

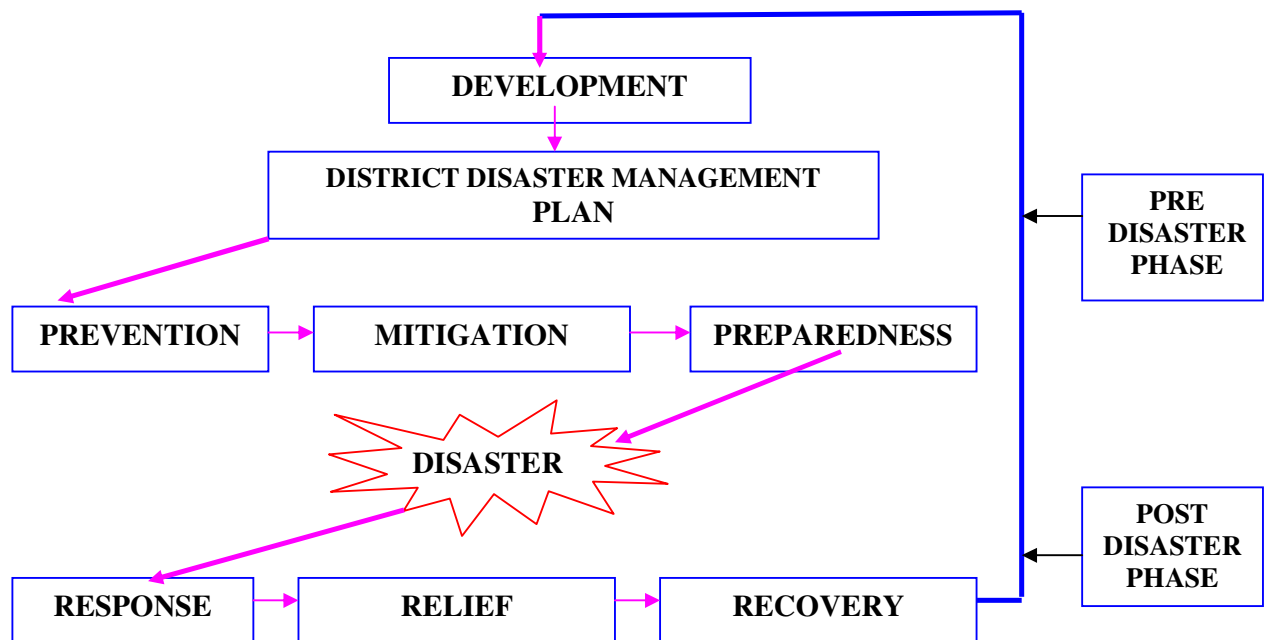
CHAPTER - 1

Multi-Hazard Disaster Management Plan:

1.1 Introduction

The present District Disaster Management Plan (DDMP) is a revised form of the earlier District Contingency Plans. A pressing need was felt for vast improvement of the existing District Contingency Plans and strengthening of information hubs at different places to manage any eventualities. District Disaster Management Plans are also useful at pre-disaster stage, when warnings could be issued, for example that floods are imminent. The plan again serves as a guide to officials at the critical time and precious time is saved which might otherwise be lost in consultations with senior officers and getting formal approval from authorities. As it is neither economical nor practicable to protect every item and the entire population against calamitous situations, response plans are formulated for relief, rehabilitation and restoration by separate agencies. **District Disaster Management Plan-2010** is an operational module for the district administration on how to mitigate the different types of disaster effectively with the locally available resources and personnel and to provide the distressed people with immediate relief. It also ensures a checklist for all the stakeholders for an action oriented response structure and to study their preparedness level.

