.com	
			Cont-Room	
			9771490197	

### **NDRF** in Disaster Management

Ministry of Home Affairs, Government of India National Disaster Response Force, has raised the National Disaster Response Force (NDRF). The two broad mandate of NDRF is to undertake search and rescue operations during disaster and conduct training and capacity building program during peace time. During disaster, the NDRF may be called for search and rescue operation while services of NDRF can also be utilized for conducting capacity building and training programs for different response groups.

The NDRF is a specialized response force to tackle a threatening disaster situation or disasters/ emergencies both natural and manmade. NDRF units maintain close liaison with the designated State Governments and aim to be available to them in the event of any life threatening disaster situation. Currently there are 10 battalions of NDRF out of which each battalion is equipped to deal with natural disasters rests and four battalions are also equipped and trained to respond to situations arising out of CBRN emergencies. Training centers are being set up by respective paramilitary forces to train personnel from NDRF battalions of respective forces to meet the training requirements of State/UT Disaster Response Forces. The NDRF units also impart basic training to all the stakeholders identified by the State Governments.

Jharkhand Disaster Management Authority

### **NDRF BNS**

Name	Designation		Telephone No.	Fax No.	Mobile No.	E-Mail
Sh. A.K.Singh	Commandant	1st BN NDRF,Patgaon PO-Azara,Guwahati	0361-2840027	0361- 2849080	09401048790	assam01- ndrf@nic.in
Sh. Sandeep Channan	Commandant	2nd BN NDRF,Haringhata, Mohanpur,Nadia, (West Bengal) Pin-741246	033-25875032	033- 25875032	09434742836	wb02-ndrf@nic.in
Sh. M.K.Yadav	Commandant	3rd BN NDRF, PO- Mundali, Cuttack-Odisha Pin-754006	0671-2879710	0671- 2879711	09439103170 09437964571	ori03-ndrf@nic.in
Sh. M.K Verma	Commandant	4th Bn NDRF, PO- Suraksha Campus, Arrakonam, Distt. Vellore,Tamilnadu	04177-246269	04177- 246594	09442105169 (M)	tn04-ndrf@nic.in
Sh.Alok Avasthy	Commandant	5th Bn NDRF,Sudumbare Taluka,Distt-Maval Pune(Maharashtra) Pin- 410507	02114- 247010(O)	02114- 247008	09423506765	mah05- ndrf@nic.in
Sh.R.S Joon	Commandant	6th Bn NDRF, Chilora Road, Gandhinagar, Pin- 382042		079- 23201551	09428826445	guj06-ndrf@nic.in
Sh.Jaideep Singh	Commandant	7th Bn NDRF, Bibiwala Road, Bhatinda (Punjab) Pin 151001		0164- 2246570	09417802032	pun07- ndrf@nic.in
Sh. P.K.Srivastava	Commandant	8th Bn NDRF, Kamla Nehru Nagar, Ghaziabad (UP) Pin -201002	0120-2766013	0120- 2766618	09968610014	up08-ndrf@nic.in
Shri Vijay Sinha	Commandant	9th Bn NDRF, Bihata Patna, Bihar Pin - 801103	06115-253942	06115- 253939	Cont Room 08544415050 07762884444	patna-ndrf@nic.in
Sh.Parshant Dhar	Commandant	10th Bn NDRF, Manglagiri, Vijaywara(AP) Pin- 522510	0863-2293178	0863- 2293050	09419217790	ap10-ndrf@nic.in

Jharkhand Disaster Management Authority

### 11.3 Non-Government Organisation

The Non-governmental organizations play an important role in disaster management and provide valuable resources and expert manpower. Their capacity to reach out to community groups and their sensitivity to local traditions of the community give them added advantage during the disaster situation.

The specific areas where the NGO can be involved are.

- Emergency First Aid
- Management of Relief Camps
- Trauma Care
- Services to Vulnerable Groups
- Rehabilitation, etc.,

NGOs and voluntary organizations are the first to respond before any outside assistance can reach the disaster site. In certain disaster prone areas a group of young volunteers are being formed and trained to undertake essential tasks which would reduce loss of life and property. NGOs and Voluntary organizations would contribute in the following areas:

- Ensuring communication links both within the community and with the administration.
- Controlling rumours and panic behaviour and undertaking confidence building activities.
- Organizing local work teams for immediate rescue, and relief e.g. cooked food, first aid, and assistance in law and order.
- Assisting the handicapped that need special help.
- Guarding major installations and evacuated properties till the administration takes over

### NGO's

Distric t	Name Of NGO's/ Organizatio n	Governmen t/ Private	Address	Authoriti es Name	Contact No	Email ID
Palamu	Lions Club	Private	65, Zila School Chowk, Daltonganj- 822101		(6562) - 226355	
Palamu	Mahila Sashaktiran and balbikash Sangathan	Private	NEAR DEVI MANDAP, RANCHI ROAD, REDMA, DALTONGANJ, PALAMU, PIN – 822101		06562- 241621 0943178806 2	wecdo@rediffmail.com
Palamu	SOCIETY FOR ENVIRONME NT AND SOCIAL AWARENESS	Private	SESA, OLD I.T.O. ROAD, REDMA, DALTONGANJ, PALAMU, JHARKHAND - 822 101	KAUSHIK MALLIK CEO	06562- 222968	sesa_environment@yahoo.c o.in

Jharkhand Disaster Management Authority

Palamu	Adiwasi Jan Kalyan Samiti	Private	House of Ms Arti Tiwari, Durga Mandap road, Daltonganj	Manoj Kumar (Secretary)	9431101216 9304310136	Ajbs06@rediffmail.com
Palamu	Nature development society	Govt.	Daltongan			
Palamu	Matribhumi Seva Sankalp Sansthan	Private	Vill- Pandwa, Post-Rajhara, Pandwa Palamu	Budhan Mahto President	9771803700 9546997790	

Distric t	Name Of NGO's/ Organizatio n	Government / Private	Address	Authoritie s Name	Contact No	Email ID
Palamu	Social Awareness Society	Private	Vill & P.O.: Shahpur, P.S.: Chainpur, Palamau-822110	Md Ekbal Zafar	9939321875	
Palamu	Mahila samagra utthan samiti	Private	PROFESSOR COLONY, G.L.A.COLLEGE ROAD DALTONGANJ, PALAMAU, JHARKHAND -822102	Mritunjay Ratnakar	9431193287	
Palamu	Social Management Society	Private	Panki Road, Near GLA Collage, Medininagar- 822101, Palamau(Jharkhand)	Sanjay Kumar	9471545998	
Palamu	Gramin Yuva Rachnatmak Manch	Private	Village & P.O Narsinghpur Pathra, Palamau	Ashok Chourasia	9430732332	
Palamu	Aadarsh Gramin Swarajya Sansthan	Private	AT- Chainpur Po+Ps- Chainpur Dist-Palamau (Jharkhand) Pin- 822110	Sri Ganesh Kumar (Treasurer)	9430778008	
Palamu	Gramin Sankalp Society	Private	Gayatri Mandir Road, Sudna, Daltonganj, Palamau(Jharkhand)-822101	Ashutosh Kumar Sinha	9304673501	
Palamu	Vishva Kalyan Seva Santhan	Private	Village : Pokharahkhurd, P.O.& P.S.: Medininagar- 822101, Palamau	Md. Jalil	9973033041	
Palamu	Jeewan jyoti	Private	Bye Pass Road, Medininagar, P.O Sudna, District - Palamau, Jharkhand - 822101	Jyoti Puram	9431563614	
Palamu	Koodrat the heart of nature	Private	gaytri mandir road,near of pipal tree sudna, daltonganj,palamu,jharkhand -822102	Pankaj kumar yadav	7488518639	

# Chapter 12: Standard Operating Procedures (SOPs) and Check List

Section 30(2) (xvi) of the Disaster Management Act stipulates that the DDMA under the chairmanship of the Collector and the co-chair of the elected representative of the local authority, shall 'coordinate response to any threatening disaster situation or disaster'. The Collector/District Magistrate as the head of administration at the district shall be the focal point in the command and control for disaster response at the district level, in accordance with the policies/guidelines/instructions from the national and state levels. Depending on the nature of disaster and response he will be the Incident Commander himself or delegate the responsibility to some other officer.

The Procedures for dealing with disasters will be as per the District Disaster Management Plan for Cyclones, Floods, Drought, etc. In the normal times a high powered committee holds a meeting of the stakeholder departments twice in a year in the 2nd /3rd week of April and September every year, headed by the district collector. DDMA meetings shall be held once every half yearly.

### **12.1 Objective of SOPs**:

- To provide, in a concise and convenient form, a list of major executive actions involved in responding to natural disasters and necessary measures for preparedness, response and relief activities to be taken
- To prevent/ reduce potential losses/damage due to hazards.
- To attain and resilient recovery.
- To indicate various actions this would be required by the District Administration within their sphere of responsibilities so that they may prepare and review the Departmental Action Plans accordingly.
- To ensure that all concerned Departments of the Government, know the precise measures required of them at each stage of the process and also to ensure that all actions are closely and continuously monitored.

### **12.2SOP for Different Departments**

### 12.2.1 Revenue Department

### Normal Time Activities

- A map of disaster prone areas in the district, history of the district, geographical conditions occupational details, settlements, rain, irrigation and industries etc.
- Safe alternative routes to utilize during disaster in the disaster prone areas.
- Key officers of all the departments, staff, vehicles and buildings.
- Details of control room arrangement.
- Details of geographical groups and assignment of Zonal Officer.
- Details of food grain storage places in the district and the Fair Price

Jharkhand Disaster Management Authority

### Shops.

- Details of vehicles, boats and equipments available in the district for rescue operation.
- Setting up of communication to communicate the messages from village to village.
- Details of operating systems for District Disaster Management Committee.
- List of NGOs and self help groups and their addresses and phone numbers in the district in the prescribed annexure
- Orientation Training to various District level officers and departments for effective functioning of control room, co-ordinations and operations.
- Details of salt pan workers and fisherman who can become the victims of Disasters and sufficient arrangement to contact the owners of saltpan.
- Special appointments of persons in charge of control room.
- Hazard analysis, seasons, and possibilities of disasters and review of disaster history.
- Review of disaster prone areas, risks, response plan, resource and utility of resources and equipments.
- Strategy for disaster management
- To update the DDMP.
- To check the condition of safe shelter during his visits in the district places and if necessary gets it repaired by co-coordinating with the local authorities, available financial resources and voluntary organizations.
- Repairing of roads and ways leading to safe shelters by coordinating with various development plans/schemes.
- Evacuation plan as a part of DDMP.
- To undertake development projects like rural housing, scarcity of relief works, disposal of rainwater and water conservation and water harvesting.
- To co-ordinate scheme for poverty eradication, self-employment and the schemes of other departments.

# On receiving the warning

- Will review the alarming situation in the meeting of DDMC.
- Assigning the work as to what to be done by which officer in case the disaster hits. Will review and have co-ordination task
- Will alert and activate the functionaries' related to early warning and communication looking to the possibilities of disaster and will see that the messages are intimated to the members.
- Distribution of work for operation of round the clock control room.
- Will send the vehicles with mikes and sound system for the areas of top priorities. Will instruct all the staff to remain present at their respective places.
- Shifting the people living in low lying areas, seashores, and economically weaker people socially and economically backward

Jharkhand Disaster Management Authority

families and houseless families to safe places. Will workout the arrangements for search and rescue operation, shifting of people and utilization of human resources as per necessity with the help of DMTs and local community through zonal officers. Will arrange for temporary shelter for the people evacuated by giving the warning in advance. Will provide the vehicles to shift the people to the safer place when necessary. Will undertake the operation of forceful evacuation of people if they are not ready to leave even after warning. Will arrange for food, drinking water, medicines at temporary shelters and relief camps with the help of local NGOs, doctors, industrial houses, etc. Will make in advance preparations for relief activities through local NGOs, industrial houses, and donors over and above normal norms of the relief. Will work out the financial estimates for search and rescue and immediate relief. Will segregate the villagers and areas victimized by the disaster and activate the DMTs. Will start relief activities including emergency relief distribution and work out the strategy of damage Will make arrangements for the transportation and distribution of Govt. relief amount and materials. Will make due arrangements to see that there should be no haphazard distribution of relief material so that needy people are not deprived of it. Will arrange for drinking water and essential things at community kitchen / relief camps as per the necessity. Will work out the primary estimates of the damage. Will undertake the rescue operations to save the trapped people through Post Disaster DMTs trained police personnel and swimmers on need base. Activities Will requisite more vehicles for rescue work, shifting the people to temporary/permanent dispensary for treatment through DMTs, NCC, Home Guards, Local Police, and Para Military Forces etc. Will arrange for identification of the people, who died, maintain the dead bodies till legal procedure is over. Assessment and provide the formats for the same and explain to all the staff members. Will guide the team members about the payments of relief accident to damage as per the rules and policies of the government before the start of duty.

### 12.2.2 Police Department

Normal Time Activities	<ul> <li>The Superintendent of Police will co-ordinate the work of disaster management as nodal officer. He will prepare a separate and comprehensive plan of district regarding the department of police and also prepare details of resources as a part of DDMP. He will consider the following in it.</li> <li>Details of contacts of all the staff members under the district. Maps and statistical data of district areas.</li> <li>Resources and human resources useful at the time of disaster.</li> <li>Details of police staff and retired officers/staff of the police and the control room.</li> <li>Details of functions of staff of the district control room. Appointment of the nodal officer in the control room.</li> <li>Traffic arrangements towards the disaster affected areas. Details of anti social elements.</li> <li>Security arrangements at relief camps and food storages. Security for the transportation of the relief material.</li> <li>Immediate police procedures for human death.</li> <li>To assist the authorities for the evacuation of people from disaster affected areas. Adequate equipments for communication.</li> <li>List of swimmers.</li> <li>Wireless stations in the district and communication network. To update the related details of Disaster Management Plan.</li> </ul>
On receiving the warning	<ul> <li>Will contact the district collector.</li> <li>Make advance preparation to implement the action plan for search and rescue. Will prepare a plan for police personnel for search and rescue.</li> <li>Will arrange to communicate the messages through all the equipments of communication and vehicles as per the necessity.</li> <li>Will requisite vehicles after obtaining the orders for the same from the district authorities.</li> </ul>
Post Disaster Activities	<ul> <li>Will arrange law and order against theft in the disaster affected area.</li> <li>Will co-ordinate the search and rescue operation through NCC/VTF/NGO. Will arrange for security at the relief camps/relief materials storages.</li> <li>Will see the law and order is maintained at the time of distribution of relief material.</li> <li>Will assist the authorities for evacuation of people to the safer places.</li> <li>Will make due arrangements for post mortem of dead persons, and legal procedure for speedy disposal.</li> </ul>

Jharkhand Disaster Management Authority

### 12.2.3 Health Department

Normal Time Activities	<ul> <li>A separate plan for disaster management regarding health.</li> <li>Arrangements for exchange of information in the control room. Appointment of nodal officer.</li> <li>Advance arrangements for life saving medicines, insecticides and vaccines.</li> <li>Maintenance of vehicles such as ambulance, jeep and other equipments such as generators etc.</li> <li>Distribution of work by forming groups of staff during emergency. List of private practicing doctors / medical facilities.</li> <li>Arrangement for survey of disaster. Mobile dispensary units.</li> <li>Information regarding proper places for on the spot medical services in various villages during disaster.</li> <li>Dissemination of information among the people regarding the death, injury.</li> <li>Primary information of disaster related relief activities to all the staff members.</li> <li>Training to PHC / Community Health Centre staff to prevent spreading of diseases among the people, animals, and advance planning for the same.</li> <li>Blood group wise list of blood donors with contact telephone numbers and addresses.</li> <li>Training of DMTs regarding first aid.</li> <li>To prepare an action plan for the availability of equipments to be useful at the time of disaster management for medical treatment.</li> <li>Co-ordination with various government agencies – schemes to meet the necessity of equipments in emergency.</li> <li>To see that all vehicles like ambulance, jeep and equipments like generators and equipments essential for health care are in working condition.</li> </ul>
On receiving the warning	<ul> <li>Will ensure the availability of important medicines, life saving medicines, insecticides and if necessary contact for additional supply.</li> <li>Round the clock control room at the district level.</li> <li>Will send the health staff for duty in their areas as per the plan of disaster management. Activate the mobile health units for the post disaster situation.</li> <li>Will organize in advance to mobilize the local doctors and local voluntary agency for emergency work.</li> <li>Will contact the blood donors for blood donation, on the basis of</li> </ul>

Jharkhand Disaster Management Authority

	lists prepared.
Post Disaster Activities	<ul> <li>Provide first aid to the injured and shifting of seriously injured people to the nearby hospital.</li> <li>Send sufficient stock of medicines to the affected areas immediately.</li> <li>Will make arrangements for the available additional health staff in the affected areas deputed by the state authority.</li> <li>Will organize to get the insecticides to prevent spreading of diseases.</li> <li>Will ensure the purity of drinking water by testing the sources of water. Will depute the mobile units for first aid.</li> <li>Distribution of chlorine tablets and other necessary medicines from house to house. Will shift the seriously injured people to the hospital.</li> <li>Will immediately start the procedure for post mortem of the dead persons as per the rules.</li> </ul>

### 12.2.4 Water Supply Department

Normal Time Activities	<ul> <li>Water supply dept. shall ensure the following to be included in the DDMP:-</li> <li>Setting up of control room and arrangement for the control room operator.</li> <li>Assign the responsibility as nodal officer to the Executive Engineer or any other officer. Prepare an alternative contingency plan to provide drinking water in case of failure of regular water distribution system during disaster.</li> <li>Detailed information of available water resources throughout the district.</li> <li>Arrangement of Govt. or private tankers to provide water temporary and immediately. Preventive measures for water borne diseases and chlorination of water.</li> <li>Availability of safe drinking water in the affected areas. Inform the staff about the disaster.</li> </ul>
On receiving the warning	<ul> <li>Organize the teams to check the sources of water / drinking water.</li> <li>Standby arrangements of tankers for drinking water through tankers or any other available source.</li> <li>Will make available chlorine tablets in sufficient quantity and arrange to distribute through DMTs.</li> </ul>
Post Disaster Activities	<ul> <li>Implement the alternative contingency plan to provide drinking water in case of failure of regular water distribution systems during disaster.</li> </ul>

Jharkhand Disaster Management Authority

## • Will start work for immediate repairing of water pipes in case of damage.

- Will arrange to check the water tanks, overhead tanks, and pumps, reservoirs and other water resources.
- Will contact the electricity authorities to re-establish the electric supply in case of failure.
- Will provide chlorinated water either by activating group water supply schemes individual schemes or through tankers.
- Will provide drinking water to the relief camps / relief kitchens, shelters etc. through available resources.