Chart Representation of the DDMP



1.2 Disaster – An Overview

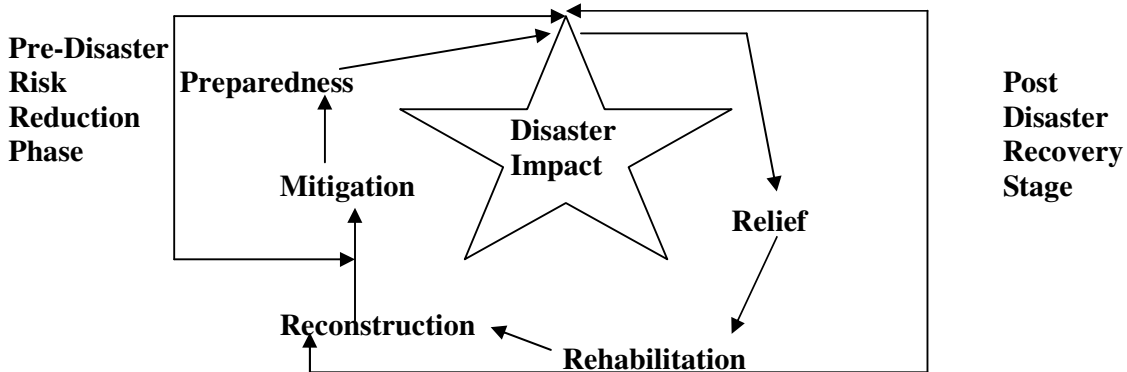
DISASTER: - “A Serious disruption of the functioning of a society, causing widespread human, material, or environmental losses which exceed the ability of the affected society to cope using its own resources.”

“The occurrence of a sudden or major misfortune which disrupts the basic fabric and normal functioning of a society (or community).”

Type of Disasters: -	Natural	&	Man Made (Broadly)
Natural Disasters: -	Earthquake	Man Made Disasters: -	Road Accident
	Flood/Heavy Rain		Rasta Roka
	Cyclone/Hailstorms		Communal Violence
	Drought		Hartals,
	Heat Wave		Riots
	Landslides		Pollution
	Forest Fire		Chemical
	Pest Infection		Railway Accidents
	Lightning		

The disaster history of Khordha clearly shows that the district is most affected by Cyclone, Flood, Drought, Heat Wave, Lightning and Fire accidents.

DISASTER PHASE CYCLE:



DEFINITION OF NATURAL CALAMITY:

Disaster means a catastrophe, calamity or mishap, a grave occurrence, which causes loss of life, human suffering, damage to and destruction of property, and/or degradation of environment and/or which disrupts the normal functioning of societies, Government and/or communities and/or adversely affects individuals and families with severity and its includes any or more of the occurrences. 30 odd types of disasters have been identified and the same have been grouped into five categories.

1. Water and climate related disasters- drought, flood, cyclone, heavy rains, tidal disasters, gale wind, whirlwind, tornado and hailstorm etc.
2. Geologically related disasters- earth quakes volcanic eruption.
3. Chemical, Industrial and Nuclear related disasters.
4. Accident related disasters.
5. Biologically related disaster.

NATURAL CALAMITY UNDER CRF Norms : Cyclone, Drought,Earthquake, Fire,Flood, Hailstrom, Tsunami,Landslide,Avalanche,Cloud Brusts & Pest Attacks

CHAPTER - 2

Overview of the District

2.1 Location, Area and Administrative Division

Location of Khordha:

The erstwhile Puri district was divided to form three new districts in April 1993 and as a result Khordha district was formed taking Khordha & Bhubaneswar sub-divisions of Puri district. This district lies between north latitudes 19⁰ 40' to 20⁰ 27' and east longitudes 84⁰ 56' to 86⁰ 05' covering an area of about 2813 Sq.Kms. It is bounded in the north and northeast by Cuttack district, on the west and southwest by Nayagarh district and Ganjam District, on the southeast by Chilika Lake and Puri District.

❖ Location	:	19 ⁰ 40' to 20 ⁰ 27' North 84 ⁰ 56' to 86 ⁰ 05' East
❖ District Headquarter	:	Khordha Town
❖ Geographical Area	:	2813 Sq Kms.
❖ Forest Cover	:	50936.56 Hect
❖ Population	:	18,74,405
❖ Male Population	:	986,003
❖ Female Population	:	888,402
❖ Sex Ratio	:	901
❖ Rural Population	:	1,069,630
❖ Urban Population	:	804,775
❖ Number of Sub-Divisions	:	2 (Khordha & Bhubaneswar)
❖ Number of Blocks	:	10
❖ Number of GPs	:	168
❖ Number of Revenue Villages	:	1567
❖ Number of Tehsils	:	10
❖ No of Parliamentary Constituency :	:	02
❖ No of Assembly Constituency :	:	08
❖ Literacy Rate	:	80.19 %
❖ Male Literate	:	769,202
❖ Female Literate	:	555,690

- Population data as per 2001 census of India.

2.1.1 Area and Administrative Divisions:

The District of Khordha is divided into two administrative Sub-Divisions namely (i) Bhubaneswar Sub-Division with head quarters at Bhubaneswar (ii) Khordha Sub-Division with head quarters at Khordha. Besides the district is divided into 10 Tehsils, 10 CD blocks, 168 Grampanchayats, 1567 Villages, 23 Police stations. Out of the total village 212 are uninhabited village. The district Headquarter is located at Khordha Town.

Sl.No	Name of the Subdivision	Headquarters	Number of Blocks	Name of Tehsils
1	Bhubaneswar	Bhubaneswar	Balianta, Balipatna, Bhubaneswar, Jatni	Balianta, Balipatna, Bhubaneswar, Jatni
2	Khordha	Khordha	Begunia, Khordha, Bolagarh, Banpur, Chilika, Tangi	Begunia, Khordha, Bolagarh, Banpur, Chilika, Tangi

2.2 Geology

Natural Resources:

Land:

The District of Khordha has Geographical area of 2813 Sq.Kms. Based on the physiographic setup; the district may be broadly divided into four natural divisions, such as (a) coastal sand dunes, (b) alluvial plain, (c) Lateritic upland and (d) Hilly terrain.

2.3 Forests

Khordha district is having 298.91 sq km of reserve forest and 209.87 sq km of demarcated protected forestland.

2.4 Climates and Rainfall:

Climate

The climate of the district is characterized by a tropical monsoon having three distinct seasons in a year i.e. winter, summer and Rainy season. The rainfall distribution is equal during the monsoon period. The summer is from March to May and during the month of May; temperature goes up to 41-47 °C in some parts of the district. The period from June to September is the rainy season and the district gets it from the southwest monsoon. The relative humidity varies from 48 to 85 % at Bhubaneswar. The wind speed is fairly strong during summer and monsoon months and the direction is between southwest and south.

Rainfall

The normal rainfall of the district is 1443.00 mm. The rainfall is uniform in all over the district. Storms and depression, which originate in the Bay of Bengal during monsoon, passed over the district during their southwest movement and cause heavy rains in the catchments area of the rivers in the district.

2.5 Socio-Economic Features

The economic condition of the district is ordinarily affected because of the continual visitation of natural calamities like: flood, cyclone and drought, Heat wave, causing devastation in the fertile region as well as loss of lives and properties in some parts of this district every year. About 65% of the population in the district live in rural areas and depend largely on agriculture for their livelihood, which controls the socio economy of the district.

2.6 River Systems and Dams

The district is drained by number of streams, which are mostly the tributaries and distributaries of Mahanadi River and a few other streams discharging into the Chilika Lake. The important

distributaries and sub-distributaries of the river Mahanadi traversing the area are Kuakhai, Bhargavi, Kushabhadra and Daya having southerly, southeasterly and south-westerly courses. The tributaries of the river Mahanadi originating in the district are Rana and Kalijiri having almost northerly course. The streams which drain the southern part of the district and fall directly into Chilika Lake are Sulia, Kharia & Kusumi which flows towards east. Almost all the streams in the district are effluent in nature and drying up during summer months but causing frequent floods in the rainy season. The low lying areas adjoining the Chilika Lake are inundated by the lake during monsoon as rivers discharge large volumes of water into it.

The District is mainly covered by the following rivers.

SI No.	Name of Rivers	Areas Covered
1	Kuakhai	Bhubaneswar Block
2	Bhargavi	Baliana & Balipatna Block
3	Budunai	Bhubaneswar Block
4	Daya	Bhubaneswar Block
5	Kushabhadra	Baliana Block
6	Malaguni	Khordha Block
7	Rana	Begunia & Khordha Block
8	Kusumi	Tangi Block

(i) KUAKHAI:

River Kuakhai originating as a branch of Mahanadi enters Bhubaneswar Block area from the north near Jhinkardiha and Marichia village of Dadha G.P. and flow touching the eastern boundaries of Kalyanpur, Barimunda, Basuaghai and Sisupal G.P. and passes amidst Mancheswar. During flood the excess water from Kuakhai River submerged Jhinkardiha, Marichia and some parts of Gandarpur village. It even affects Mancheswar Bhoisahi if the flood is very severe. Excess water over flowing Mancheswar escape over river Kuakhai completely submerges the paddy field of Mancheswar and Barimunda G.Ps. and maroons Singada, Rokata and Krushnaranapur villages.

(ii) BHARGAVI:

The River Bhargavi passes through some village of Baliana Block. The river affects a part of Baliana and Balipatna blocks during flood.