### 12.2.5 Irrigation Department

Normal Time Activities	<ul> <li>The irrigation department shall carefully include the following particulars while preparing / updating the DDMP:-</li> <li>Contact address and phone numbers of all the staff / officers, vehicles and swimmers of the District.</li> <li>Details of irrigation related factors in the district such as rivers, pools canals, large and medium dams, etc.</li> <li>Control room arrangements and appointment of Nodal Officer. Details of damage prone areas.</li> <li>Location of water level gauge station for flood situation.</li> <li>To disseminate information /warning to the damage prone areas in case of flood situation. Details of immediate action to be taken in case of leakage in large water storage reservoirs.</li> <li>Supervision over major storage / reservoirs.</li> <li>Very clear explanation of disaster and priorities during disasters to all the staff.</li> <li>Effective working of control room at every major dam.</li> <li>Enough and ultra modern equipments for communication.</li> <li>Periodical checking of Dam /Waste veer, canal -tunnel, roads leading to Dams etc. for maintenance during normal time.</li> </ul>
On receiving the warning	<ul> <li>Ensure that communication equipments like telephone, mobile phone, wireless set and siren etc. are in working conditions.</li> <li>Keep the technical and non-technical staff under control, ready and alert.</li> <li>Get status report of ponds, dam, canal and small dams through technical persons.</li> <li>Will take decision to release the water in consultation with the competent authority and immediately warn the people living in low lying areas in case of increasing flow of water or overflow.</li> </ul>

Jharkhand Disaster Management Authority

	<ul> <li>Keep the alternative arrangements ready in case of damage to the structure of dam / check dam to leakage or overflow in the reservoirs.</li> </ul>
	<ul> <li>Make due arrangements to disseminate the information about the increasing and decreasing water level whatever it may be to the community, media etc.</li> </ul>
	<ul> <li>A senior office will remain and work accordingly at large storage reservoirs.</li> </ul>
	<ul> <li>Will arrange to provide the dewatering pumps, generators, trucks and bulldozers, excavator, boats for search and rescue operations wherever required.</li> </ul>
	• Will obtain the clear picture of the condition of all the reservoirs through teams of technical officers.
	<ul> <li>Ensure about no overflow or no leakage.</li> </ul>
	• If overflow or leakage is found, start immediate action to avoid adverse effect to the reservoir as per the action plan.
Post Disaster Activities	• If there is no possibility and risk, keep the people and media informed about "everything is safe".
	• If overflow or any leakage is found, he will immediately warn the people living in the low lying areas.
	• Will take due care for the transportation of drinking water if
	drinking water is provided through irrigation scheme.
	• Will assist the local administration to use boats, dewatering pumps, etc. search and rescue operations.

### 12.2.6 Agriculture Department

Normal Time Activities	<ul> <li>All the details of his subordinate staff with addresses and phone numbers and resources of irrigation for agriculture in all the villages.</li> <li>Details of buildings, vehicles and equipments under his control and list of contractors with vehicles and equipments used by them.</li> <li>Maps showing details of agricultural resource laboratory, seed center, agriculture training school with statistical data.</li> <li>Details regarding agricultural production, extension, seed growth centers, agriculture university campus, training centers etc;</li> <li>Action plan regarding the repair/alternative arrangement in case of agricultural production related facilities are disrupted.</li> <li>Will prepare the action plans to avail the technical, semi technical and administrative employees along with vehicles from near by district and taluka offices.</li> <li>Will inspect the sub-ordinate offices, other centers and sub-centers under his control, which are damage prone.</li> <li>Will prepare a sub-plan for timely and speedy availability of machines</li> </ul>
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Jharkhand Disaster Management Authority

	and equipments to restoration of the economic activities in case of loss				
	of properties as well as crops.				
	• Will maintain the departmental equipments such as diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights,				
	shovels, axes, hammers, RCC cutters, cable wires, fire equipments,				
	de-dusting equipments etc; which can be used during emergency				
	ensure every 3 months those are in working condition.				
	• Will prepare a list of public properties related to agriculture in the				
	damage prone areas and will in advance make arrangements to lessen				
	the damage.				
	• Will take due care to see that the emergency services at hospital,				
	shelters, with special reference to agriculture are not disrupted.				
	Will immediately contact the District Control Room and will assist in				
	the work assigned to him as a part of his duty.				
	Will ensure that the staff under this control is on duty at the				
	<ul><li>headquarters.</li><li>Will assign the work to his subordinate officers and staff the work to</li></ul>				
	be done regarding agriculture under DDMP and will send them to				
	their sites.				
On receiving the	Will receive instruction from the district liaison officer and will take				
warning	necessary action.				
	• Will ensure the availability of resources included in the DDMP and				
	will make due arrangement to get those during emergency.				
	Will make groups having vehicles for emergency work and will assign				
	the areas to them.				
	Will set up a temporary Control Room for the dissemination of information for amorganay work and will appoint a nodal officer.				
	<ul> <li>information for emergency work and will appoint a nodal officer.</li> <li>Will follow the instruction of the District Liaison Officer.</li> </ul>				
	<ul> <li>Will carry out the duty assigned to him for search and rescue work.</li> </ul>				
	<ul> <li>Will deploy the resources and manpower available to manage the</li> </ul>				
	disaster.				
	• Will review the matters regarding discontinuation of movement for				
	safety measures and will see that it is restarted very soon.				
	• Will send DMTs with necessary equipments in case the crop is				
Post Disaster	washed away, and if there is water logging in a very large amount.				
	Will act in such a way that the human life is restored again speedily				
Activities	and timely in the priority areas.				
	• Will contact the circle office or central control room if machines equipments, vehicles, man power, technical personnel are required to				
	restore the agricultural activities.				
	Will make arrangement to avail the external helps to manage to				
	disaster.				
	• Will collect the details of loss of crops to send it to the district				
	administration. Should have the details of village wise various crops in				
	the district.				
	Will prepare a primary survey report of crop damage in the area and				

will send the same to district control room and also to the
administrative head
• Will immediately put the action plan in real action during the
emergency.

### 12.2.7 Electricity Department

Normal Time Activities	<ul> <li>Prepare and manage inventory for emergency operations.</li> <li>Training of electricity department workers and make sure that proper norms are being followed at the time of installation of various electric units/instruments.</li> <li>Make various applicable and implementable schemes regarding the setup and examination of electrical units/instruments.</li> <li>Make people aware so as to minimize the damage to life/limb caused due to electricity.</li> </ul>
On receiving the warning	<ul> <li>Make provisions for providing electricity to rehabilitation centers in disaster hit areas &amp; to cut off electric supply from risky areas in case of emergency.</li> <li>Follow proper regulations monitor continuously so that in case of wire breakage the current does not spreads.</li> <li>Make proper arrangements and follow stringent norms such that in case of a natural calamity, (like earthquake, flood, cyclone etc) the high tension line does not get damaged.</li> </ul>
Post Disaster Activities	<ul> <li>Cut off electricity immediately after receiving information about any disaster so as to minimize the damage caused.</li> <li>Survey the spot and estimate (also help in estimation) the damage caused.</li> <li>Be ready to provide electricity in areas where it is needed and can be provided safely.</li> <li>Make a plan about how to re supply electricity to important areas, site operation centers, Industries, etc.</li> <li>Examine and repair major poles, transformers &amp; wires necessary for getting electricity supply back to areas needed.</li> <li>Minimize the damage caused to life by demarcating dangerous areas and cutting electricity in time.</li> </ul>

### 12.2.8 Public Works Department

	•	Details of the staff members with their contact addresses and telephone numbers.
Normal Tir Activities	me •	Details of buildings, vehicles and equipment as well as the names of contractors and the vehicles & equipment used by them.
	•	Maps of the areas in the district with the statistical data related to available resources.

Jharkhand Disaster Management Authority

	<ul> <li>The position of approach roads and other road of all the villages including bridges, railway crossing etc.</li> <li>To strictly observe the rules during the constructions regarding earthquake and cyclone proof materials.</li> <li>The PWD will inspect periodically the buildings, residences, high rise buildings under their control.</li> <li>Damage prone road bridges and arrangement for their inspections Action plan for emergency repairs.</li> <li>Will appoint an officer of the rank of Assistant Engineer to coordinate during emergency at the District Control Room.</li> <li>Will maintain the departmental equipments such as bulldozers, tractors, water tankers, dumpers, earthmovers excavator, de-watering pumps, generators, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters etc; which can be used during emergency and will quarterly checkup these to ensure in working condition.</li> </ul>
On receiving the warning	<ul> <li>Will immediately contact the District Control Room for assistance.</li> <li>Will ensure that all the staff members remain on duty at the headquarters.</li> <li>Will send the officers and the staff assigning them specific duties for the DDMP</li> <li>Undertake all the action for the disaster management required to be done by the PWD after receiving instructions from district liaison officer.</li> </ul>
Post Disaster Activities	<ul> <li>Will follow the instructions of the District Liaison Officer Will remain active for search and rescue activities</li> <li>Will provide all the available resources and manpower for disaster management.</li> <li>Will mobilize the service of technical personnel for the damage survey work to help the district administration</li> <li>Will prepare a primary report of damage in the affected area within 12 hrs / 24 hrs looking to the emerging situation</li> <li>Will make arrangements for electricity, water, and latrines in the temporary shelters. Will also inspect the approach roads leading to the temporary shelter and repair the same if so required.</li> </ul>

### 12.2.9 Telephone Department

Normal  • Maps showing the details of telephone exchanges, D.Ps, imported telephone lines, hot lines, telex lines, microwave towers of the control of the co							
Activities	•	statistical data.  Details of telephone numbers of water supplies, Control Room,					

Jharkhand Disaster Management Authority

### hospitals, drainage system, railway stations, bus depots, strategically important places, ports, Army, Air force, Navy camps, Jail, Police Station and other sensitive places, light houses, major industrial units, and other communication channels which can be used during emergency. Action plan for repairs/alternative arrangement in case of disruption of telephone line and microwave towers. Inspect the telephone exchanges/sub-exchanges in the damage prone area at every 3 months. To appoint an officer not below the rank of telephone inspector to coordinate the district control room during emergency. To maintain the equipments such as diesel generators, dumpers, generator, cutters, tree cutters, ladder &, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, etc; which can be used during emergency and ensure every month that these are in working condition. To ensure that the telephone lines at the shelters, emergency hospitals, police stations, control room and other places of emergency services, which can be used during disaster, are not disrupted. o prepare a list of public properties related to the telephone department which are in damage prone areas and will make arrangements to lessen the damage. To contact the District Control Room and assist in the work. To ensure that the staff are on duty at the headquarters. To assign work to the subordinate officers as per the DDMP and send them to the sites. On receiving the To receive the instructions from the District Liaison Officer and to do warning the needful. To ensure availability of resources included in the DDMP and establish contacts for the same during emergency. To setup a temporary control room for the exchange of information for emergency work and will appoint a nodal officer. To follow the instructions of District Liaison Officer. To perform the duties assigned for search and rescue work. To deploy the resources and manpower available to manage the disaster. To review the situation regarding disconnected telephone lines due Post Disaster to safety measures and reestablish the communication network as **Activities** soon as possible. To send the Disaster Management Teams with the necessary equipments for restoration of the telephone lines speedily where the lines are disrupted and to such places, which are strategically important. To make arrangements to obtain external help to manage the disaster.

- To prepare a primary survey report of damage and to send the same to the District Control Room and also to the administrative head within 6 hours.
- To arrange for temporary hotline services or temporary telephone connections at the District Control Room, hospitals, shelters, ports, jails, police station, bus depots, etc.
- To immediately undertake the emergency repairing work.
- To make an action plan to avail immediately and timely, telephone poles, D.Ps, transformer to the established the communication system.
- To prepare an action plan to avail temporarily, technical personnel from the near by district, staff and vehicles from the district office which are not affected in consultation with the district authority.

### 12.2.10 Animal Husbandry

### Normal Time Activities

- Addresses of members with telephone numbers.
- Details of veterinary centers, artificial insemination centers, veterinary dispensary, veterinary colleges' buildings, vehicles, mobile dispensaries and equipments and also the details of vehicles and equipments used often by outsource.
- Maps showing the details of animal breeding laboratories, animal vaccination centers, animal husbandry training school with statistical
- Details of essential facilities to be provided at sensitive place such as important animal husbandry centers, veterinary college campus, training center etc; Arrangement of repairs/alternative arrangements in case the facilities related to animal husbandry and veterinary services are disrupted.
- To make arrangements to necessary medicines, vaccines and other material, for treatment of animals.
- To collect the details of cattle in each village of the taluka, details of safe places for the treatment of animal, milk dairies, other private veterinary doctors and facilities related to it.
- To appoint an employee not below the rank of livestock inspector to coordinate the District Control Room during emergency.
- To maintain the equipments available such as stands to keep animals, sharp instruments, insecticides, diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, cable wires, shovels, axes, hammers, RCC cutters, equipments, deducting equipments etc; which can be used during emergency and will also ensure that they are in working condition.
- To see that essential services related to animal husbandry and Veterinary services are not disrupted at the time of emergencies.
- To prepare a list of public properties related to animal husbandry,

Jharkhand Disaster Management Authority

	which are damage prone areas and will make advance planning to				
	lessen the damage.				
On receiving the warning	<ul> <li>To immediately contact the District Control Room and will assist in the work.</li> <li>To ensure that the staff is on duty at the headquarters</li> <li>To assign the work to be done to the subordinate officers and staff and send them to their sites.</li> <li>To receive instructions from the district liaison officer and do the needful.</li> <li>To ensure the availability of resources included inthe DDMP and will make necessary arrangements to obtain those during emergency.</li> <li>To consult the Liaison Officer to prevent the probable epidemic among the cattle and also for the safety measures.</li> <li>To make groups having vehicles for emergency work and will assign the areas to them.</li> <li>To set up a temporary control room for the exchange of information</li> </ul>				
Post Disaster Activities	<ul> <li>for emergency work and will appoint a nodal officer.</li> <li>To follow the instruction of the District Liaison Officer.</li> <li>To carry out the duty assigned to him for search and rescue work.</li> <li>To deploy the available resources and manpower to manage the disaster.</li> <li>To review the matters to restart the milk collection activity where it has been closed for security measures.</li> <li>To send DMTs with necessary equipments in case of cattle death are there in the affected areas for the disposal of carcass with a view to restoration of public life and result oriented work. To arrange to treat the injured cattle.</li> <li>To contact the State Director of A.H. if additional equipments vehicles, manpower, technical personnel etc; are required for restoration of the cattle related activities.</li> </ul>				

### 12.2.11 Forest Department

# Addresses of members with telephone numbers. Details of veterinary centers, artificial insemination centers, veterinary dispensary, veterinary colleges' buildings, vehicles, mobile dispensaries and equipments under his control and also the details of vehicles and equipments used often by out source. Maps showing the details of area with statistical data. Approach roads under forest department and their condition including bridges, causeways, railway crossing etc. Inspection of damage prone roads, bridges, check dams, causeways, under forest department To inspect periodically the buildings, residencies, high causeways under forest department

Jharkhand Disaster Management Authority

	<ul> <li>To maintain the equipments available such as sharp instruments, insecticides, diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, de-dusting equipments etc; which can be used during emergency and will also ensure that they are in working condition.</li> <li>To take care of public shelters, other places to be used for evacuation with primary facilities like water</li> <li>To prepare a list of public properties in the damage prone forest areas and will make advance arrangements to lessen the damage.</li> </ul>
On receiving the warning	<ul> <li>To immediately contact the district control room and will assist in the work.</li> <li>To ensure that the staff at the headquarter is on duty.</li> <li>To assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.</li> <li>To arrange for wireless, telephones, manpower, forest guard in advance to disseminate information of the disaster in the damage prone are as and will play a key role with the district administration to warn the public.</li> <li>To make in advance arrangement for fuel wood and bamboos for priority areas.</li> </ul>
Post Disaster Activities	<ul> <li>To follow the instructions of District Liaison Officer</li> <li>To carry out the duty assigned for search and rescue work.</li> <li>To engage the resources and manpower available to manage the disaster.</li> <li>To prepare a primary report of damage for the affected areas.</li> <li>To take actions to provide electricity, water and latrine to the temporary shelters in the forest areas.</li> <li>To send task forces with vehicles, tree cutters, ropes, flood light, generator in case of closure of roads due to felling of trees.</li> </ul>

### 12.2.12 Department of Fire Service

Normal Time Activities	<ul> <li>Strict enforcement of laws made for the security of Fire squad and proper proceedings to be done in case the law is violated.</li> <li>Regular check of equipments and procuring new ones as and when necessary.</li> <li>Demarcating Industries and areas susceptible to fire, events that are susceptible to fire etc.</li> </ul>
neuvices	<ul> <li>Aware people about their safety how to mitigate fire &amp; its effects.</li> <li>Training of employees keeping their safety in mind.</li> <li>The blueprint of any building/house should not be accepted without proper Fire Safety measures.</li> </ul>

Jharkhand Disaster Management Authority

On receiving the warning	<ul> <li>Train people how to mitigate fire in early stages and foremost how to avoid it.</li> <li>Training of people on how to react in an emergency situation.</li> <li>Train staff and Raj Mistri's about latest Fire Fighting techniques During Disaster</li> </ul>
Post Disaster Activities	<ul> <li>Find a safe way to save people trapped in fire in a house/ building/ aero plane/ train/ industry/boiler etc.</li> <li>Get control over fire and minimize damage in case of an explosion.</li> <li>Control the situation in case of gas leak or leakage of some dangerous chemical.</li> </ul>

### 12.3 Disaster Specific SOP's

### 12.3.1 Fire:

### **POWER DEPARTMENT**

- As electricity is one of the reasons because of which the crops and fields of the people catch fire during summers due to some electricity fault.
- To ensure that the wires hanging from the pole are not loose,
- People should not be allowed to connect the wires themselves it should be declared as unauthorized.

### POLICE DEPARTMENT

- They need to ensure that anti social elements are not present in the village who can indulge in any kind of notorious activities which might lead to fire accidents.
- Fire safety related equipments availability insures at police station.

### **GRAM PANCHAYAT**

- Along with the water tankers the gram panchayat must also be equipped with fire fighters.
- Identify hut area and develop water source pond by MNERGA.