(iii) BUDUNAI:

It originates from the forest and hilly tracks of Chandaka and flows through Daruthenga G.P. near Alasua, Raghunathpur, Kalarahanga and Barimunda G.Ps. and finally merges into river Kuakhai near Jaripatna. Excess water flowing through Budunai flows over Nandanakanan-Jaripada road. Communication is cut off during heavy rains and flood.

(iv) DAYA:

The river Daya takes off from river Kuakhai at Saradeipur and runs towards a few miles and then makes a sharp turn West ward for four miles and after that continues its course outwards; the rest of the length emptying itself into the north eastern corner of the Chilika lake, 37 miles from its take off place.

(v) KUSABHADRA:

Kusabhadra leaves the river Kuakhai at Baliana and flows in the South-Western direction for 46 miles till it enters the Bay of Bengal near Ramachandi temple, 15 miles East of Puri. The mouth of Kusabhadra below Ramachandi is free from lid. The river bed is shallow resulting in low discharge at the time of heavy flow. The river Dharua with its tributary brings a large volume of water to Kusabhadra.

(vi) MALAGUNI :

It runs through Khordha Tahasil. This is more or less a hill stream and badly affects some portions of Khordha, Chilika and Tangi blocks during flood.

(vii) RANA :

The river Rana rises in Khordha Sub-division and eventually joins the river Mahanadi after flowing through Banki Tahasil in the district at Cuttack. An area of 27 Sq. Kms. (some portions of Begunia and Khordha blocks) is inundated by the backwater of this river when Mahanadi is flooded.

(viii) KUSUMI:

This river affects some villages of Tangi Block during flood. Thus floods have become endemic in the district and call for effective pre-flood measures, flood relief operations and post flood arrangements.

Danger level at different Locations:

Sl. No.	Name of river Embankment	Name of gauge stations	Zero value of gauge in the meter	Danger level	Name of Irrigation Division
01	Kushabhadra Right Embankment.	Jogisahi	14.55 M	17.44 M	Nimapara
02	-do-	Sisumatha	10.81 M	15.08 M	-do-
03	Bhargavi left Embankment.	Achyutpur	10.92 M	13.26 M	-do-
04	Kusabhadra left Embankment.	Balianta	14.146 M	18.25 M	Prachi
05	-do-	Rama Chandrapur	14.306 M	17.28 M	-do-
06	-do-	Jalahata	11.08 M	13.45 M	-do-
07	Daya Right Embankment.	Daya Bridge to RD 00	11.13 M	16.34 M	-do-
08	Malaguni	Golabai (Railway Bridge No.702)	4.87 M	7.77 M	Khordha
09	Kusumidhar	Road bridge at Satasankha at N.H. 5	8.95 M	12.74 M	-do-
10	Chilika lake	Mangalajodi	0.70 M	1.98 M	-do-
11	Hada on Bridge	SH 1 Bridge	64.28 M	67.28 M	-do-

These are the different locations where danger levels can be identified in the shortest possible time limits. The reporting Authority is their respective irrigation division.

2.7 Transports and Communication Network

Bhubaneswar the state capital is well connected by Roads. The National Highway No.5 passes through the district. Besides National Highway No 224 connecting Khordha and Nayagarh also passes through this district. All the blocks were connected by roads with the district headquarters. Howrah- Chennai Railway line of East Coast Railway passes through the district.

CHAPTER – 3

Risk Assessment & Vulnerability Analysis

Disaster Specific History of Khordha District (since 1995)

YEAR →	1995 - 96	1996-97	97 - 98	98 - 99	99 - 2000	2000 - 01	01 - 02	02 - 03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	
CYCLONE																
Families Affected	4605	2	NIL	NIL	826353	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
Villages Affected	489	2														635
Human Casualities	5	2														106
Animal Lost	nil	Nil														91931
No of House Damaged	4605	2														134730
Value of property Lost(In Rs)	21,27,00.00															88,66,42,010.00
FLOOD/ HEAVY RAIN																
Families Affected	17290	Nil	5838	Nil	Nil	Nil	681814	Nil	74830	Nil	56476	131425	NIL	12219	Nil	
Villages Affected	791		942				1129		612		193	1100		152		
Human Casualities	4		nil				1		2		Nil	1		2		
Animal Lost	49		nil				19		1079		Nil	Nil		9		
No of House Damaged	17290		5838				567		6298		1075	1104		2278		
Value of property Lost(In Rs)	82,97,10,0.00		99,77,000.00				748335000		4874000		3035000	7312200		1442 Lakhs		
DROUGHT																
Persons Affected	Nil	1378422	Nil	Nil	Nil	Nil	Nil	316126	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
Villages Affected		1155						708								1187
Human Casualities		Nil						Nil								Nil
Animal Lost		Nil						Nil								Nil
No of House Damaged		Nil						Nil								Nil
Value of property Lost(In Rs)		Nil						Nil								Nil
Value of Crop Loss(In Rs)		75,39,56,000.00						370795000.00								6157 Lakhs