### 12.3.2 Earthquake:

### MUNICIPALITY

- Old buildings in the district must be identified and demolished for reconstruction so as to avoid any major damages during an earthquake.
- New buildings must be constructed keeping in mind the new norms set for construction and the degree of damage and its estimated amount should be calculated to be submitted with the district headquarters.

Jharkhand Disaster Management Authority

### 12.3.3 Drought:

The following activities shall be carried out in order to prevent the situation of draught.

### MUNICIPALITY

- In order to store and use the Monsoon water stop dam, check dam and reservoirs must be constructed
- To reserve water in the main water body newer manmade lakes must be constructed and maintained so that the water from monsoon can be collected and used.
- Rain water harvesting should be taken up so as to prevent wastage of the monsoon water making its recollection possible and also for maintaining the ground water levels.

### AGRICULTURE DEPARTMENT

• Awareness regarding draught resistant crops should be created among the farmers by the district agriculture officer and the committee formed in this regard will keep them informed about the draught related activities to be taken care of.

### 12.3.4 Floods:

### POLICE/ HOME GUARDS/ CIVIL DEFENSE

- To have a search and rescue team to help people evacuate the affected area.
- Training sessions should be conducted for such teams in order to develop a better understanding that can help in action during the time of emergency.
- The teams should go through mock drills to be able to deal with any kind of disaster so that they can successfully save both life and property.
- These teams should be provided with the required resource inventory (JCB, Motor Boat etc.) that can help them in search and rescue.

### HEALTH DEPARTMENT

- The doctors and the paramedical staff of district hospital and the other primary health centers should be trained in first aid and allied activities.
- A medical emergency team should be formed which can deal with any kind of serious consequences that may occur during a disaster.
- In case of extreme conditions the medical department should have a plan to establish a temporary PMC.
- The health department should have a plan setup to bring down doctors from outside when and where necessary.

Jharkhand Disaster Management Authority

# Checklists

### 1. Checklist for DC

### DDMP - Checklist for DC

Sr.	During Normal Times / During Bi-annual review	Yes	/	Remarks
No	meeting	No		
1	Has ddmp updation person been nominated?			
2	Has the following items been updated in ddmp?			
	• Communication equipment numbers & functioning			
	• list of contact numbers of key members of each			
	department			
	• list of NGO's and their contact details			
	• list of resources reqd for DM			
	• HRVC - vulnerable villages / areas identified and			
	updated			
	• list of possible emergency shelters (schools, hospitals,			
	churches, temples, other public buildings)			
3	list of trained persons responsible at district, mandal and			
	village level is available and updated			
4	Police dept training has been conducted with latest		_	
	techniques and equipments for effective disaster			
	management and maintenance of law and order?			
5	Maps detailing the vulnerable villages / localities are			
	updated and available for use in time of disaster?			
6	Has the medical dept made/updated plans for hospital			
	level disaster management?			
7	has mock drills been conducted at key departments:			
	police, medical, search and rescue etc			
8	Has mock drills or community awareness programmes			
	been conducted and plans for coming period have been			
0	made?			
9	Has the resource list (reqd for disaster management) been			
10	updated by concerned?			
10	training programmes for general public have been			
	conducted by concerned departments (example - animal rearing and fisherman communities given training on			
	measures to protect against cyclone, farmers being taught			
	agricultural vulnerability reduction measures by			
	agricultural dept etc )			
11	Has each department updated / reviewed their			
11	departmental DM plan?			
12	Are latest technologies being monitored and being			
	checked for feasibility by various departments as			
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Jharkhand Disaster Management Authority

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	preparedness, mitigation measures?	
13	Check status of various long term action plans for	
	preparedness and mitigation and gauge its progress; so	
	that corrective actions can be taken where necessary	
14	Monitor whether the long term mitigation plans are being	
	incorporated in the normal development plans for most	
	effective results?	
15	Monitor whether public infrastructure development has	
	been incorporated with the long term mitigation	
	strategies?	
16	Are the physical infrastructure being checked for	
	vulnerability improvement and repairs being made where	
	necessary (ex- for roads, bridges, electricity lines etc)	

Sr.	Pre Disaster Phase	Yes /	Remarks
No	Tre Disaster I muse	No	
1	Has medical dept circulating awareness on do and		
	don'ts		
2	Are the medical dept preparations are underway		
	(vehicles, ambulances, food facilities, stockpile of		
	medicines, blood banks etc)		
3	Are all departments in working to mitigate disaster		
	impacts? (relocation of equipment, people and cattle;		
4	information to departmental designates for DM etc)		
4	For droughts, are sufficient quantities of seeds and		
	food available and stored? Is the condition of godowns acceptable or immediate repairs are needed?		
5	enquire about the quantities and availability of various		
	resources as listed in idrn resource network		
6	sufficient quantities of chlorine / bleaching powder		
	available for use in water / drinking water		
7	check the daily list of incoming and outgoing		
	messages		
Durin	g Disaster Phase		
1	meeting with DM team to brief them on the warning /		
	disaster situation and also to issue instructions		
2	Are the emergency shelters usable and are known to		
_	everyone?		
3	Availability of drinking water, food, clothing and		
4	sanitation at the emergency shelters?		
4	Is police dept having sufficient resources to enable		
-	search and rescue?		
5	medical dept is sufficiently informed of severity of		
(	disaster to plan to improve / expand medical services		
6	sufficient number of temporary medical camps are		

	available	
7	ensure replenishment of emergency resources by coordinating / requisitioning from nearby unaffected areas	
8	timely information being provided to all department designates and monitor whether departments are making optimum use of the information	
Durir	ng Post Disaster Phase	
1	Have sufficient rehabilitation materials (ex- seeds to farmers) been provided for the affected or relocated persons?	
2	Rehabilitation work is underway and progress is reasonable?	
3	Restoration of essential facilities (road, rail, electricity, telephone, gas, house construction) are underway and progress is reasonable?	
4	adequate steps are taken to prevent epidemic outbreaks at the emergency centers	
5	Have the Various depts made and submitted loss reports to decide compensation and also for record?	
6	Various depts have submitted a written record on the disaster and lists of resources consumed, losses incurred and problems faced?	
7	Is support measure in place for people who can move from relief camps to their places whenever normalcy returns?	
8	ensure quick and sooth process for distribution of relief funds to effected	
9	Is the information related to disasters is continually given at community shelters (ex-flood warning situation, cyclone warning etc)	
10	Are steps being taken for rejuvenation of crops at village level?	

### 2. Checklist for Department heads

### 2.1 Preparedness Checklist for the Police Department

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed

### Jharkhand Disaster Management Authority

- Adequate warning mechanisms established for evacuation.
- An Officer has been designated as Nodal Officer for Disaster Management.
- Sources of materials required for response operations have been identified.

### 2.2 Preparedness Checklist for the Health Department

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
- A hospital plan for the facilities, equipment and staff of that particular hospital based on "The Guide to Health Management in Disasters" has been developed.
- Hospital staff is aware of which hospital rooms / buildings are damage-proof.
- All the staff of the hospital has been informed about the possible disasters in the district, likely damages and effects, and information about ways to protect life, equipment and property.
- An area of hospital identified for receiving large number for casualties.
- Emergency admission procedures with adequate record keeping developed.
- Field staff oriented about DDMP, standards of services, and procedures for tagging.
- An Officer has been designated as Nodal Officer for Disaster Management.
- Sources of materials required for response operations have been identified.

### 2.3 Preparedness Checklist for Energy Department

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
- An Officer has been designated as Nodal Officer for Disaster Management.
- Sources of materials required for response operations have been identified.

### 2.4 Preparedness Checklist for Water Supply Department

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
- Adequate warning mechanisms for informing people to store an emergency supply of water have been developed.
- Procedures established for the emergency distribution of water if existing supply is disrupted.
- An Officer has been designated as Nodal Officer for Disaster Management.

### Jharkhand Disaster Management Authority

• Sources of materials required for response operations have been identified.

### 2.5 Preparedness Checklist for Irrigation Department

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
- Flood monitoring mechanisms can be activated in all flood prone areas from 1st of June.
- All staff is well aware of the precautions to be taken to protect their lives and personal property.
- Each technical assistant has instructions and knows operating procedures for disaster conditions.
- Methods of monitoring and impounding the levels in the tanks evolved.
- Methods of alerting officers on other dam sites and the district control room, established.
- Mechanisms evolved for forewarning settlements in the downstream, vacuation, coordination with other dam authorities.
- An Officer has been designated as Nodal Officer for Disaster Management.
- Sources of materials required for response operations have been identified.

### 2.6 Preparedness Checklist for Telephone Department

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed
- An Officer has been designated as Nodal Officer for Disaster Management.
- Sources of materials required for response operations have been identified.

### 2.7 Preparedness Checklist for PWD

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
- All officers are familiar with pre-disaster precautions and post-disaster procedures for road clearing and for defining safe evacuation routes where necessary.
- An Officer has been designated as Nodal Officer for Disaster Management.
- Sources of materials required for response operations have been identified.

### 2.8 Preparedness Checklist for Agriculture Department

• The department is familiar with the disaster response plan and disaster response procedures are clearly defined.

Jharkhand Disaster Management Authority

- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
- Information provided to all concerned officers about the disasters, likely damages to crops and plantations, and information about ways to protect the same.
- The NGOs and the other relief organizations are informed about the resources of the department.
- An Officer has been designated as Nodal Officer for Disaster Management
- Sources of materials required for response operations have been identified.

### 2.9 Preparedness Checklist for Animal Husbandry Department

- The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
- Orientation and training for disaster response plan and procedures undertaken.
- Special skills required during emergency operations imparted to the officials and the staff.
- Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
- Hospital staff is aware of which hospital rooms / buildings are damage-proof.
- All the staff of the veterinary hospitals and centers have been informed about the possible disasters, likely damages and effects, and information about the ways to protect life, equipment and property.
- An area of the hospital identified for receiving large number of livestock.
- Emergency admission procedures with adequate record keeping developed.
- An Officer has been designated as Nodal Officer for Disaster Management.
- Sources of materials required for response operations have been identified.

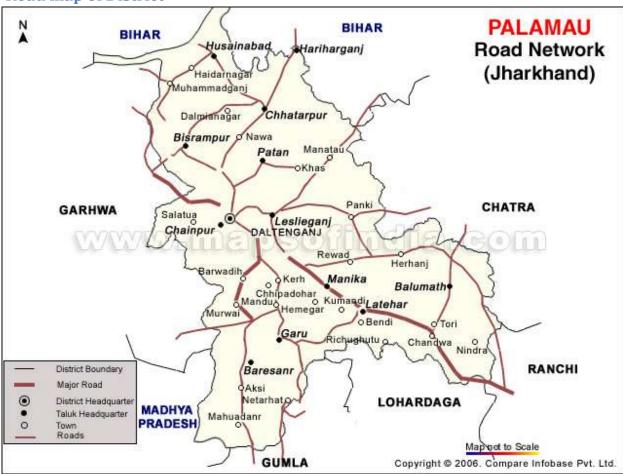
### 3. Checklist for District Emergency Operation centre (DEOC)

- The Emergency Operations Centre (EOC) contains important equipment and certain resources such as maps and communication equipment including landline telephones, mobile phones, satellite phones, walkie-talkie, ham radio, computer/laptop with printer facility, email facility, fax machine, television, etc.
- In addition, it also contains, LCD monitors, printers, videoconferencing equipment, power sources and backups, copies of plans, etc.
- Ensure regular training of all staff meant to be present in the EOC.

Jharkhand Disaster Management Authority

# Annexure: Important Detail

**Road map of District** 



### **2 Resource Inventory of District**

### 2.1 Fire & Emergency Department

Name of the	Location	Name of Officer	Mobile/land	No of officer	No of Fire Tenders
Fire Station		in charge	line no	available at fire	available at fire
				station	station
Daltonganj	Bairia	Mr. Dileep Ram	Cont Room -	ASI-01	Available Fire
		Keshri	9304953439,	Havaldar- 5	Tender-3;
			Privet No	Constable- 6	Water Tender-1;
			9431765760		Water Woger-1;
					Jeep Tender-1
Husainabad	SDO office	Mr. Ravindra	Cont Room -	ASI-01	
		Thakur	9304953441,	Havaldar- 3	
				Constable- 3	

Jharkhand Disaster Management Authority

### 2.2 Urban Development Department

### URBAN DEVELOPMENT DEPARTMENT

SL.NO.	NAME OF MUNICIPAL CORPORATION	LOCATION OF URBAN DEVELOPMENT BODY'S OFFICE	DETAIL: EQUIPMEN		CONTACTL PERSONG NAME AND MOBILE NO.	Remarks
1	Nagar Panchayat Bishrampur	Bishrampur	Name of Equipment	Number	2	
		Excavators	Nil			
			JCB	Nil	9570029176	
			Heavy Duty Crains	Nil	Ramesh kumar	
			Tippers Hydrolic	Nil	Kulliai	
	1 0		Tractors	Nil		

### URBAN DEVELOPMENT DEPARTMENT

SL.NO.	NAME OF	LOCATION OF	DETAILS OF EQU	IPMENT	CONTACT PERSON	Remarks
	MUNICIPAL	URBAN	HELD		NAME AND MOBILE	
	CORPOARATION	DEVELOPMENT			NO.	
		BODY'S OFFICE				
1	Municipal Council,	Kutchary Campus	Name of Equipment	Numbers	Krishna Murari Sharma,	
	Medininagar	Kutchary Campus	Name of Equipment	Numbers	Sanitary Inspector	
	Wicdininagai				Mobil no. 9798589370	
			-	2711	1110011 1101 9 7 9 0 0 0 9 2 7 0	
			Excavators	Nil		
			JCB	Nil		
				1 111		
			Heavy Duty Crains	Nil		
			Tippers Hydrolic	2		
			11ppcis flydrone	Dumper		
				Damper		
			Tractors	4		
<u> </u>						

Jharkhand Disaster Management Authority

DEPLOYMENT																				
SI. No.	Name of Installation	B.P. Jacket	B.P. Helmet	D.S.M.D.	D.F.M.D.	H.H.M.D.	Dragon Light	Commando Light	Day Vision Binocular	Night Vision Binocular	Riot Control Equp.	GPS Mobile	Day Binocular with Photography	Body Protector with singaurd	Fibre Stick	Quick Clot	Finger Print Developer Kit	Tracker Kit	ISAT PHONE	setelit phone
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Sadar P.S.	6	6	-	-	2	-	3	-	-	-	1					1			
2	Town P.S.	8	8	-	-	2	-	-	-	-	-	11	-				1			W.
3	Satbarwa O.P.	11	11	-	-	-	-	2	-	-	-	-	1							
4	Chainpur P.S.	24	20	-	-	2	-	2	1	1	-	1	-				1			ren
5	Paton P.S.	27	21	-	(S#C)	2	2	2	1	1		1	-				1			
6	Pandwa P.S.	3	3	ास	( <del>) ()</del>	2	7	1	1	_ 1	( <del>=</del> )	1	-				1			
7	Panki P.S.	16	10	1	-	2	-	2	1	-		1	-		25		1			100
8	Manatu P.S.	27	27	1	( <del>=</del> )	2	-	2	1	1	-	1	-			g	1			
9	Terhasi P.S.	12	12	3-	-	2	-	2		-		1	1		20		1			
10	Lesliganj P.S.	8	4	1-0	. T	(#2)	2	2	( <b>-</b> ( )	1	150	1	1				1		-	
11	Hariharganj P.S.	7	3	1	100	127	-	2	1		6	1	_	10	10		1			
12	Chattarpur P.S.	10	6	1	-	-	-	2	1	1	*	1	-				1			
13	Naudiha P.S.	10	10		-	18 <del>8</del> 11	2	2	7-5		-	1	1							Į.
14	Hussainabad P.S.	21	21	120	-	3	3	2	1	3		1	-	10	12		1			
15	Deori O.P.	10	10	-	-	10 <b>7</b> .5	-	1	-	-	-		-			7				
16	Haidernagar P.S.	13	13	20	-	-	2	2	-	35 <b>=</b> 3	12	1	<u> </u>				1			
17	Mohammadgan j P.S.	28	24	=	-	2	-	3	1	-	(3 <b>4</b> ).	1	-				1			
18	Bishrampur P.S.	16	12	-	-	2	2	2	1	1	-	1	-				1			
19	Rehla P.S.	4	4	-		2		2	-	-		1	-		-		1			
20	Ramgarh P.S.	10	10	1	-	2	2	2	1	1	-	1	-				Ť			
21	S.P. Resi. Offi.	-	-	-	-	-	2	2	3	1	-	-	-			15		t		
22	Addl. S.P. (Ops)	-	-	-	-	- 4	-	-	1	1	-	-	-					,		
23	Dy.S.PI	13	13	-	-	-	-	1	2	7.2	-	1								
24	Dy.S.PII	1	1		-	-	-	-	1	1	_	-					-			
25	S.D.P.O. H.Bad	4	4	-	-	-	-	2	1	1	-	1	-							
26	S.D.P.O. Chattarpur	6	6	-	-	(#)	2	1	1	2	3 <mark></mark>	2	-	5-11-3						
27	Padma Picket	8	8	-	-		2	2				_	-				-		-	
28	Pipratand P.S.	8	6	1				2	-								1			
29	Dabra Picket	8	6	-	-	-	2	2	-		(12)						1			
30	Pandu P.S	10	10	-		1	2	2	1	_		V 13			10		1		4	
30	Chainpur		10	-	-	1	2	-	1				-		10		1		-	
31	Anchal	3	3	-	-	0 <b>-</b> 0	-	-	-				-							
32	Chattarpur Anchal	2	2	-	-	S <b>=</b> 3	190	-	-	-			-							
33	Bishrampur Anchal	3	3	-	-		-	1	=	-			-							
34	Police Line Magazine Guard	8	6	-	٠	(4)	-	2	2	-	_		=							

42	Latheya Picket	15	15	-	-	-	*	2	1	+	-							
43	Jhabar Picket	5	5	1	-	-	-	2	-	-	-		-			- 50 - 5		Г
44	Nawajaipur Picket	8	8	2	-	٠	3	2	-		-	-	-					
45	Kishunpur Picket	8	8	2		-	-	2	-	2	-	-	-		1/6			
46	Kalapahar Picket	10	10	ŭ.	14	-	-	2	-	1	2	-	-					
47	C.I. Paton Circle	-	-	-	12	-	-	2	1	-	112		-					
48	C.I. Sadar Circle	-		-	-	4	-	1	2	-	122		-					
49	C.I. Town Circle	1			1-	-	-	-	-		-	1	2					
50	Sri Videsh Singh, MLA Body Guard	2	2	1		•	-	-		(5)			-					
51	MP Vehicle S.P. Res	12	14	-	-	-		-		-	4	-	-					
52	MP Vehicle S.P. Res New	12	15	•	5 <del>-</del> 6	-		-		٠	-	-	-					
53	MP Vehicle Panki	*	12			•	-		-		(a)	-						
54	MP Vehicle Chhattarpur		14			ı		-	-	(#)	:#i	-	-					
55	MP Vehicle Manatu	-	14		+	-	*				•	-	22					
56	G.P. Section		-	12	144	8		,	-	-		-	11.5					Г
57	C.R.P.F. Bajar Samitee	30	30	( <b>*</b>	i				: <b>+</b> :	+	1		-					
58	SAF-2 "D" Coy Manatu Block		-	-	1		1	2	12/	•	(1)							
59	HQRT , JJ Ranchi.	7	-	•	150	ı			(7)		-		-				1	
60	HAZARIBAGH S.P. OFFICE	2	-	•	1				( <del>, 1</del> )			-		e ventra e e			2	2007
61	Nawa Camp				-		2	2		10 <del>4</del> 0	-	-	-					

N. C.				.,	NI C
Name of Thana	Location	Man-power	Resource Name	No. Available	Name of person to contact
1	Ш	III	IV		Y
Chainpur P.S.			Police Van	-	
			Jeep	2	c/470 Anil Shukla
			Motorcycles	[ [ [ [ ] ]	
			Anti-Land mines	(7 <b>7</b> 3)	
			Vehicle Vajra		
			Bullet proof Vans	1	
			Tear Gas Gun	( <del>*</del> )	
			Communication	-	
			Equipments		
			Waldie-Talkie		
			Satellite phone	-	
			Special Equipment (if any)	9753	La Labore
Satbarwa OP			Police Van		
			Jeep	1	C/570 Shankar Ganjhu
			Motorcycles	13 <del>-</del> 3	
			Anti-Land mines		
			Vehicle Vajra		
			Bullet proof Vans	1	
			Tear Gas Gun	11.	
			Communication	_	
			Equipments		
			Waldie-Talkie	9 <del>4</del> 8	
4000			Satellite phone	-	
			Special Equipment	-	
Sadar P,S			Police Van	-	Hav/ Baliram
			Jeep	1	nav/ ballram
			Motorcycles Anti-Land mines	-	
			Vehicle Vajra	79 <b>4</b> 0	
			Bullet proof Vans		
			Tear Gas Gun		
			Communication	,	
			Equipments		
			Waldie-Talkie	27-34	
			Satellite phone	le H <b>a</b> n	
			Special Equipment		
			(if any)	10 <b>0</b> 0	
Parwa P.S			Police Van	858	
			Jeep	2	Hav/ Duryodhan paswan Hav/ Alludin khar
			Motorcycles	-	
			Anti-Land mines	-	
			Vehicle Vajra	5	
			Bullet proof Vans Tear Gas Gun	-	
			Communication		
			Equipments		
			Waldie-Talkie	(-)	
			Satellite phone	-	
			Special Equipment		
			(if any)	1.5	

Chhatarpur P.S.	Police Van	-	
	Jeep	1	C/1503 Manoj Kumar
	Motorcycles		
	Anti-Land mines		
	Vehicle Vajra		M
	Bullet proof Vans	1	Hav Harun khar
	Tear Gas Gun	843	
	Communication		
	Equipments	287627	
	Waldie-Talkie	10.5	
	Satellite phone	•	
	Special Equipment	_	
D 1 D 6	(if any)		
Ramgarh P.S.	Police Van	-	
	Jeep	9.7	
	Motorcycles	-	
	Anti-Land mines	1	Hav/ Satish
	Vehicle Vajra		chandra Deogam
	Bullet proof Vans Tear Gas Gun	-	
	Communication		
	Equipments	<del>:-</del>	
	Waldie-Talkie		
	Satellite phone	-	
	Special Equipment		
	(if any)		
Hariharganj P.S.	Police Van		
	Lana		C/223 Rajendra
	Jeep	1	prasad
	Motorcycles	-	1
	Anti-Land mines	1	
	Vehicle Vajra	1	C/ Ashok kr. Raja
	Bullet proof Vans	1	C/233 Wase Khan
	Tear Gas Gun	¥	
	Communication		
	Equipments		
	Waldie-Talkie	70	
	Satellite phone	-	
VI	Special Equipment	72	
Naudiha	(if any)	-	
bazar P.S.	Police Van	99 <del>5</del> 2	
	Jeep	2	C/1506 Dadan Ram
	Motorcycles	Yal	
	Anti-Land mines		
	Vehicle Vajra		
	Bullet proof Vans	1	
	Tear Gas Gun	(F#1)	
	Communication	00.	
	Equipments		
	Waldie-Talkie	25	
	Satellite phone	-	
	Special Equipment (if any)	-	
Bisrampur	Police Van		
P.S.	Jeep	1	C/63 KUSAL
		15	TOPPO
	Motorcycles		

	Anti-Land mines Vehicle Vajra	55	
	Bullet proof Vans	1	
	Tear Gas Gun	-	
	Communication	-	
	THE RESERVE OF THE PROPERTY OF	53	
	Equipments Woldin Talkin	9.	
	Waldie-Talkie	- 2	
	Satellite phone	<u> </u>	
	Special Equipment (if any)	-	
Pandu P.S.	Police Van	420	
	Jeep	-	C/983 SAJAY KUMAR SRIVASTA
	Motorcycles	-	
	Anti-Land mines		
	Vehicle Vajra	-	
		10	
	Bullet proof Vans		
	Tear Gas Gun	-	
	Communication	_	
	Equipments	2000	
	Waldie-Talkie	*	
	Satellite phone		
	Special Equipment		
	(if any)	-	
Mohmadganj P.S.	Police Van	-	
1.5.			Hav DEWRAJ
	Jeep	2	PRASHAD
	Motorcycles	14	114101111
	Anti-Land mines		
	그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	100	
	Vehicle Vajra		
	Bullet proof Vans		
	Tear Gas Gun	-	
	Communication	-	
	Equipments	2.7	
	Waldie-Talkie	-	
	Satellite phone	-	
	Special Equipment		
	(if any)	17.5	
Haidarnagar	Police Van	1.70	
P.S	, , , , , , , , , , , , , , , , , , , ,		
	Jeep	1	C/ 1383 NARENDR KUMAR SINGH
	Motorcycles	G-81	
	Anti-Land mines		
	Vehicle Vajra	-	
	Bullet proof Vans	(4.)	
	Tear Gas Gun		
		355h	
	Communication	場實施	
	Equipments		
	Waldie-Talkie	-	
	Satellite phone	•	
	Special Equipment		
	(if any)	77 <b>2</b> 3	
Dewari O.P	Police Van		
Demail On	Jeep	1	Hav Md. Aftab
	Motorcycles		khan
	Anti-Land mines	1111	
		-	
	Vehicle Vajra		
	Bullet proof Vans		
	Tear Gas Gun	_	

	Communication		
	Equipments	543	
	Waldie-Talkie		
	Satellite phone		
	Special Equipment	-	
	(if any)	-	
Hussainabad	Police Van		
P.S	Tonce van	-	
	Jeep	1	Hav Akbar Ajam Khan
	Motorcycles	-	
1	Anti-Land mines		
	Vehicle Vajra		
	Bullet proof Vans	-	
	Tear Gas Gun	7.4%	
1	Communication		
	Equipments	9 <del>7</del> 8	
	Waldie-Talkie	-	
	Satellite phone	i •	
	Special Equipment		
Dalla DG	(if any)	# <b>=</b> ##	
Rehla P.S	Police Van		
70:		12	C/240 Lakhan
	Jeep	1	Rajak
	Motorcycles	-	3555
	Anti-Land mines		
	Vehicle Vajra	-	
	Bullet proof Vans	- 2	
	Tear Gas Gun	-	
	Communication		
	Equipments	77.	1
	Waldie-Talkie		
	Satellite phone		
	Special Equipment		
	(if any)	143	
Manatu P.S	Police Van	2 <b>-</b> 2	
	Jeep	1	Hav Yadu Oran
	Motorcycles		riav i adu Oran
	Anti-Land mines		C/1389 Mukesh
	Vehicle Vajra	1	Kumar
	Bullet proof Vans	5285	Kumai
	Tear Gas Gun	20-12	
	Communication	20043	
	Equipments	-	
	Waldie-Talkie		
	Satellite phone		
	Special Equipment	-	
	(if any)	-	
Patan P.S	Police Van	_	
	Jeep	1	C/954 Om Prakash
	Motorcycles		Paswan
	Anti-Land mines		
	Vehicle Vajra	27	
	Bullet proof Vans		
	Toon Con Con	=======================================	
	Tear Gas Gun	7.5	
	Communication	6440	
	Equipments		
	Waldie-Talkie	-	
	Satellite phone	656	
	Special Equipment	-	
rhashi P.S	(if any)		
THE PARTY OF THE P	Police Van	-0	

	Jeep	1	
	Motorcycles	1	Hav Md. AJIM
	Anti-Land mines	-	
	Vehicle Vajra	1.00	
	Pullet CT	1	
	Bullet proof Vans		
	Tear Gas Gun		
	Communication	202	
	Equipments	-	
	Waldie-Talkie	4	
	Satellite phone		
	Special Equipment		
Panki P.S	(if any)	-	
t aliki F.S	Police Van	-	
			C/582 Muni Lal
	Jeep	2	Ram
	Motorcycles	100	Rain
	Anti-Land mines		
	Vehicle Vajra	78	
	Bullet proof Vans	77217	
	Tan Co. C	1	
	Tear Gas Gun		
	Communication	:-	
	Equipments		
	Waldie-Talkie	-	
	Satellite phone	-	
	Special Equipment		
	(if any)	-	
Pipratand P.S	Police Van		
	Folice Van	~	
	¥		C/115 Santosh
	Jeep	1	Kumar Yadav
	Motorcycles		. camar 1 aday
	Anti-Land mines		
	Vehicle Vajra	-	
	Bullet proof Vans		
	Tear Gas Gun		
	Communication	-	
	Equipments Waldia Talkia		
	Waldie-Talkie	-	
	Satellite phone	-	
	Special Equipment		
1 7 w 0 22827	(if any)	276	
Lesliganj P.S	Police Van	-	
	Jeep	1	C/1393 Ashok Kumar
	Motorcycles	740	ramal
	Anti-Land mines	-	
	Vehicle Vajra	-	
	Bullet proof Vans		
	Tear Gas Gun	•	
	Communication of the Communica	-	
	Communication	-	
	Equipments		
	Waldie-Talkie	-	
	Satellite phone	-	
	Special Equipment		
	(if any)	+	

## 2.4 Drinking Water and Sanitation Department

SI.	Name of City /	Water Tank	2. Water Ta	Capacity in Cubic metric	No. of	DEMARKS
No.	BLOCK	- 20		Litres	Persons Dependant on this	REMARKS
1	Medinagar	1	Zila School premises	1.00 Lac gallon	2200 House Holds	
2	Medinagar	1	Sahitya Samaj Chock	1.00 Lac gallon	Near about 100000 people	Defunct Tower, Water Supply is done directly.
3	Medinagar	1	B.N. College	1.00 Lac gallon		
4	Medinagar	1	I.T.I Perimises	1.00 Lac gallon	*	41/
5	Medinagar	1 .	Dw&S Office Perimises	1.00 Lac gallon		
7	Medinagar	1	Station Road Sub Division Office	1.00 Lac gallon		
6	Medinagar	1	Station Road Sub Division Office Perimises	0.36 Lac gallon	1000	Police Force, CRPF and Firebrigade etc.
8	Chainpur	2	Semra	1.00 Lac gallon	18070	
			Block Perimises	1.00 Lac gallon	+	
9	Hussinabad	1	Hussinabad	1.00 Lac gallon	26400	100
0	Sudna	1	Sudna	1.00 Lac gallon	4193	

## 3. Mobile Drinking Water Vans Data

SL NO	CITY/BLOCK	MOBILE WATER VANS IN NUMBER	TOTAL WATER HOLDING CAPACITY	REM
1	2	3	4	5 ,
1	Medininagar	1	1000 Litre Per Hour	This Van is Currently in DW&S Division, Deoghar. Now the van returning back to this Division.

Jharkhand Disaster Management Authority

#### 2.5 Aditya Birla Chemicals (India) Ltd., Rehla

#### Resources

# ADITYA BIRLA CHEMICALS (INDIA) LTD., REHLA DOC NO. : DMP ISSUE NO. : 02 REV.NO. : 08 REV.NO. : 08 DATE : 01.07.2013 PAGE NO. : Page 33 of 45

S.N.	Identification Number	Location	Details of PPEs in the safety Kit	Ownership
1	SK—CP-1	Caustic Evaporation	1. Gumboot - 02 pairs	Mr. A. K. Singh
		Unit	2. Goggles - 06 nos 3. Apron - 05 nos	
2	SK—CP-2	HCI Section	4. Hand glove - 05pairs  1. Gumboot - 02pairs	Mr. S C Yadav
_	0.0	1101 000001	2. PVC full apron - 02 nos	
	1		3. Half Apron 02 nos	
	1		4. Face-shield 02 nos	
	1		<ol> <li>Hand glove 02 pairs</li> <li>Self contained breathing</li> </ol>	1
	1		apparatus -01 N0	1
_			7. HCl fume3m mask05	Mr. S C Yadav
3	SK-CP-3	Chlorine-filling & Chlorine plant	Self contained breathing     Apparatus - 02 nos	Mr. S C Yadav
	1	Critorale plant	2. full apron - 04 nos	1
	1		3. Respirator - 02 nos	
			4. Gumboot - 02 pairs	1
4	SK-CP-4	Process Building	Universal ring - 01 no     Safety goggles -03 nos	Mr. A.K.
7.7	Sic-Ci -4	r rocess building	2. Face shield -03 nos	SINGH
	1		<ol><li>Hand glove -02 pairs</li></ol>	
	1		4. Gumboot- 03pairs	
	1		5. Apron - 02 nos 6. Gasmask 3m -02 nos	
			7. Safety belt - 02 nos	
5	SK-CP-5	Brine-plant	Safety belt - 02 nos	Mr. J.C
			2. Face-shield -01 no	Mishra
	1	I	3. PVC apron -02 nos	
6	SK-CP-6	Sodium hypo-chlorite	4. Gumboot -02 pairs 1. Gumboot- 02 pairs	Mr. S C Yadav
-	311-31-3	codidin hypo-chlorite	Rubber hand gloves-	O O Tadav
	1	I	02pairs	
	1	I	3. Face - shield -01no	
7	SK-CP-7	MCC(CP)	4. Goggles- 02 nos 1. Eye-goggles -02no	Mr Amarnath
	SK-CP-/	MCC(CP)	Eye-goggles -02no     Electrical hand glove-	Jha
	1		02pairs	one.
	1		3. Gumboot -	1
	1		02pairs 4. Rescitator -01no	
	1.		5. Safety belt -02nos	
8	SK-CP-8	Sales Despatch	1. Helmet —02 nos	Mr. R.P.Dixit
			2. Face Shield -02 nos	
	1		Gumboot - 02 pairs     Hand Glove -02 pairs	1
_			4. Hand Glove -02 pairs	1
9	SK-DCR-9	Main Gate	1.Gas mask - 10 nos	Mr. Jaipal
- 1			2.Eye goggles - 04 nos	Singh
- 1			3.PVC full size apron -04 nos	Rathore
- 1			4.Gumboot -11 pairs 5.Rubber hand glove -04 pairs	
- 1			Helmet -12 nos	
	5		Tiennet -12 nos	
10	SK-PP-10	PP control room	Heat resistance hand	Mr. R K Pathak
	SK-FF-10	FF Control room	gloves-02sets	Mr. R R Pathak
- 1			2. Eye goggles 06 nos	
- 1			3. Gumboot -02 pairs	
- 1			4. Ear muff -0 4 nos	
		-50		
11	SK-PP-11	Boiler Area	1.Leather hand glove - 03pairs	Mr. R K Pathak
	516-1-11	Jollet Aled	2 Dust mask – 20no	MI. IN IN Faulak
		1	3 Eye goggles - 04nos	
				1
		a a		1
			4. Safety belt - 04nos	1
2	SK_PP_12	Coal handling plant	4. Safety belt - 04nos	Mr R K Pathal
12	SK-PP-12	Coal handling plant	Safety belt - 04nos     Safety goggles - 04 nos	Mr R K Pathak
12	SK-PP-12	Coal handling plant	Safety belt - 04nos     Safety goggles - 04 nos     Safety belt - 02 nos	Mr R K Pathak
12	SK-PP-12	Coal handling plant	Safety belt - 04nos     Safety goggles - 04 nos	Mr R K Pathak
12	SK-PP-12	Coal handling plant	Safety belt - 04 nos     Safety goggles - 04 nos     Safety belt - 02 nos     Gumboot - 02 pairs	Mr R K Pathak
	SK-PP-13	Coal handling plant  Alumunium Chloride	Safety belt - 04 nos     Safety goggles - 04 nos     Safety belt - 02 nos     Gumboot - 02 pairs	Mr. Tejveer
			1. Safety goggles - 04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos  1. Safety goggles -04 nos 2. Safety belt - 02 nos	
12			Safety belt - 04 nos     Safety belt - 02 nos     Safety belt - 02 pairs     Dust mask - 25 nos      Safety belt - 02 nos     Safety goggles - 04 nos     Safety goggles - 04 nos     Safety belt - 02 nos     Safety belt - 02 pairs     Safety belt - 02 pairs     Safety belt - 02 pairs	
			1. Safety goggles - 04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos  1.Safety goggles -04 nos 2.Safety belt - 02 nos 3.Gumboot - 02 pairs 4.Dust mask -25 nos.	Mr. Tejveer
			1. Safety goggles - 04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos  1. Safety goggles -04 nos 2. Safety belt - 02 nos 2. Safety belt - 02 pairs 4. Dust mask -02 pairs 4. Dust mask -25 nos. 5. Ear muff/ear plug -12 nos.	Mr. Tejveer
			1. Safety goggles - 04 nos 2. Safety belt 02 nos 3. Gumboot 02 pairs 4. Dust mask - 25 nos  1. Safety goggles - 04 nos 2. Safety belt 02 nos 2. Safety belt 02 nos 3. Gumboot 02 pairs 4. Dust mask - 25 nos. 5. Ear muff/ear plug - 12 nos. 6. Fire suit - 02 sets	Mr. Tejveer
			1. Safety goggles - 04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos  1. Safety goggles - 04 nos 2. Safety belt 02 nos 3. Gumboot 02 pairs 4. Dust mask - 25 nos  5. Ear muff/ear plug - 12 nos 6. Fire suit - 02 ests 7. Heat resistance hand gloves-	Mr. Tejveer
			1. Safety goggles - 04 nos 2. Safety belt 02 nos 3. Gumboot 02 pairs 4. Dust mask - 25 nos  1. Safety goggles - 04 nos 2. Safety belt 02 nos 2. Safety belt 02 nos 3. Gumboot 02 pairs 4. Dust mask - 25 nos. 5. Ear muff/ear plug - 12 nos. 6. Fire suit - 02 sets	Mr. Tejveer
	SK-PP-13	Alumunium Chloride	1. Safety belt - 04 nos 2. Safety belt - 02 nos 3. Gumboot 02 pairs 4. Dust mask - 25 nos  1. Safety goggles - 04 nos 2 Safety belt - 02 nos 2 Safety belt - 02 pairs 4. Dust mask - 25 nos 5. Ear muff/ear plug - 12 nos. 6. Fire suit - 02 sets 7. Heat resistance hand gloves- 02 sets	Mr. Tejveer Singh
3		Alumunium Chloride	1. Safety goggles - 04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos  1. Safety goggles -04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos 5. Ear muff/ear plug -12 nos 6. Fire suit -02 sets 7. Heat resistance hand gloves- 02 sets  1. Safety goggles - 04 nos.	Mr. Tejveer Singh
	SK-PP-13	Alumunium Chloride	1. Safety goggles - 04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos  1.Safety goggles -04 nos 2.Safety belt - 02 nos 3.Gumboot - 02 pairs 4.Dust mask -25 nos. 5.Ear muff/ear plug -12nos. 6.Fire suit -02 sets 7.Heat resistance hand gloves- 02sets  1.Safety goggles - 04 nos. 2.Safety belt - 02 nos.	Mr. Tejveer Singh
13	SK-PP-13	Alumunium Chloride	1. Safety goggles - 04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos  1. Safety goggles -04 nos 2. Safety belt - 02 nos 3. Gumboot - 02 pairs 4. Dust mask -25 nos 5. Ear muff/ear plug -12 nos 6. Fire suit -02 sets 7. Heat resistance hand gloves- 02 sets  1. Safety goggles - 04 nos.	Mr. Tejveer Singh