Prepared by : Emergency Operation Centre, Khordha

District Disaster Management Plan-2010
For official circulation only

YEAR	1995- 1996	1996-1997	1997- 1998	199 - 1999	1999 - 2000	2000 - 2001	01 - 02	02 - 03	03 - 04	04 - 05	05-06	06-07	07-08	08-09	09-10
FIRE ACCIDENTS															
Persons Affected	792	1320	694	934	949	278	801	1184	739	801	4100	2890	2120	1810	1953
Villages Affected	191	320	220	237	214	216	226	282	251	NA	240	88	217	186	217
Human Casualities	Nil	2	Nil	6	4	Nil	Nil	1	Nil	1	Nil	4	0	0	0
Animal Lost	Nil	Nil	nil	3	7	Nil	Nil	Nil	8	24	Nil	Nil	0	4	0
No of House Damaged	964	236	650	1137	501	216	805	1464	251	1128 Houses	34	578	713	186	813
Value of property Lost(In Rs)	44,77,06,4.00	15185900	7730600	8671550	12141112.00	8161150.00	8349100.00	9505700	37179300	13255100	10870400	7868875	82'29000	837500	12889000
SUNSTROKE															
Persons Affected				71				1	2	3	39	1	5	6	16
Human Casualities	Nil	Nil	Nil	71	Nil	Nil		1	2	3	39	1	5	6	16
LIGHTENING															
Persons Affected	5	6	19	10	4	13		6	10	12	10	6	6	8	13
Human Casualities	5	6	19	10	4	13		6	10	12	10	6	6	8	13
Animal Lost	Nil	3	Nil	Nil	Nil	Nil		Nil	Nil	Nil	Nil	76	0	0	Nil
No of House Damaged	Nil	Nil	Nil	Nil	Nil	1		Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Value of property Lost(In Rs)	Nil	Nil	Nil	Nil	Nil	Nil		60,000.00	Nil	Nil	Nil	Nil	Nil	Nil	Nil

* Source : Annual return on Natural Calamity .

3.1 Hazard Prone Months :

Type of Hazards	JAN-MAR				APR-JUNE				JULY-SEPT				OCT-DEC			
	H	C	A	I	H	C	A	I	H	C	A	I	H	C	A	I
FLOOD									←	←	←	←				
CYCLONE									←	←	←	←	←	←	←	←
DROUGHT					←	←	←	←								
HEAT-STROKE					←	←	←	←								
EARTHQUAKE	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
EPIDEMICS					←	←	←	←	←	←	←	←				

H - Human, C - Crop, A - Animal, I - Infrastructure

3.1.1 Disaster Probability

Sl.No	Type of Disasters	Time of Occurrence	Potential Impact/Probable Damages	Vulnerable Areas
1	Flood	June - September	Crop, Human, Animal, Infrastructure loss	Balianta, Balipatna, Bhubaneswar, Jatni Block & some parts of Khordha, Tangi, Chilika, Banpur, Begunia, Bolagarh Block.
2	Cyclone	May - December	Crop, Human, Animal, Infrastructure loss	<i>Entire District</i>
3	Drought	April - June	Crop loss	Bhubaneswar, Jatni, Khordha, Tangi, Chilika, Banpur, Begunia, Bolagarh Block.
4	Sunstroke/Fire	April - June	Crop, Human, Animal, Infrastructure loss	<i>Entire District</i>
5	Earthquake	Jan - December	Crop, Human, Animal, Infrastructure loss	Entire District
6	Epidemics	June - September	Human & Animal loss	Entire District
7	Lightening	April -December	Human, Animal, Infrastructure loss	Entire District

3.2 Risk Assessment vs. Probable Blocks

TYPE OF HAZARD	POTENTIAL IMPACT	VULNERABILITY	VULNERABLE AREAS (BLOCK)
C Y C L O N E & F L O O D	Loss of crop, infrastructure, human and bovine life, livelihood system, houses, Pvt. Public property etc	<p>1 Communication network. Road network of the affected block. Telephone connections.</p> <p>2 Private Infrastructures. Kutcha Houses, Semi Kutcha Houses.</p> <p>3 Agriculture/Horticulture. Crop (estimated Area), Others.</p> <p>4 Irrigation Sources. Private LI- Points, Govt. LI- Points. Electrical Installations.</p> <p>5 Drinking Water sources. Tube-wells. Wells. PHD Stand Posts</p> <p>6 Educational Institutes. Primary Schools, M.E. Schools, High Schools. Colleges.</p> <p>7 Live stock. Cows, Buffalos, Goats/Sheep, Poultry Farms,</p> <p>8 Vulnerable People. Handicapped, Fishermen, Old/ Aged, Pregnant, Sick and ailing/diseased, Children below 5 years.</p> <p>9 Other vulnerable assets. Flood embankments, Canal embankments, Irrigation Projects, Small scale industries,/ orchards & forest .</p>	Entire District is Vulnerable to Cylone and flood vunerability in Baliana, Balipatna, Bhubaneswar, Jatni Block & some parts of Khordha, Tangi, Chilika, Banpur, Begunia, Bolagarh Block.
HEAT WAVE	Human and bovine life.	Loss of Human & Bovine life.	All over the District.
DROUGHT	Loss of crop, livelihood	Crop Loss, Drinking water scarcity.	Almost All over the District except Baliana and Balipatna Block.

4 Probability of affected population due to Disaster

Total population, scheduled caste and scheduled tribe population by sex and their percentage to total population in different blocks and urban areas of Khordha district.

Block & Urban area Wise Demographic Profile:

Name of Block	Total Population			Scheduled Castes		Scheduled Tribes	
	Persons	Males	Females	Males	Females	Males	Females
BANAPUR	106,148	52,566	53,582	5,066	5,199	3,750	3,719
CHILIKA	107,867	55,538	52,329	15,416	14,444	618	512
TANGI	139,823	70,817	69,006	11,550	11,176	1,654	1,629
BEGUNIA	114,691	58,105	56,586	5,792	5,698	6,739	6,644
BOLGARH	117,783	59,955	57,828	4,805	4,782	5,037	4,903
KHORDHA	120,117	61,024	59,093	6,206	6,279	5,511	5,403
JATNI	84,875	43,403	41,472	6,466	6,337	3,494	3,346
BHUBANESWAR	105,992	54,335	51,657	10,014	9,850	5,148	4,970
BALIANITA	100,557	51,440	49,117	14,080	13,688	1,570	1,414
BALIPATNA	106,908	54,285	52,623	13,941	13,664	72	76
BBSR M.C.	648,032	360,739	287,293	28,009	23,666	15,704	13,172
KHORDHA MPLTY.	39,054	20,381	18,673	2,524	2,415	548	483
JATNI MPLTY.	53,251	27,582	25,669	3,556	3,388	416	380
BALUGAON NAC	15,823	8,362	7,461	2,369	2,108	47	31
BANPUR NAC	16,474	8,354	8,120	909	854	123	73
GRAND TOTAL :	1,877,395	986,886	890,509	130,703	123,548	50,431	46,755

- Population data as per 2001 census of India.

4.1.1 Probability of affected areas Vs Disaster Events

Sl.No	Block	Flood	Cyclone	Heavy Rain	Drought	Sunstroke	Vulnerable Population (as per 2001 census)
1	Balianta	←————→				✓	100557
2	Balipatna	←————→				✓	106908
3	Bhubaneswar	←————→					105992
4	Jatni	←————→			✓	✓	84875
5	Khordha	←————→		←————→			120117
6	Begunia		✓		✓	✓	114691
7	Bolagarh		✓	✓	✓	✓	117783
8	Tangi	←————→		←————→		✓	139823
9	Chilika		✓		✓	✓	107867
10	Banpur		✓	✓	✓	✓	106148