#### DISASTER MANAGEMENT PLAN

DOC NO. : DMP ISSUE NO. : 02 REV.NO. : 08

DATE : 01.07.2013 PAGE NO. : Page 35 of 45

#### LOCATION WISE LIST OF FIRE- EXTINGUISHERS

#### ANNEXURE- 5

SI No.	Location	Identification	Quantity	
9 Ltrs	Cap. Water Co2 type fire Extinguisher	-WCANTER-TO RE-	531	
1.	Material Office	FF-WC-1	1	
2.	Bungalow	FF-WC-5	1	
3.	Near Time Office	FF-WC-10	1	
4.	Hospital	FF-WC-8	1	
5.	Canteen	FF-WC-7	1	
6.	Surbhi Centre	FF-WC-9	1	
0.1 ten	Cap. Mechanical Foam( Aquious Film Form	ming Form AFFF) tung Entinguis	have	
		FF-MF-20		
1.	Mechanical Workshop	A 107.00000000000000000000000000000000000	1	
	Material Department	FF-MF-14	1 2	
3.	Material Yard	FF-MF-10,12	2	
4.	School School Standard Standar	FF-MF-18	1	
5.	Aluminum Chloride Plant	FF-MF-21,22	2	
6.	0 Mtrs Turbine	FF-MF-11	1	
7.	Mech.Ment. Room, cl,hcl,hypo	FF-MF-24,23	2	
50 Ltr	s Cap. Mechanical Foam( Aquious Film Fo	rming Foam-AFFF) type Extinguis	shers	
1.	Mechanical Maintenance Room(cl,hcl)	FF-MF-6	1	
2.	Diesel Tank(C.P.)	FF-MF-9	1	
3.	Material Yard(P.P)	FF-MF-5	1	
4.	Turbine Hall("0" Mtrs P.P)	FF-MF-2	1	
5.	Diesel Tank (P.P)	FF-MF-4	1	
6.	D.G.Set (P.P)	FF-MF-1	1	
7.	Fire Pump House(P.P)	FF-MF-3	1	
8.	Electrical Work Shop(C.P)	FF-MF-7	1	
9.	C.H.P Motor Work Shop	FF-MF-10	1	
10.	Material Department	FF-MF-8	i	
		1		
	Capicity CO2 Type Fire Extinguisher.  Aluminum Chloride Plant	FF-CO2-5,6	2	
1			2	
2	New M.C.C Cell House	FF-CO2-3,4		
3		FF-CO2-1,2	2	
4 5	Turbine Hall C.H.P MCC(Near Atithi Grihi)	FF-CO2-7,8 FF-CO2-9	1	
J	C.T.F MOO(Neal Autil Offic)	77-002-9	540	
	Co2 type Fire Extinguishers			
1	Electrical Control Room	FF-CO <sub>2</sub> - 1,14	2	
2	M.C.C - 14	FF-CO <sub>2</sub> - 16	1	
3	Turbine Hall	FF-CO <sub>2</sub> - 6,24	2	
4	Almunim Chloride Plant	FF-CO2-8,11,13,18,19,23	6	
5	Rectifier Room No. 1	FF-Co2-9	1	
6	Rectifier Room No. 2	FF-CO2-05	1	
7	Cell House	FF-CO <sub>2</sub> - 4,10	2	

8	S.B.P. Plant		FF-CO <sub>2</sub> - 12	1
9	Surbhi Centre		FF-CO <sub>2</sub> - 29	1
3.2 Kg	g Co2 Type fire extinguisher			
1	Turbine Hall		FF-CO <sub>2</sub> - 1,2,3,4,5	5
2	Hospital		FF-CO <sub>2</sub> -10,12	2
3	M.C.C./ D.M Plant & Lab		FF-CO <sub>2</sub> - 9	1
4	Air Compressor ( C. P.)		FF-Co2- 14,6	2
5	School		FF-CO2-7	1
6	Administrative Office(Account Sec.)		FF-CO2-8	
2 V-	Canacity Co2 type fire sylinguishes			
	Capacity. Co2 type fire extinguisher.		EE CO 12	-
1	22 KV Switch gear		FF-CO <sub>2</sub> - 1,2	2
2	415 Volts Switch gear room		FF-CO <sub>2</sub> - 3,4 FF-CO <sub>2</sub> - 5	2
3	BFP (Side) 0 Mtrs Compressor room (All Floor)			1 2
5	Turbine Hall		FF-CO <sub>2</sub> - 7& 8 FF-CO <sub>2</sub> - 6	1
6	Fire Pump House		FF-CO <sub>2</sub> - 6 FF-CO <sub>2</sub> - 11 & 13	2
7	Ash Handling Plant		FF-CO <sub>2</sub> - 11 & 13 FF-CO <sub>2</sub> - 9 & 12	2
8	School		FF-CO <sub>2</sub> - 14	1
9	Hydrogen Control Room.		FF-CO <sub>2</sub> - 10	1
2 Ka	Capacity DCP type Fire Extinguisher.		te del	
1	Canteen		FF-DCP <sub>2</sub> -4,9	2
2	Material department		FF-DCP <sub>2</sub> -10	1
3	Time Office		FF-DCP <sub>2</sub> -20	2
4	Service Building (All Floors)		FF-DCP <sub>2</sub> -2,15,22	3
5	D.G Set (PP)		FF-DCP <sub>2</sub> -13	1
6	M.C.C D.M Plant & Lab		FF-DCP <sub>2</sub> -17	i
7	Pump House		FF-DCP <sub>2</sub> -3	1
8	Chemical House		FF-DCP <sub>2</sub> -8	1
9	CHP / Crusher.(1st Floor)		FF-DCP <sub>2</sub> -1	1
10	Receiving Section (Material)		FF-DCP <sub>2</sub> -12	1
5 kg	Capacity DCP type Fire Extinguisher.	200	9 9	
	Hypo Section	F	F-DCP <sub>5</sub> -52,84	2
	H.C.L. Section		F-DCP <sub>5</sub> -25	1
	CL <sub>2</sub> Drying Section		F-DCP <sub>5</sub> -38	1
	M.C.C-13		F-DCP <sub>5</sub> -40	1
	M.C.C-14	F	F-DCP <sub>5</sub> - 68	1
6	Transformer Room (Out side)	F	F-DCP <sub>5</sub> -28,29,31	3
	D.G Set (CP)		F-DCP <sub>5</sub> -30	1
	Service Building All Florr.		F-DCP <sub>5</sub> -43,48,49,65	4
	Marketing Office	F	F-DCP <sub>5</sub> -46	1
	Cooling Tower P,P	F	F-DCP <sub>5</sub> -45	1
11	Conference Hall.		F-DCP <sub>5</sub> -64	1
	Boiler 1st Floor		F-DCP <sub>5</sub> -36	1
13	05th floor		F-DCP <sub>5</sub> -15	1
14	10th floor	F	F-DCP <sub>5</sub> -55	1
15	Record Room (Marketing)	F	F-DCP <sub>5</sub> -51	-1
16	Hospital	F	F-DCP <sub>5</sub> - 47,67,87	3
17	U.H. Office	F	F-DCP <sub>5</sub> -34	1
18	Painting Section (Material)		F-DCP <sub>5</sub> -1	1
	W.C.M. Training Center Material Yard (PP)	E	F-DCP <sub>5</sub> -27 F-DCP <sub>5</sub> -42,44	2
	Processes Building -Ground Floor		F-DCP <sub>5</sub> -42,44 F-DCP <sub>5</sub> -66	1
	Top Floor	F	F-DCP <sub>5</sub> -06 F-DCP <sub>5</sub> -76	1
	1 <sub>st</sub> Floor		F-DCP <sub>5</sub> -77	1
24	Ground Floor	F	F-DCP <sub>5</sub> -63,82	2
25	Ground Floor (Back Side)		F-DCP <sub>5</sub> -60	1
	Control Room		F-DCP <sub>5</sub> -50	1
28	Visitor Room New MCC Room(Back Side-GF)		F-DCP <sub>5</sub> -86	1
30	New MCC Room(Back Side-GF) Rectiformer - Room No.1		F-DCP <sub>5</sub> -83 F-DCP <sub>5</sub> -41	1
	Room No.2		F-DCP <sub>5</sub> -41 F-DCP <sub>5</sub> -75	- 1
	Alumunium Chloride Plant, New		F-DCP <sub>5</sub> -54,53,58,62,80	5
		F	F-DCPs-	
33	Alumunium Chloride Plant, Old	6	1,69,70,72,.73,74,79, 88,89	9
	M.C.C, D.M. & Lab	F	F-DCP <sub>5</sub> -57	1
35	Marketing Dispatch	F	F-DCP <sub>5</sub> -37	1
		E	F-DCP <sub>5</sub> -	
36	S.B.P. Plant		,3,4,5,6,7,8,9,10,11,12,13,1 ,16,17,18,19,20	18
	M.C.C Room (Near S.B.P Plant)		F-DCP <sub>5</sub> -21,22	2
	Electical Work Shop (C.P)	F	F-DCP <sub>5</sub> -32,33	2
39	Main Switch Area (Material Deptt)	F	F-DCP <sub>5</sub> -24	1
40	Issued Section (Material Deptt)		F-DCP <sub>5</sub> -26	1
	New CL <sub>2</sub> Compressor Room.		F-DCP <sub>5</sub> -35,39	2
	New Transfarmer (S.B.P)		F-DCP <sub>5</sub> -23	1
	Drum Plant CL2 Filling Section		F-DCP <sub>5</sub> -71 F-DCP <sub>6</sub> -85	1
	Processes Building -1 Floor		F-DCP <sub>5</sub> -85 F-DCP <sub>5</sub> -56,59	2
	Processes Building - 1 Floor Process Building - 2nd Floor	E	F-DCP <sub>5</sub> -36,39 F-DCP <sub>5</sub> -81	1
	MCC(C.H.P)		F-DCP <sub>5</sub> -78	1
46				
46 47	Capacity DCP Type Fire Extinguisher.	2000000		1
46 47 <b>10 kg</b>	M.C.C - 14		F-DCP <sub>10</sub> - 4	
46 47 <b>10 kg</b> 1 2	M.C.C - 14 Mechnical Work Shop	F	F-DCP <sub>10</sub> - 9	1
46 47 10 kg 1 2 3	M.C.C - 14 Mechnical Work Shop M.C.C - DM, Plant & Lab	F	F-DCP <sub>10</sub> - 9 F-DCP <sub>10</sub> - 10	1
46 47 10 kg 1 2 3 4	M.C.C - 14 Mechnical Work Shop M.C.C - DM, Plant & Lab Receipt Section (Material)	F	F-DCP <sub>10</sub> - 9 F-DCP <sub>10</sub> - 10 F-DCP <sub>10</sub> - 1	1 1 1
46 47 10 kg 1 2 3 4 5	M.C.C - 14 Mechnical Work Shop M.C.C - DM, Plant & Lab Receipt Section (Material) Cell House Ground Floor	F F	F-DCP <sub>10</sub> - 9 F-DCP <sub>10</sub> - 10 F-DCP <sub>10</sub> - 1 F-DCP <sub>10</sub> - 8	1 1 1
46 47 10 kg 1 2 3 4 5 6	M.C.C - 14 Mechnical Work Shop M.C.C - DM, Plant & Lab Receipt Section (Material)	F F F	F-DCP <sub>10</sub> - 9 F-DCP <sub>10</sub> - 10 F-DCP <sub>10</sub> - 1	1 1 1

#### DISASTER MANAGEMENT PLAN

DOC NO. : DMP ISSUE NO. : 02 REV.NO. : 08

DATE : 01.07.2013 PAGE NO. : Page 38 of 45

1	U.H. Office	FF-ABC-2,3	2
2	U.H. bungalow	FF-ABC-11	1
3	H.R.Office	FF-ABC-8,13	2
4	Main Gate	FF-ABC-7	1
5	Guest House	18	3
	Room No-1	FF-ABC-20	1
	Room No-2	FF-ABC-23	1
	Room No-3	FF-ABC-9	1
	RooM No-4	FF-ABC-19	. 1
	Room No-5	FF-ABC-17	1
	Room No-6	FF-ABC-06	1
	Room No-7	FF-ABC-22	1
	Room No-8	FF-ABC-16	1
	Room No-9	FF-ABC-18	1
	Room No-10	FF-ABC-15	1
	Room No-11	FF-ABC-01	1
	Shot No-1	FF-ABC-24	1
	Shot No-2	FF-ABC-21,12	2
6	Hospital	FF-ABC-4,5	2
)5 kr	Capacity ABC Type Fire Extinguisher		1
1	Guest House	FF-ABC-1,3	2
2	U. H. Bungalow	FF-ABC-4,5	2
3	Atthiti Grihi	FF-ABC-6,7	2
4	Executive Hostel	FF-ABC-8.9	2
5	Mechanical Workshop	FF-ABC-10	1
6	Account Deptt. (Admin.)	FF-ABC-13,17	2
7	U.H .Office	FF-ABC-12	1
8	Hydrogen Boiler Control Room	FF-ABC-23	1
9	Hospital	FF-ABC-22,15	2
10	School	FF-ABC-11,20,24	3
11	Shyam Shopping centre	FF-ABC-14	1
12	Security Main Gate	FF-ABC-21	1
13	Security Office	FF-ABC-16	1 1

## 3. Important Telephone Number

## 3.1 Police Department

Sl. No.	Rank/Post	Std Code	Office	Residence	Mobile
1	SP Palamau	06562	224023	231111, 231222 <b>(F)</b>	9431706238
2	Addl.SP (Ops.)	06562	-	231591	9430169657
3	Dy.SP HQ-1	06562	224006	227080	9431706240
4	Dy.SP HQ-2	06562	224025	235824	9431706239
5	SDPO Hussainabad	06566	222301	222238	9431706242
6	SDPO Chattarpur	06566	285240	285215	9431706241
7	Ins.Town	06562	222294	-	9431706243
8	Ins. Sadar	06562	227085	-	9431706244
9	Ins.Hussainabad	06566	222801	222801	9431706246
10	Ins. Chattarpur	06566	285253	285253	9431706247
11	Ins. Terhasi Camp Paton	06560	279497	-	9431706248
12	Ins. Pandu Camp Rehla	-		-	9934046616
13	OC Town PS	06562	222294	-	9431706249
14	OC Sadar PS	06562	240111	-	9431706250
15	OC Lesliganj PS	06562	282619	-	9431706253
16	OC Chainpur PS	06586	251151	-	9431706252
17	OC Naudiha PS	-	-	-	9470969651
18	OC Ramgarh PS	-	-	-	9431184872
19	OC Bishrampur PS	06584	262278	-	9431706254
20	OC Rehla PS	06584	262233	-	9431706255
21	OC Pandu PS	-	-	-	9470503973
22	OC Hariharganj PS	06566	251610	251610	9431706260
23	OC Chattarpur PS	06566	285236	285236	9431706259
24	OC Hussainabad PS	06566	222237	222237	9431706256
25	OC Haidernagar PS	06566	232459	232459	9431706257
26	OC Mohammadganj PS	06566	242291	242291	9431164149
27	OC Panki PS	06562	262370	-	9431706261
28	OC Paton PS	06560	279497	-	9431195378
29	OC Manatu PS	-		-	9431585746
30	OC Terhasi PS	06562	290404	-	9431362293
31	OC Padwa PS	06560	289696	-	9431285582
32	OC Satbarwa OP	06562	254499	-	9431706251
33	OC Deori OP	06566	222545	222545	9471147787
34	OC Pipratad PS	_	-	-	9162706322
35	Sarjent Major' Police	06562	224026	-	9431141229

Jharkhand Disaster Management Authority

3.2 Aditya Birla Chemicals (India) Ltd., Rehla

## **DISASTER MANAGEMENT**

**DISTRICT INDUSTRIES CENTRE, PALAMU** 

		HUDUSIN				ı	
SL	NAME	PRODUCT	TYPE	LOCATIO	CONTACT PERSON	DM	DM
NO	OF		OF	N	NAME AND MOBILE	PLAN	EQUIPME
	INDUSTR		THREA		NO.		NT
	Y		T				DETAILS
1	M/s	Caustic	Chlorin	Garhwa	Sri Shatrudhn Singh	yes	
	Aditya	Soda,	e Gas	Rd. Rehla	9708985000		
	Birla	Aluminum			shatrughn.singh@adityabi		
	Chemicals	Florid,			rla.com		
	(India)	Stevle					
	Ltd.	Bleaching					
2	M/s	Do	Chlorin	Dandilakhu	Sri Sunil Kr.		
	Manaw		e Gas	rd Garhwa	06584262977/		
	Chemicals			Rd. Rehla	9304009671		
3	M/s	Chlorinate	Chlorin	Garhwa	Sri Ashok Gupta	List	List
	Competent	d Paraffin	e Gas	Rd. Rehla	9973686006	Attached	Attached
	Polymers	of					
	Pvt.Ltd	Compound					
		Plastic &					
		Hydraulic					
		Acid					
4	M/s vinira	Graphite	N.A	Vill-Kuliya	Sri Binod Kr. Mintri &		
	minerals	Beneficiati		Dhabadih,	Sri Rajat Mintri		
		on		Satbarwa			
5	M/s Baba	Atta	N.A	Panki	Sri Bijay Kr. Singh		
	Bansidhar			Road,			
	Product			Redma			
6	M/s	Packaged	N.A	Chainpur	Sri Bhagwan Singh		
	Namdhari	Drinking		Harbhonga	Namdhari		
	Real	Water					
	Estate						
	Pvt.Ltd						
7	M/s Balaji	Graphite	N.A	Kuliya	Sri Ashok Kr. Jain		
	Graphite	Powder		dhawadih,	9431146017		
	_			Satbarwa			

Jharkhand Disaster Management Authority



#### DISASTER MANAGEMENT PLAN

DOC NO. : DMP ISSUE NO. : 02 REV.NO. : 08 DATE : 01.07.2013

PAGE NO. : Page 31 of 45

ANNEXURE-2

#### TELEPHONE NUMBERS OF SR. EXECUTIVES

SL. <u>NO.</u>	NAME OF SR. EXECUTIVES	TELEPHONE NO. (OFFICE) P&T Internal.	TELEPHONE NO. (RESIDENCE) P&T Internal.
01	MR. B B DIXIT	06584-262211/221-2200	06584-262211/221-2300
03	MR. M K SINHA	06584-262211/221-2405	06584-262211/221-2276 (Mob -9507039402)
05	MR. N K PANDEY	06584-262211/211-2201	06584-262211/211-2301 (Mob9507039405)
06	MR. R D SAO	06584-262211/221-2400	06584-262211/221-2400/2500 (Mob9507039403)
07	MR. M D PATHAK	06584-262211/221-2210	06584-262211/221-2310 (Mob9507039411)
09	MR. IQBAL KHAN	06584-262211/221-2225	06584-262211/221-2337 (Mob9507039406)
10	MR. SATRUGHAN SINGH	06584-262211/221-2373	06584-262211/221-2334 (Mob9507039410)
11	MR. R K PATHAK	06584-262211/221-2406	06584-262211/221-2510 (Mob8873407000)
12	MR. B P PANDEY	06584-262211/221-2421	06584-262211/221-2512 (Mob9507039421)
13	MR. P.N.PATHAK	06584-262211/221-2250	06584-262211/221-2392 (Mob . 9955160049)
14	MR P P SINGH YADAV	06584-262211/221- 2207	06584-262221/211/488-2307 Mob No :- 9507038100
15	MR N K MISHRA (SAFETY OFFICER)	06584-262221/211/2209	06584-262211/221/2309 Mob No :- 9507036200
16	MR.JAIPAL SINGH	06584-262211/221-2222	06584-262211/221-2308 (Mob., 9431776273)
17	SCHOOL PRINCIPAL	06584-262211/211-2261	06584/262221/211-2359 (Mob. 9708039398)
18	ANCILLARIES	KG Industries -2449 Competent Polymer-2409 Sumangal -2448	2506 2397
19	DR SANTOSH KUMAR	06584-262211/221-2511	06584-262211/221-2353 Mob :- 9931516115
20	Mr. P S DWIVEDI	06584-262211/221-2248	06584-262211/221:-2510 Mobile No :- 9708899706

Jharkhand Disaster Management Authority



#### DISASTER MANAGEMENT PLAN

DOC NO. : DMP ISSUE NO. : 02 REV.NO. : 08 DATE : 01.07.2013 PAGE NO. : Page 32 of 45

#### ANNEXURE -3

#### **FACILITIES AVAILABLE**

SI. No.	PARTICULARS	LOCATION	PERSON INCHARGE	DISTANCE FROM FACTORY	TEL.No
01.	Sadar Hospital	Garhwa	Doctor	15 Kms	(06561) 222385, 223897, 222991
02.	Sadar Hospital	Daltonganj	Doctor	40 Kms	06562-224273
03.	Hindalco Hospital	Renukoot.	Doctor	100Kms	252077 / 252079
04.	Apollo Hospital	Ranchi,	Doctor	220Kms	2275717 2275699

#### STATE AUTHORITIES

S. No	STATE AUTHORITIES	Telephone No	umber
		Office	Residence
01	D.C., Palamau, Daltonganj	(06562), 224033	(06562) 224044
02	S.D.O., Daltonganj	224027	224028
03	S.P. Palamau	(06562) 224023, 231111	231222
04	C.M.O., Palamau	224273	224050
05	Fire Brigade, Palamau	222555	12
06	Chief Inspector of Factories, Ranchi, Jharkhand	(0651), 2480454	2
07	Inspector of Factories, Daltonganj,	(06562) 231270	2505384
08	Police Station, Rehla	(06584) 262233	

Jharkhand Disaster Management Authority

## 3.3 Electricity Department

ELECTRICAL ENGINEERING DEPARTMENT								
OFFICE	OFFICER	ADDRESS	TEL. NO.(0)	TEL.NO.(R)	E-MAIL	FAX	MOBILE NO	
ELECTRICAL EXECUTIVE ENGINEER	Sri Ram Rup Mehra	Electric-Supply Division,Daltonganj					9431707404	
ASSISTANT ELECTRICAL ENGINEER(URBAN)	Sri Abhishek kumar	Electric-Supply Sub- Division, Daltonganj (U)		5	_		9431707407	
ASSISTANT ELECTRICAL ENGINEER(RURAL)	Sri Nitish Kumar Sinha	Electric-Supply Sub- Division, Daltonganj (R)					9431707408	
ASSISTANT ELECTRICAL ENGINEER(CHHATARPUR)	Sri Ajay kumar Singh	Electric-Supply Sub- Division,Chhatarpur.			_		9431707409	
ASSISTANT ELECTRICAL ENGINEER(JAPLA)	Sri Sayam Kumar Paswan	Electric-Supply Sub- Division, Japla.					9431707410	

## 3.4 Engineering Department

Office	Name of Officer	Tel. No. (O)	Mobile No.
<b>Executive Engineer</b>	Birendra Kumar		9546202713
N.R.E.P., Palamu	Bimal		
<b>Executive Engineer,</b>	Devendra Prasad		9931447621
Minor Irrigation	Jaiswal		
Division, Palamu			
<b>Executive Engineer,</b>	Yogendra Kumar		9431176778
Waterways Division	Pandit		
<b>Executive Engineer,</b>	Birendra Kumar		9546202713
<b>Special Division</b>	Bimal		
(DRDA)			
<b>Executive Engineer,</b>	Ajay Singh	06561-225238	9431325479
PHED, Palamu			8294763473
<b>Executive Engineer,</b>	Shiv Dayal Saxena		9471312096
<b>Building Division</b>			9546627491
<b>Executive Engineer,</b>	Ram Swarup Mehra	06561-240518	9431707404
Electrical Board			
Palamu			

Jharkhand Disaster Management Authority

#### 3.5 District Data Center

Ser No	District	Name and Location of NIC Center	Contact Persons name , mobile No and email id	Details of Facilities available	Type of Data available
1	Palamu	NIC Palamu, Collectorate Campus Palamu	Sanjeev Kumar, 8102020901	Net Connectivity, Video Conferencing	

## 4. Media & Information Management

## सूचना एवं जन सम्पर्क विभाग, पलामू

SL.	NEWS PAPER	NAME OF CONTACT	MOBILE NO	EMAIL
No		PERSON		
1	DAINIK JAGRAN	BENI MADHAV SINGH	9431786160	madhavbeni8@gmail.com
2	HINDUSTAN	AKHILESH PATHAK	9431969043	akhilesh.chainpur@gmail.com
3	SANMARG	ARUN SHUKLA	9431337669	dalsanmarg.as@gmail.com
			7649056809	
4	DAINIK BHASKAR	PRAVIN SINGH,	8084945588	pravinranjan420@gmail.com
		SHYAM KISHOR	9430131399	pathak.shyam@gmail.com
		PATHAK		
5	KHABAR MANTRA	BHOLA, ABHISHEK	7677652119,	khabarmantra.palamu@gmail.com
			9304467977	
6	AAJAD SIPAHI	HARENDRA KUMAR	9334687796	
7	PRABHAT KHABAR	AJEET MISHRA	9430392140	pkdal2013@gmail.com
8	THIRD I	NEEL KAMAL SUKLA	9431324129	

#### TV MEDIA CONTACT

SL. No	TV	NAME OF CONTACT PERSON	MOBILE NO	EMAIL
1	ETV	NIL KAMAL	9431788259	
2	NAXATRA	KRISHNA RAJ	8252959049	
3	SAHARA TV	ASHUTOSH RANJAN	9955582996	
4	ARYAN TV	ASHUTOSH PANDAY	9471148159	
5	SADHNA TV	VINOD SINGH	9431554487	
6	NEWS 11	RAJAN RAJ	9386024810	
7	ZEE NEWS	AMIT KUMAR	9835536469	
8	STAR NEWS	SAKT CHATARJI	9431193035	
9	AAJTAK	VIKASH SINHA	9431155088	

Jharkhand Disaster Management Authority

## 5. Health and Family Welfare Department

		OR VILLAGE LEVEL HOSPITAL		_			1
1	SATBARWA	Daltonganj					
2	POLPOL	Daltonganj	+-				
3	SUA KAUDIYA	Daltonganj					
4	BADKA GAUNW	Daltonganj					
5	SINGRAKHURD	Daltonganj					
6	SINGRAKALA	Daltonganj					
7	SINDURIYA	Daltonganj					
8	PONCHI	Daltonganj					
9	BAIRIYA	Daltonganj					
10	CHIYANKI	Daltonganj					
11	KHAMDIH	Daltonganj					
12	KANDUMUHALLA	Daltonganj					
13	BARAHLOTA	Daltonganj		1			
14	BARI	Daltonganj					
15	TABAR	Daltonganj					
16	JHABAR	Daltonganj					
17	SAGALIM	Lesliganj					
18	HURLAUNG	Lesliganj					
19	VIHARA	Lesliganj					
20	KONWAI	Lesliganj					
21	TAL	Lesliganj					
22	LOHARSHI	Lesliganj					
23	DAWARIKA	Lesliganj					
4	TETRAI	Lesliganj					
25	NAWAGARD	Lesliganj		-			-
6	DUB	Lesliganj		1	4		-
7	TATIDIRI	Lesliganj			-		_
8	PORSAM	Lesliganj			1		-
9	NAWDIHA BAHERA	Lesliganj					
0	BORADIRI	Lesliganj			-		-
1	KELHWA	Lesliganj		_	_		
2	ASHEHAR	Lesliganj			_	-	-
3	CHANDO	Chainpur			_		-
4	SALATUA	Chainpur		-	-	-	-
5	KARSO	Chainpur		-			
6	PATHRA	Chainpur			+	-	-
7	RAMGARD .	Chainpur		-	-	-	-
8	BASARIYA	Chainpur	_	-	-		
9	KURKA	Chainpur	-				
0	SEMRA						-
1	NENUA	Chainpur			_		
2	HARINAMAND	Chainpur					-
_	The second secon	Chainpur		-			_
4	NEURA NAWADIH	Chainpur					-
5	MAYAPUR	Chainpur		-			-
		Chainpur	 				-
6	RAMPUR	Chainpur		-			
7	PURVDIHA	Chainpur					
8	BABHANDI	Chainpur		-	-		
9	MAHUGANWA	Chainpur	-				
0	MUNDARIYA	Lesliganj		_			
	FULANG	Lesliganj			-		
2	CHAPARNA	Lesliganj					
3	KOIRIPATHRA	Lesliganj					
4	BASDOHAR	Lesliganj					
5	KUNDRI	Lesliganj					
6	ORIYA	Lesliganj					
7	GENTHA	Lesliganj					
8	DHANGANW	Lesliganj		i i			
9	MAHARJA	Lesliganj					
0	SEHRA	Lesliganj					
1	EKTA	Lesliganj					
2	DHAWADIH	Lesliganj					
3	DARUDIH	Lesliganj					
4	PALEHKALA	Patan		0			-
5	DIPAWA	Patan					
6	CHUDADOHAR	Patan					
7	NAWDIHA	Patan			-		_

68	KISHUNPUR	Patan	1					
69	SAGUNA	Patan				-		-
70	CHHECHHAURI	Patan			_			-
71	LAMIPATRA	Patan						
72	GAMHETHA	Patan					-	
73	PACHKEDIYA	Patan	4		_	_	_	-
74	SIKKIKALA	Patan			_	+		-
75	ROLL	Patan			_			
76	LOINGA	Patan					-	
77	SUTHA	Patan	_		-	-		-
78	SOLE	Patan						
79	HISHRA BARWADIH	Patan				+		
80	GADERIYADIH	Patan	_			-		
81	GAADI	Patan			-	1		
82	CHAK			4				
83	TARHANSHI	Manatu						
84	PADMA	Manatu						
85	CHIRIKHURD	Manatu						1
86		Manatu						
	TARIYA	Manatu						
87	SEWATI	Manatu						
88	GURHA	Manatu						
89	PATHAKPAGAR	Manatu	4					
90	BALIYARI	Manatu						
91	UDYAPURA	Manatu						
92	MITAR	Manatu						
93	BASHIYA	Manatu						
94	BISHRAMPUR	Hariharganj						
95	PIPRA	Hariharganj						
96	SARSOT	Hariharganj						
97	CHANDA	Hariharganj						
98	ARARUA	Hariharganj						
99	SARAIYA	Hariharganj						
	SIKARPUR	Hariharganj						
	SAKALDIPA	Hariharganj						
102	ANHARIBAG	Hariharganj						
103	SONBE	Hariharganj		181				
104	CHAPARWAR	Hariharganj				10-		
105	PACHMO	Hariharganj						
106	DHAKCHA	Hariharganj						
107	KHADAGPUR	Hariharganj						
108	KATAIYA	Hariharganj						
109	KAUAKHOH	Hariharganj						
10	BISHUNPUR	Hariharganj					7	
11	NADIYANI BARWADIH	Husainabad		(				_
12	BAIJALI	Husainabad				-		
13	MOHAMADGANJ	Husainabad						
	BEGAMPURA	Husainabad				-		
15	KAJIBIHRA	Husainabad						-
-	KAMAT	Husainabad						
	LOTANIYA	Husainabad						
_	NONIYABIGHA	Husainabad						
	НЕМЈА	Husainabad					-	
	PANSA	Husainabad						
_	UDWAR	Husainabad						
-	KOSIYARA	Husainabad						
	BATAUA	Husainabad						
	HAIDARNAGAR	Husainabad		1				
_	KAMGARPUR	Husainabad						
-	BAJARDIH							
-	POLDIH	Husainabad	-					
	KHAGARPAR	Husainabad		-25				
-	JHARGARDA	Husainabad						
		Husainabad						
-	DANDILA	Husainabad						
-	PATARIYA	Husainabad						
_	CHAUKADI	Husainabad						
	KARIMANDIH	Husainabad				1		
	BARANDA	Husainabad						
	GAJI BIHRA	Husainabad						

136	PINDRAHI	Unesinghad				1		
137		Husainabad						
_		Husainabad						
138		Husainabad						
139		Husainabad		·				
140	DALI	Husainabad						
141	GULABJHARI	Husainabad		V				
142	UDYAGARH	Husainabad						-
143		Husainabad						
144		Husainabad						
145		Husainabad						
146	ANTAKALA	Husainabad						
147	KHAJURI	Husainabad						+
148	MANJHAULI	Husainabad				-	-	-
149								-
		Husainabad						
150		Husainabad						
151	TELADI	Husainabad						
152	KARMA	Husainabad						
153	KANDA	Husainabad				1		_
154					7	-		
		Husainabad						
155		Husainabad						
156	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Husainabad						
157	RATNAG .	Husainabad			7		1	1
158	OBRA	Husainabad					+	-
159	NAWA							1
		Husainabad						
160	RAJHARA	Husainabad	A THE STATE OF THE				100	-
161	BASHNA	Husainabad						
162	LALGARH	Husainabad						1
163	DIHARIYA	Husainabad						
164	KADHWAN							
		Husainabad						
165	REHLA	Husainabad						
166	GURHA	Husainabad						
167	SIGSIGI	Husainabad						+
168	BINDUWA	Husainabad						-
169	TISIBAR							
170	KUTMU	Husainabad						
		Husainabad						
171	UNTARIROAD	Husainabad						
<b>JOBIL</b>	LE MEDICAL UNIT							
1	VIKAS BHARTI	SADAR, BISHRAMPUR, HARIHARGANJ & CHHATARPUR	9304804078	Dr. Sitaram Gupta & Dr. Mihir		3		
	K	CHIATARFOR		I VIIIIII				l.
2	ROSE	CHAINPUR &	9570029435	Dr. Birendra Singh	-			
2	ROSE		9570029435 9709286669	Dr. Birendra Singh Dr. Umesh Pd.				
197		CHAINPUR & LESLIGANJ MANATU & PANKI HUSAINABAD &	9709286669	Dr. Birendra Singh				
3	VIVEK FOR VIKAS NARMADA	CHAINPUR & LESLIGANJ MANATU & PANKI	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL	CHAINPUR & LESLIGANJ MANATU & PANKI HUSAINABAD & PATAN	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital	CHAINPUR & LESLIGANJ MANATU & PANKI HUSAINABAD & PATAN Tumbagara	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital	CHAINPUR & LESLIGANJ MANATU & PANKI HUSAINABAD & PATAN Tumbagara Rehla	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital	CHAINPUR & LESLIGANJ MANATU & PANKI HUSAINABAD & PATAN Tumbagara	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage,	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage, Daltonganj  Barhmani Arogya Sadan, Daltonganj	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage,  Daltonganj  Barhmani Arogya Sadan,  Daltonganj  Bhagwati Hospital Ranchi  Road	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7 8	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage,  Daltonganj  Barhmani Arogya Sadan,  Daltonganj  Bhagwati Hospital Ranchi Road  Dr. Kiran Singh Clinic  Abadqanj	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7 8	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage,  Daltonganj  Barhmani Arogya Sadan,  Daltongani  Bhagwati Hospital Ranchi  Road  Dr. Kiran Singh Clinic	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7 8 9 10	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage, Daltonganj  Barhmani Arogya Sadan, Daltongani  Bhagwati Hospital Ranchi Road  Dr. Kiran Singh Clinic Abadganj  Life Line Hospital, Muslim Nagar	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7 8 9 10 11	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage, Daltonganj  Barhmani Arogya Sadan, Daltonganj  Bhagwati Hospital Ranchi Road  Dr. Kiran Singh Clinic Abadganj  Life Line Hospital, Muslim Nagar  Sakuntalam, Daltonganj	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 1 2 3 4 5 6 7 8 9	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage, Daltonganj  Barhmani Arogya Sadan, Daltonganj  Bhagwati Hospital Ranchi Road  Dr. Kiran Singh Clinic Abadganj  Life Line Hospital, Muslim Nagar  Sakuntalam, Daltonganj  Materniti & Surgeory Centre	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7 8 9 10 11 12	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage, Daltonganj  Barhmani Arogya Sadan, Daltonganj  Bhagwati Hospital Ranchi Road  Dr. Kiran Singh Clinic Abadganj  Life Line Hospital, Muslim Nagar  Sakuntalam, Daltonganj  Materniti & Surgeory Centre FCI Godawn Road	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				
3 4 RIVAT 1 2 3 4 5 6 7 8 9 10 11 12 13	VIVEK FOR VIKAS  NARMADA  TE HOSPITAL  Nawajivan Hospital  BCCL Hospital  Mission Hospital  Seva Sadan, Daltonganj  Surya Clinic, Daltonganj  Saintpaul Health Weage, Daltonganj  Barhmani Arogya Sadan, Daltonganj  Bhagwati Hospital Ranchi Road  Dr. Kiran Singh Clinic Abadganj  Life Line Hospital, Muslim Nagar  Sakuntalam, Daltonganj  Materniti & Surgeory Centre	CHAINPUR & LESLIGANJ  MANATU & PANKI  HUSAINABAD & PATAN  Tumbagara Rehla Daltonganj Daltonganj Daltonganj Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj  Daltonganj	9709286669	Dr. Birendra Singh Dr. Umesh Pd. Singh				