Probability of affected population due to Disaster & Food Grain Requirements

Stocking of Food Grains at Vulnerable GPs of Khordha District						
Sl. No	Name of the Block	Name of the Flood affected GPs	Population	Requirement of rice for one day in Qntls.	Requirement of rice for three days in Qntls.	Requirement of rice for Seven days in Qntls.
1	Balianta	Pratapsasan	11471	91.768	275.304	642.376
2		Satyabhamapur	4164	33.312	99.936	233.184
3		Umadei				
4		Berhampur	5186	41.488	124.464	290.416
5		Sarakana	6542	52.336	157.008	366.352
6		Puranapradnan	7628	61.024	183.072	427.168
7		Jhintيسان	8703	69.624	208.872	487.368
8		Bhainchua	5411	43.288	129.864	303.016
9		Jayadev	5305	42.44	127.32	297.08
10		Prataprudrapur	4849	38.792	116.376	271.544
11		Bentapur	3383	27.064	81.192	189.448
12		Bhingarpur	8539	68.312	204.936	478.184
13		Benupur	3797	30.376	91.128	212.632
14		Balianta	11181	89.448	268.344	626.136
15		Jagannathpur	6805	54.44	163.32	381.08
		Kakarudrapur	7593	60.744	182.232	425.208
		Total	100557	804.456	2413.368	5631.192
16	Balipatna	Rajas	9638	96.38	289.14	674.66
17		Kurunjipur	7975	63.8	191.4	446.6
18		Pampalo	8412	67.296	201.888	471.072
19		Somansasan	9388	75.104	225.312	525.728
20		Guapur	4196	33.568	100.704	234.976
21		Turintira	6542	52.336	157.008	366.352
22		Garedipanchan	12842	102.736	308.208	719.152
23		Nariso	7785	62.28	186.84	435.96
24		Majjihara	7543	60.344	181.032	422.408
25		Bhapur	7197	57.576	172.728	403.032
26		Bhakarsahi	8166	65.328	195.984	457.296
27		Deulidharpur	7752	62.016	186.048	434.112
28		Marthapur	4522	36.176	108.528	253.232
29		Amanakuda	4950	39.6	118.8	277.2
		Total	106908	874.54	2623.62	6121.78
30	Tangi	Nirakarpur	8180	65.44	196.32	458.08
31	Khordha	Narangarh	6980	55.84	167.52	390.88
32		Brajamohanpur	3159	25.272	75.816	176.904
33		Gada haldia	8464	67.712	203.136	473.984
34		Orbarsingh	3675	29.4	88.2	205.8
		Total	22278	178.224	534.672	1247.568
		Grand Total	237923	1922.66	5767.98	13458.62

4.1.2 Economic, Occupational, Social and Educational Profile of the Population

• **Occupational Profile of Khordha District**

Sl. No	Block	Total Workers	Main Workers	Marginal Workers	Cultivators	Agriculture labour	Live stock	Mining & Quarrying	Household Industry	Construction	Trade & Commerce	Transport
1	Balianta	32,335	30,813	1,522	9,082	9,419	681	28	1,399	437	2,703	421
2	Balipatna	28,025	26,747	1,278	10,140	9,054	410	18	952	202	2,340	471
3	Banapur	28,500	26,779	1,721	15,848	5,355	732	13	677	199	1,064	249
4	Begunia	30,133	28,462	1,671	12,370	9,117	320	95	1,068	200	1,526	405
5	Bhubaneswar	29,157	27,673	1,484	8,234	8,864	1,041	182	279	472	2,429	624
6	Bolgarh	30,991	30,315	676	13,741	9,023	565	45	1,685	105	1,439	333
7	Chilika	26,193	25,688	505	9,935	3,920	6,307	30	246	316	1,468	647
8	Jatni	21,413	20,094	1,319	6,320	6,381	445	331	401	641	1,542	1,033
9	Khordha	28,489	27,343	1,146	9,967	7,980	470	1,029	534	206	1,770	829
10	Tangi	32,284	31,433	851	12,631	6,481	3,949	89	560	248	2,768	671
URBAN												
A	Balugaon	3,540	3,464	76	498	255	241	--	67	35	1,274	382
B	Banpur	3,665	3,471	194	948	466	80	1	120	43	833	87
C	Bhubaneswar	1,34,966	1,34,030	936	2,732	6,147	3,805	762	1,104	9,773	26,033	9,608
D	Jatni	11,589	11,411	178	348	305	108	11	160	296	2,436	4,730
E	Khordha	8,396	8,313	83	375	797	374	26	294	299	1,668	556

Source: District Statistical Handbook-2009

4.1.3 Specific Vulnerability of Systems and Services to Disaster Events
Infrastructure vulnerability against Hazards - River Embankments:
PRACHI DIVISION, BHUBANESWAR.