2. Summary: Hospitals

S.No.	Details	Number of Government Hospital	Number of Private Hospital	Total
1	Number of Hospitals	32	14	
2	Bed Capacity	_==		
3	Number of Doctors	73		
4	Numbers of Paramedics			
5	Number of Ambulances	5		

## **Police Department**

Details of Police Vehicles Available

पलामू जिलाबल में उपलब्ध पुलिस वाहनों की विवरणी:--

क्र.सं.	A CONTROL DE CIDADES DE CONTROL D	कुल संख्या			9
Ι	II	Ш	IV	V	VI
1	अम्बेसंडर कार	1	1		
2	जिप्सी	7	7		
3	बी.पी. जिप्सी	13	5	8	मरम्मती की प्रक्रिया में है।
4	हीरो होण्डा मोटरसाईकिल	10	9	1	मरम्मती की प्रक्रिया में है।
5	टी.भी.एस. भीक्टर मोटर साईकिल	88	83	5	मरम्मती की प्रक्रिया में है।
6	कमाण्डर जीप	17	16	1	क्षतिग्रस्त
7	टाटा 407	28	28		
8	बड़ी बस	3	3	0	
9	माईन्स अवरोधक वाहन (एम.एम.पी.भी.)	6	5	1	
10	बज वाहन	1	1	-	
11	टाटा 709 वाटर टैंकर	1	1		
12	टाटा 407 वाटर टैंकर	1	1	-	
13	कैदी भान	2	2		
14	टाटा ७०९ ट्रक	5	5	-	
	टाटा 1212 ट्रक	3	2	1	
16	स्वराज माजदा (विधि–विज्ञान प्रयोगशाला)	1	1	-	
17	टाटा सुमो एम्बुलेंस	1	1	-	
18	बोलेरो	4	3	1	मरम्मती की प्रक्रिया में है।
19	मार्शल (रक्षक)	7	6	1	मरम्मती की प्रक्रिया में है।
20	टाटा 709 बस	3	3	_	
21	क्रेन	1	1	-	
22	टाटा स्पेशियो	5	1 =	4	मरम्मती की प्रक्रिया में है।
23	इन्भेडर	26	24	2	क्षतिग्रस्त एवं मरम्मती की प्रक्रिया में है।
24	बड़ी एम्बुलेंस	1	-1		
25	बी.पी. 407	1	0	1	क्षतिग्रस्त
	टाटा 4X4	1	1	-	
	स्कार्पियों	2	2	0	भी.आई.पी कारकेड सुरक्षा हेतु
	टाटा सफारी	2	2	-	भी.आई.पी कारकेड सुरक्षा हेतु
29	बी.पी.टाटा सफारी	4	2	2	भी.आई.पी कारकेड सुरक्षा हेतु
30	टाटा 1316 पानी टैंकर	1	1		
31	वाटर कैनन	2	2	0	
	महेन्द्रा जीप	18	18	0	
	इंडिवर	1	1		
34	टाटा सुमो	8	8	0	
35	इन्डिगो	1	1	0	
36	अपाची	6	6	0	
37	ट्रैक्टर	3	3	0	
	योग :	285	257	28	

			Pragya Kedra	Details		-V	
Number of							
LNO.	Muncial/Ward/Block	Pragya Kendra	Location	Contact Person's Kamal kumar Pathak	PHONE NO. 9304767901	Remarks	
	Bishrampur	-	Lalgarh	Santosh kumar	9431776325 8809940599		
2	Bishrampur	<del> </del>	sigsidi Bhandar	Ranjeet kumar pandey	9431770323 6803940399		
	Bishrampur	· -	GurhaKala	Kapildeo Sukla	8051126718 8986850201		
4	Bishrampur Bisrampur	-	Guri	Rayindra Yadav	9631516422 9470307197		
6	Bisrampur	10	Panjari Kala	Navnit Kr. Pathak	7677889146		
7	Bisrampur	-	Baghmanwa	Dayashambhu Ram	8084300952.00		
8	Bisrampur		Ketat Kala	Vishal Kumar	8235906890.00		
9	Bisrampur	1	Ghasidag	Parveen Kumar	9525501102		
10	Bisrampur		Tolra	Anita Devi	8294023288 8969614951		
11	chainpur		Narsighpur pathara	Bhishm narayan	9431556110 9006086140		
12	chainpur		Koshiyara	Gayandhan Kr. Choursiya	9955473806		
13	champur		patariya khurd	Daroga singh	9955175697 9308145833		
14	champur		Awasane	Uday Mistri	8084380825		
15	champur		Chando	Pintu kumar	9973686632		
16	chainpur		Basdih	Ayodhya choudhary	9771379343 9771992705		
17	спаіприг		Basariyakala	Sushma Rani	9771313372 06562219301		
18	chainpur		karso	Balmukund singh			
19	chainpur		Babhandi	Tileshwar singh	9955980298	4	
20	chainpur		Uldanda	Silas oraon	9608508061 8102266356		
21	chainpur		semra	Samim ansari	06586251656 9162747732		
22	chainpur		Banduwa	Krishna Baitha	9939168684 9470505404		
25	Chainpur		Bedma Babhandih	Md. Alamgir Rizwi	9835241661 9608880250	-	
26	Chainpur	- I	Jhariwa	Ibrar Ansari	9693567266 8969495412 8809267798 9661946331	-	
27	Champur	_	Baraw	Smt Mamta Devi		1	
28	Champur	-	Ornar	Sarvan Ojha Vinay Kumar Ojha	9430120015 9386767188	1	
29	Chainpur	25	Mahugawan	Vinay Kumar Ojha Mustaf Ansari	9693716561 9470309495		
30	Champur	35	Bori Khurakala	Gorakh Choudhn	8987439159.00		
31	Champur	-	Burhibir	Manoj Kr Pandey	9931747083.00		
32	Chainpur	-	Nawadih	Dheeraj Kr. Gupta	9973999199.00	-	
33	Chainpur	-	Chainpur	Ravindra Kumar	9507193004 9507006809		
35	Chainpur Chainpur	-	Purabdiha	Anita Devi	9931747083.00		
36	Chainpur	_	Kankari	Manoj Choudhri	8521612384.00		
37	Chainpur	1 -	Chorhat	Chandrashekhar Pathak	9661921671		
38	Champur	<b>.</b>	Sahpur (S)	Md. Naushad	8797581105		
39	Chainpur		Hutar	Shama parveen	9661921671 9006326525		
40	Chainpur		Majhigawan	Saktidhar Swaraj	9546524852 9430732332		
41	Chainpur	1 -	Rabda	Birendra Kr. Choudhri	9471723795 9798222116		
42	Chainpur	1 -	Sahpur(N)	Akash Kumar			
43	Chainpur	1	Salatuwa	Rajarandhir Prasad			
44	Chainpur	1	Bhargawan	Sujit Kumar	9905987301 9835945853		
45	Champur	1 -	Ramgarh	Saddam Hussain	8102871475 7677455105		
23	Champur		Bansdih	Santosh Kr.Singh	9662471496		
24	Champur		Neura	Sanjar Alam	9546524864.00		
46	Chhatarpur		Kauwal	Sunil kumar perjapaty	9470114658 9430347766		
47	Chhatarpur		Chhatarpur	MD UMAR ANSARI	9534190581	4-2-11	
48	Chhatarpur		Khori	upendra kumar yadav	9905712266		
49	Chhatarpur		Chiru	Ravishankar Srivastav	9234067128 9608885989		
50	Chhatarpur		Sushiganj	Mahendra Yadav	8757505517 9661230896		
51	Chhatarpur	-	Kalapahar	Mukesh Prasad	9334651758	-	
52	Chhatarpur	-	Pindrahi	RAHUL PASWAN	7870485980 8864054398		
53	Chhatarpur		Kawal	Birendra Yadav	9608577213 9471753899		
54	Chhatarpur	17	Rudwa	Salima Parveen Israt jaha	9431968947 8235529466 7488335770	-	
55	Chhatarpur	-	Dali	Pramod Kumar	7488335770 8987498852	-	
56	Chhatarpur	-	Murumdag	Sheoshankar Yadav	9905457831		
57	Chhatarpur	- I	Sildag	Akhatar Hussain	8102872252 9798702578	_	
58	Chhatarpur	-	Noudiha	Nirmal Kumar	9905792079 9471165614	1	
59	Chhatarpur	-	Dinadag Cherai-1	ANIRUDH RAM	9430326540 9693376089		
60	Chhatarpur Chhatarpur	-	Mashihani	Md.Mansoor Ansari	9431968947 8235529466		
62	Chhatarpur	- I	Udaygarh	Manoranjan Kr. Singh	8603984624		
63	Haidamagar		Imamnagar Barewa	Jaiparkash Kushwaha	9934762771 9471120055		
64	Haidamagar		Babhandih	Amrendra Kr. Mehta	8294660592 8986679335	1	
65	Haidarnagar	1	Khargara	Sanjay Ram	9661516276.00		
66	Haidarnagar	1	Sadeya	Ravi Kumar Singh	8294110941 9939577828		
67	Haidamagar	100	Haidarnagar(W)	Dhiraj Kr. Singh	9939172722 8084386705	VI CANADA TITLE	
68	Haidarnagar	10	Mokharkala	Md Nawajis Ali	9973669286 9693141820		
69	Haidarnagar		Haidarnagar(E)	Arvind Kr. Singh			
70	Haidarnagar		Bilashpur	Bholanath Sharma	7677839182		
71	Haidarnagar	1	Parta	Sanjeev Kr. Singh	9431969087		
72	Haidarnagar		Choukri	Raviranjan kr. Singh	954118943		
73	Hariharganj		Kharagpur	Deepak kumar	9939891412		
74	Harihargani		Dema	Awadhesh Kr. Mehta	9631379770 06566251668	Negation 1	
75	Hariharganj		Semarwar	BIPIN MEHTA			
76	Hariharganj	7	Kataiya	PRADEEP YADAV	9308661184 9905498420	TI	
77	Hariharganj		Belodar	OK			
78	Hariharganj		Hariharganj(W)	RAJKUMAR PASWAN	9525012310 9572999360	Name of the last	
79	Hariharganj		Sarsot	OK			
80	Huassainabad		jamua	Omperkash yadav	9905505118 9771185360		
	Huassamabad		BeniKala	Aruna Verma	A CONTRACT OF THE PARTY OF THE		

82	Huassainabad		Uprikala	Vikash Kumar mehta	9771803061	
83	Huassamabad		Dewrikala	Munna Kumar	521613282 9576513581 80847374	96
84	Huassainabad		Dewri Khurd	Jitendra Kr. Dubey	9430156696 9162071261	
15	Huassainabad		Kosi	Balendra kumar	9835795879 9471391594	
6	Huassainabad		Pansa	SADDAM HUSSAIN	7677933504	
7	Huassainabad		Jhargara	Kanchan Kr. Gupta	8292203065 8521476330	
8	Huassainabad		Belbigha	Sunil Paswan	7250158410	
9	Huassainabad	19	Lotniya	shweta upadhaya	V	
10	Huassainabad		Mahuary	dharmendra kumar singh		
ii:	Huassainabad		Barawan	Rakesh Kr. Mehta	9471120932 8809165990	
12	Huassainabad		Kurmipur	Purusottam Kumar	9386238695 9835130310	
3	Huassainabad		Pathra	Sanjeev Kr.Singh	7352441344	
14	Huassamabad		Poldih	Chanda Kumari	9973805884	*
15	Huassainabad	1	Urdwar	SHESHANT PASWAN	8972586513 9563238266	
16	Huassainabad	1	Patrakhurd	SANjeev Kr.Singh	8987698325 9334128845	
17	Huassamabad		Dandila	RAJESHWAR YADAV		
18	Huassamabad		Mahudand	ok		
10	Lesliganj		Koat	Sushil Kr. Sukla	9199227796 9122482251	
-		1	Lesliganj	Jitendra Prasad	9162180104	
00	Lesliganj	H	Kundri	Ajay Kumar Mehta	9006895992	
01	Lesliganj	l +				
02	Lesliganj	-	Piprakhurd	Kamal kishore	9939148861 9304624566	
03	Lesliganj	-	Kurain patra	Suraj Kumar	9430129298	
94	Lesliganj		Haratua	Yatish Kr. Giri	9431789095 9835175952	
05	Lesliganj	L L	Oriya	Deepak Kr. Mchta	9308531241 9934379381	
	450.0220.0000	1000	SEE VALUE OF COMMISSION OF COM	WALLES TO THE TAXABLE	9097361366 9097831143	
06	Lesliganj	16	Rajhara	Noorisha khatoon	947036267	
07	Lesliganj		Sangbar	Amresh Kr. Mehta		
08	Lesliganj		Dabra	Naresh pd. Yadav	9905745676	
09	lesliganj		Darudih	Kumari Nitu singh	9835492200	
10	Lesliganj		Naudiha	Binod kushwaha	9661462418 9546997936	
i i	Lesliganj		purandih	Gaurav kumar Jaishwal	9955457534	
12	Lesliganj		Juru	Anuj Kr.jaiswal	9631379778 8986782404	
13	Lesliganj		Jamundih	Nihit Tiwari	9471162541	
14	Lesliganj		Choura	ANIL KUMAR	9162179808 8809875903	
15	manatu		Naudiha	Girendra kumar singh	9801303137 9661484730	
16	manatu		padama	Shialesh kumar	9431650057 9199265816	
17	manatu		Manjhuli I	Mazhar Ansari	9955177503 9934512502	
18	Manatu		Rangeya	Hemant kumar Giri	9934510560	
10	manatu		chak	Ajay kumar Das	9798093450 9470852606	5
20	manatu		Dumari	Kamlesh yadav	9934512090 9973497078	
21	manatu		Bansikhurd	Chandradeo Kumar	9006978028 9572517677	
18	manatu		Pathakpagar	surendra shaw	9973742067	
100	manata	-	i manakpagai	Surcitora shaw	9979478289 9973478289	
m	manatu		sonpurwa	Basisth kumar		
[9	menatu	-	sonpurwa	Basistii kuntai	9934510250 9234056085 9470190912	
20	Manatu	20	Kashmar	Girendra kumar perbhaker	9939518019	
21		F				
	manatu	-	Naughar	Sunil kumar shaw	9631189273 9471147142	
22	manatu	-	Selari	Vijay sharma	9955167275 9661947253	
23	manatu	-	Arka	Ashok kr.Singh	9771847582 9631346495	
24	manatu	-	Tanya	Girendra Singh	9905754968 8809382297	
25	manatu	-	Tarhashi	Anuj Prasad	9534127544	
26	manatu		Gurha	Awedhesh Kr Singh		
27	manatu		Manjhouli-2	Khusbu Kumari	9955529913 9162775360	
28	manatu		Udaypura 2nd	Sandeep kumar Mistry	9939320540	
29	manatu		Goindi	Girendra Kumar		
0.	manatu		Udaypura-1	Sanjay kr.Sah		
22	Medininagar		Lahalahe	Kaushal Kr. Tiwari	9905587705	
23	Medininagar		Polpol	Mithlesh Kr. Singh	9430324657 9504576018	
24	Medininagar		Sarja	Lileshwar Ram	9934513095	
25	Medininagar		Sudna (E)	Sarvan Kr. Mehta	9471585877 06562235281	
6	Medininagar		Suwa/	Arvind kumar singh	9304161264	<del></del>
7	Medininagar		sudana (W)	Punam Devi	06562235143 9631668296	
8	Medininagar		chiyanki	Narendra kumar mehata	6562235096 9308140259	
9	Medininagar		Baralota(S)	Manoj Kumar Ram	9608348735	-
10	Medininagar		Baralota(S)	reshma Kumari	9304361602	
1	Medininagar	18	Singrakhurd	Manoj Kr Ram	The state of the s	
2	Medininagar	-	pokharaha	Premchand Ram	9576108644 9905507564	
					9973818630	
3	Medininagar	-	Jorh	Hemant kumar Verma	8000110111	
4	Medininagar		Jhabar	Sohrab Ansari	9939168557.00	
5	Medininagar		Jamune	Birendra Kr. Saw	9835332373.00	
6	Medininagar		Redma (N)	Wokil singh		
7	Medininagar		Rajwadih	AchyutaNand Tripathi	9199054664	
8	Medininagar		Redma (S)	saddam hussain ansari	8603236841 9304132320	Carrier Carrier
9	Medininagar		Kouriya	Kumari Anjana Singh	8002752518 9798155677	
1	MOHMMADGANJ		Goradih	Ajay Singh		M.
2	MOHMMADGANJ	3	Mohammadganj	Raviranjan Singh	7631087100 9534118943	
3	MOHMMADGANJ		Pansa	Saddam Hussain		Ų.
10.	Nawabazar	1	Basna	Manoj Kumar Pandey	8102563181.00	
1	Nawabazar		Itko	Aftam Alam	9431143720 9835944623	-6
2	Nawabazar		Kanda	Sumant Kr.Mehta	9798939705	
	Nawabazar	7	Rabda	Anuradha Kumari	9693801193.00	
3	Nawabazar	100	Shohdag khurd	Anju Kumari	9471119857 9852906546	
	i very autocatali		Tukbera	Chandan kumar prajapati	8083164853 9771849421	
4	Namaharar		a unoted	Community Kumar prajapati		
4	Nawabazar	-		Dhaning burner	0430740240 066622200606	
5	Nawabazar		Rajhara	Dhanjay kumar	9430740240 06562290596	1
13 14 15 16 17				Dhanjay kumar Md.Faizul Haque Rashid Birendra Yaday	9430740240 06562290596 521986707 9334660048 969325781 9905926862	1

249	Noudihabazar		Nawataar	Irshad Ansari	and the second s	
250	Noudihabazar	1	Bisunpur	Ravindra Yadav	9576568537	_
251	Noudihabazar	9	Dagra	Anup kumar		
252	Noudihabazar	* H			9798350461 9905819100	
		-	Karkatta	Akhtar Ansari		
253	Noudihabazar		Taridih	Ramnandan Ram	9693712229 9430181009	
254	Noudihabazar	L	saraidih	Sanju kumari	09529147411 9798117387	
255	Noudihabazar	the same of the sa	Lakhamipur	Sanjay kumar mali	9308988467 9471508907	-
140	Pandu		Mahugawan	Kanhain pd soni	9308077980	
141	pandu		sildili	Dhermendra kumar shahu	9162707338 9801163048	_
142	pandu	3	pandu	surendra kumar pandey	9334134637	_
143	pandu	-			The state of the s	_
143	pandu	-	Ratnag	Shiv pujan kumar	6560279504 9431567045	
25200	501	20 /			9162723245 9097491324	
144	pandu	10	kutmu	Deepak kr. Bharati	93044388601	
145	Pandu		Kajrukala	Nawz Ahamad	8002312787 9973818745	
146	Pandu		MusiKhap	Premshankar Singh	9955159680 9661269230	
147	Pandu		Fuliya	Ramdat Pal	9835962691	_
148	Pandu	-	Dalakala	Meera Devi	7055702071	
149	Pandu	-	Tisibarkala			
				Satish Kumar		
150	Pandwa	-	Lohara	Govind Ram	9955176031	
				4-2-22	6560289426 9771803700	
151	Pandwa	4	Pandwa	Budhan Mahto	9973819100	
152	Pandwa		Murma	Awdhesh kumar mehata	9771304405 9973674591	
153	Pandwa	8	Lamipatra	Omkar nath	6562290193 9471127582	_
154	Pandwa	-	Chechhori	Deelip kumar		_
		-			6562290650 9308658974	
155	Pandwa	_	majhigama	Awdhesh prasad	9955365447	
156	Pandwa		Garikhash	Vidayanand singh	8521478677	-10
157	Pandwa		Kajari	Rajesh Viswakarma	8877137816 7277489694	
158	panki		Tetrai	Rupesh Kumar	9801333825	
159	panki		Nuru	Kanhiya kumar	9430347790	
160	Panki	-	sagalim	Satyendra Singh	8969062387	_
161	Panki	-	Dhub			
			The state of the s	Bachandeo kumar mahato	9934378046 993935041	
162	Panki	-	Konwai	Rakesh Kr. Singh	9955472808	
163	Panki		Hurlong	Birendra kumar	6560219065 9955177078	
164	Panki		Dandar Kala	Upendra Kumar	9931174062	
165	Panki		Maran	Anita Devi	9973813824 9939386313	
166	Panki		Ashehar	Rajeshwar Saw	9931386920	
167	Panki		panki west	Rajeev kumar	9470584886 9955154915	_
168	panki	-	Pagarkhurd	Shatish kumar singh		
		-			9430127388 9006150867	
169	Panki		Lohersi	Asif Ansari	9631994527 9973993353	
170	panki	25	Ambabar	Deonandan Pd. Yadav	9162169652 9546095732	10
174	panki		Suri	Manoj Kumar		
172	panki		Pakariya	Anurada Devi	9576543749	
173	panki		Hotai	Prem Kumar		-
174	panki	-	Ratanpur	Sursh Kr. Verma	8800202721	_
175		-			8809392731	
	panki	_	Sakaldipa	Premchand Kr. Dangi	8757275707 8002222654	
176	panki	_	Karar	Santosh Kr. Gupta	9608211166	
177	panki	-	Panki(W)	Umesh Kumar		
178	panki		Naudiha (mangalpur)	Aftab Alam	7677719020 7654545042	
179	panki	100	Kelhwa	Ataullah Ansari	9955764324 8651277441	
180	panki		Noudiha (Bahera)	Asgar Ansari	9006977497 9973679118	_
181	panki		Taal	Rajmani Singh	8873500678 9472749341	_
182	panki					_
			Kekargarh	Navjivan Kr. Yadav	9430114053 9835371428	
183	Patan		Naudiha	Shachidanand singh	9334999945 9835183841	
184	Patan		meral	Amrendra Mehata	9973842330 9334860355	
					9471512744 9470594691	
					9939518038 9334716233	
185	Patan		Kishunpur	Ravindra Prasad	9334971006	
186	Patan		Mahuliya	Birendra kumar	9308199090 9631819620	_
187	Patan		Rudidih	Abhimanau Kumar		-
_		-			90977226650	
188	Patan	7	kashwakhar	Amresh Kr. Mehta	9934607138 9973819709	
189	Patan		Saguna	Ranjeet kumar singh	9097069719 9308421242	
190	Patan		sutha	Dhermendra couhan	9905300410 9471389110	
191	patan		semari	Dhanjay kumar	9608546047 9308071288	
92	Patan		Janhasi	Ravindra Kumar	9771304021 9608110436	_
		22			8051040937 9835944065	
195	Patan		Pachkeriya	Control Longe		
				Sujit kumar	9608505710	
96	Patan		Kankekala	Anup kumar	9334841264	
97	patan		Nawakhash	Birendra kumar	9835120234	
98	Patan		Loinga	Ranjana kumari	9471742970.00	
199	Patan		Hisra barwadih	Kamlesh Kr. Saw	9973674634.00	_
200	Patan		Satauwa	Umakant Singh	8051122585 9973284340	-
201	Patan		Sirma	Vibhashranjan Singh		_
202	Patan	-	Showaley		9504116503 9006084227	
	111111111111111111111111111111111111111	-		Nawalkishore Singh	8986851705 9955087731	
203	Patan	51	Palhekala	Sunil Singh	9431786160	
04	Patan	1911	Kelhar	Deepak Prasad	9798060357	
93	Patan		Utakki	Kamlesh kr. Mehata	9430130474 7631018317	
94	Patan		Raihara	Sudhir kr. paswan	9905195184 9308025852	_
05	PIPRA		Madhubana	SATYENDRA PD. YADAV	8809611776	_
06	PIPRA	3	Dalpatpur	Sunil Kumar		
907	PIPRA	-			9470462517 8804242430	
			Babhandih	Ashok Kr. Sexena		
08	Satbarwa		Ghutuwa	Raviranjan Singh	9386351025 9471126632	
	2.500			3	9097349491 9905333006	
	Satbarwa		Rabda	Mahesh kumar	9905585692	
	A CONTRACTOR OF THE CONTRACTOR					
209	Satharwa		Dulsulma	Sharwan kumar Mistry	94307419044	
	The state of the s		Dulsulma	Sharwan kumar Mistry	94307419044 9770989974 9835327913	_

212	Satbarwa	10	Satbarwa	Pankaj Kr Gupta	9334858969 9905588978	
213	Satbarwa		Bohita	Amardayal Singh	9430219970	
214	Satbarwa	i E	Ponchi/	Arun Kr. Ravi	9430324382	
215	Satbarwa		Bari	Niwas thakur	9798111018 9470581682	
216	Satbarwa		Bakoriya	Bhola Prasad	9097303625 9852863112 9430397862	
217	Satbarwa		Rewaratu	Visnudeo Oraon	9905588850.00	
234	UTARIROAD		LumbaSatbahini	Ashok Ram	8292866533	
235	UTARIROAD		Labar Banjari	Parsant Kumar	9431147868 9576146848	
236	UTARIROAD		MurmaKhurd	Ambedkar Kumar	8102689483 8102689404	
237	UTARIROAD	6	Murmakala	Sabita Dubey		
238	UTARIROAD		Joga	Manoj Kr. Pal		100
239	UTARIROAD		Karkatta	Awdhesh Mehta		

## 6. Drinking Water and Sanitation Department

#### DRINKING WATER AND SANITATION DEPARTMENT

Name of Executive Engineer:- Sri Shashi Shekhar Singh Mobile No- 8235018964

Email Id- eedwsd.medininagar@gmail.com

#### 1. Drinking Water Source

SL NO	NAME OF CITY/BLOCK	NO OF BORE WELLS	NO OF OPEN WELLS	NO OF PWS	OTHER URBAN/SEMI URBAN WSS	NAME OF AREAS WATER BEING SUPPLIED	REM
1	2	3	4	5	6	7	8
1	Medininagar	1165	9	2	1	Medininagar	
2	Satbarwa	734	7	5	0	Satbarwa	
3	Chainpur	2545	32	56	0	Chainpur	
4	Patan	1384	41	1	0	Patan	
5	Padwa	424	22	0	0	Padwa	
6	Bishrampur	679	42	2	0	Bishrampur	
7	Nawa Bazar	353	36	8	0	Nawa Bazar	
8	Pandu	596	20	4	0	Pandu	
9	Untari Road	153	12	2	0	Untari Road	
10	Panki	1616	29	1	0	Panki	
11	Manatu	392	30	0	0	Manatu	
12	Tarhasi	737	28	1	0	Tarhasi	
13	Lesliganj	1326	35	11	0	Lesliganj	
14	Hussainabad	1078	0	7	1	Hussainabad	
15	Haidarnagar	604	8	2	0	Haidarnagar	
16	Mohammadganj	412	12	0	0	Mohammadganj	
17	Chattarpur	1121	9	2	. 0	Chattarpur	
18	Nawdiha Bazar	612	3	0	0	Nawdiha Bazar	
19	Hariharganj	716	7	8 .	0	Hariharganj	
20	Pipra	430	6	9		Pipra	
	Total:-	17077	388	121	2		

Jharkhand Disaster Management Authority



#### DISASTER MANAGEMENT PLAN

DOC NO. : DMP ISSUE NO. : 02 REV.NO. : 08 DATE : 01.07.

DATE : 01.07.2013 PAGE NO. : Page 30 of 45

#### Flow of Information from affected area ( On site or Off site )

CAUSTIC PLANT CONTROL ROOM (2401/2402)/Mob No- 9507039597

Power Plant Control Room Hot Line Mob. No. -9708037599 R D Sao - (9507039403) M D Pathak - (9507039411) Unit Head - (9507036183)

Main Gate 2232 2242

ANNEXURE-1

#### **Emergency Management Staff**

#### Emergency Control Centre (2232/2242)

R D Sao - (Mob. 9507039403) M K Sinha - (Mob. 9507039402) Shatrughan Singh - (Mob. 9507039410)

Site Controller - Chlorine S N Singh Bharmar 9939524447 Ashok Singh (9546517898) Arun Kumar (9576490802) Tejveer Singh (9955476499) P P S Yadav (9507038100)

P P S Yadav (9507038100) R N Upadhyay (Operator) Bhagwan Singh (Fitter) U P Singh (Operator) Hemant Kr. Sinha (Operator) Narendra Dubey (Operator) Site Controller –Fire Jaipal Singh (9939607218) Mukesh Choubey (9693765400) Balram Pandey Asharfi Oiha

Narendra Mishra (9507036200) R N Vishkarma (Fitter) Rabindra Tiwari (Operator) Arun Kumar Jha (Fitter) Md Mustafa (Operator) S B Tiwari (Chemist) A N Tiwari (Asstt Engr) Radheshyam Sharma (Fitter) B P Shahi (Operator)

Site Controller -Reserve

P N Pathak (9955160049)

#### **Hospital Services**

Dr. Santosh(9931516115) Dr. Rajesh (7654485504) Vijay Kr. Singh (9939358935)

Paramedical Staff

#### School Services

S N Singh -Principal (9708039398) Sumant Mishra

U P Singh A K Dutta (9801340454) (Supportive team) Aseem Gupta (8969121930) Amamath Jha

P K Deo (9973682235) Dukhan Choudhary

Technical Services

#### Controller Assembly Point - 1 (ADM Building)

H K Panda (9507036131) Brijesh Kr.(9507039408) Rajesh Rathi Administrative support & Rescue

M D Pathak (9507039411) Rescue team members Controller Assembly Point – 2 (Service Building) lgbal Khan(9507039407)

lqbal Khan(9507039407) S B Samal (8092522037) Sunil Kumar Singh

Mr. N K Pandey, Mr. R K Pathak, Mr. B P Pandey & Mr. P S Dwivedi will reach to respective control rooms to ensure necessary operation in co-ordinations with ECC. Effected area members of Site controller - chlorine will control / handle the emergency and coordinate to ECC for help. Others to remain alert at their site.

Jharkhand Disaster Management Authority

## Name of District Animal Husbandry Officer: Dr. Dayanand Prasad

Mobile No.: 9430379019, Landline No.: Nil, Fax No.: Nil, e-Mail ID:

ahdplm@gmail.com

Sl. No.	Name of Veterinary Hospitals/Centers	Location	Contact No.	Name of Doctor- in- charge	Animal admission Capacity (in No.)	No. of Vehicles	Specialisation/ Facilities		
1	2	3	4	5	6	7	8		
	DISTRICT VETI	DISTRICT VETERINARY HOSPITAL / PRIVATE HOSPITAL :							
1	State Veterinary Hospital, Medininagar	Medininagar	8083186403	Dr. Dilip Kacchap	10 & OPD	-	Treatment, Castration, Vaccination & A.I.		
2	Pet Clinic	Medininagar	8083186403	Dr. Dilip Kacchap	10 & OPD	-	Treatment, Castration, Vaccination		
	VETERINARY H	IOSPITAL AT	BLOCK LEV	EL:					
1	Class-I Vet. Dispensary Chainpur	Chainpur	9431275557	Dr. Sanjeev Kumar	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination & A.I.		
2	Class-I Vet. Dispensary Satbarwa	Satbarwa	9835341366	Dr. Binay Kumar	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination & A.I.		
3	Class-I Vet. Dispensary Lesliganj	Lesliganj	8873869382	Dr. Sangeeta Kumari	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination & A.I.		
4	Class-I Vet. Dispensary Patan	Patan	8873869382	Dr. Sangeeta Kumari	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination & A.I.		
5	Class-I Vet. Dispensary Panki	Panki	9430753755	Dr. Alfred Minz	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination & A.I.		

Jharkhand Disaster Management Authority

			133					
6	Class-I Vet. Dispensary Manatu	Manatu	9835341366	Dr. Binay Kumar	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination A.I.	&
7	Class-I Vet. Dispensary Nawa Bazar	Pandwa	9430753755	Dr. Alfred Minz	3 & OPD	Nil	Treatment, Castration, Vaccination A.I.	&
8	Class-I Vet. Dispensary Bishrampur	Bishrampur	9431373732	Dr. Prethvi Ram Mardi	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination A.I.	&
9	Class-I Vet. Dispensary Mohammadganj	Mohammadganj	9431373732	Dr. Prethvi Ram Mardi	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination A.I.	&
10	Class-I Vet. Dispensary Chhattarpur	Chhattarpur	9431373732	Dr. Prethvi Ram Mardi	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination A.I.	&
11	Class-I Vet. Dispensary Hariharganj	Hariharganj	9431373732	Dr. Prethvi Ram Mardi	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination A.I.	&
12	Class-I Vet. Dispensary Haidarnagar	Haidarnagar	9431275557	Dr. Sanjeev Kumar	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination A.I.	&
13	Class-I Vet. Dispensary Hussainabad	Hussainabad	8873281457	Dr. Jyoti Minz	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination A.I.	&
	VETERINARY H	IOSPITAL AT 1	PANCHAYA	T OR VIL	LAGE LE	VEL:		
1	Class-I Vet. Dispensary Babhandi	Babhandi	9431275557	Dr. Sanjeev Kumar	3 & OPD	01 Motor Cycle	Treatment, Castration, Vaccination	
2	Class-I Vet. Dispensary Cherai	Cherai	9431373732	Dr. Prethvi Ram Mardi	3 & OPD	Nil	Treatment, Castration, Vaccination	
3	Class-I Vet. Dispensary Kisunpur	Kisunpur	8873869382	Dr. Sangeeta Kumari	3 & OPD	Nil	Treatment, Castration, Vaccination	
	MOBILE VETER	RINARY MEDIC	CAL UNITS	<u>•</u>				
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil	

	PRIVATE VETERINARY HOSPITALS:						
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Sl. No.	Details	No. of Government Veterinary Hospital	No. of Private Veterinary Hospital	Total
1	Number of Veterinary Hospital	17	0	17.00
2	Bed Capacity	58	0	58.00
3	Number of Veterinary Doctor	7	0	7.00
4	Number of Veterinary Paramedicals.	15	12	27.00



#### Drought:

- Don't waste water.
- Prepare means of rain water harvesting.
- Do something to maintain the under-ground water level

#### Forest Fire:

- Avoid using the inflammable material in jungle.
- Don't leave your leftover behind you in jungle.

#### Naxalism:

- Inform the police and rapid action force immediately in case of any attack.
- Immediately look out for some safety places to hide.
- Prepare your first-aid kit ready.



### **Helpline number:-**

Fire Brigade – 101 Ambulance -108 Police Control Room- 100

Jharkhand Disaster Management Authority