Sl. No.	Name of River Embankment	Location of weak Embankment & vulnerable Villages	Name of Block	Name of Sub-Division	Reason for vulnerable
1	Kuakhai Left Embankment	Nuapatna-Kacharamal, Nuapatna, Banguary, NH-5, Pahal	Balianta	Balianta	Thrust of flood directly hits embankment needs renovation of spur needs watch & ward.
2	Kusabhadra Lt. Embankment	Abhayamukhi- Venkatraipur, Bantugram, Satapuri, Belakana	Balianta	Balianta	Seepage, needs watch and ward
		Bhakarsahi- Banamalipur, Deuli, Bhanra, Adashpur	Balipatna	Balianta	Damaged condition of Spur
		Bhingarpur- Bhingarpur, Prataprudrapur, Mahukhanda, Kantapada	Balianta	Balianta	-do-
		Bhanra- Deulidharpur, Amanakud, Srirampur	Balianta	Balianta	Profuse piping
		Nuasahi- Prataprudrapur, Mahukhanda, Bhingarpur, Saheb Nagar	Balianta	Balianta	U/S Afflux developed

KHORDHA IRRIGATION DIVISION, KHORDHA

Sl. No	Name of Embankment	Village covered	Name of Block.	Name of Sub-Division	Reason of vulnerability
1	Malaguni Lt. Embankment	Balikudia	Khordha	Khordha	Bend in the river, flood water hits the embankment
2	Rajua Rt Embankment	Tirimal	Jatni	Khordha	Inadequate Free board
3	Lekhanpur Gherry	Lekhanpur	Khordha	Khordha	Bend in the river, flood water hits the embankment
4	Salia Right Embankment	Achyutrajpur , Gosala	Banpur	Salia Dam	-do-
	Sapua Right Embankment	Patapur, Bhimpur	Banpur	Salia Dam	-do-
	Salia Lt Embankment	Dasarathipur	Banpur	Salia Dam	flood water hits the embankment

NIMAPARA IRRIGATION DIVISION

Sl. No.	Name of Embankment	Location of weak & vulnerable locations	Name of Block	Name of Sub-Division	Reason of vulnerability
1	Kushabhadra Rt.Embankment	Sishu Matha	Balipatna	Balipatna	Heavy Piping Section
2	-do-	Marthapur Beherasahi	-do-	-do-	Piping Section
3	Bhargavi Left Embankment	Mukunda Dashapur	-do-	Achutpur	Piping Section
4	Kuakhai left Embankment	Bainchua	Balipatna	Bhubanpur	Piping Section
5	-do-	Petaghai	-do-	-do-	Piping Section

PURI IRRIGATION DIVISION

Sl. No.	Name of Embankment	Location of weak & vulnerable locations	Name of Block	Name of Sub-Division	Reason of vulnerability
1	Daya Lt.Embankment	Kumardihi	BBSR	Pipili	Piping & seepage
		Dhauri	BBSR	Pipili	Deep Channel near to embankment
2	Bhargavi Right Embankment	Terabatia & Phulapal	BBSR	Pipili	Piping & seepage

FLOOD FIGHTING MATERIALS AVAILABLE WITH IRRIGATION DIVISIONS

Irrigation Division	Flood Fighting Materials Available	Quantities at different Locations		
		Mundali	Bhubaneswar	Balianta
Prachi Irrgn. Division, BBSR	Empty Cement Bags	25,000	25,000	40,000
	Sutuli in Kg	03	03	04
	Needle in Nos	03	03	04
	Petromax / Gas Light (in Nos)	10	15	05
	Torch Battery in Nos	30	15	15
	Torch Light	10	05	05
	Sands in Cums	250	250	350
Khordha Irrgn. Division, Khordha		Jankia Irrgn. Section	Khordha Irrgn. Section	Tangi Irrgn. Section
	Empty Cement bags (in nos.)	16500	7000	14000
	Sand in Cum.	218	106	576
	Bamboo mat (in Sqm.)	280	110	290
	Bamboo (in nos.)	214	78	218
Nimapara Irrgn. Division.		Balipatna Sub-Divn.		
	Empty Cement bags (in nos.)	1,00,000		
	Sand in Cum.	2,120		
	Bamboo mat (in Sqm.)	75		
	Bamboo (in nos.)	75		
	Kirosine Oil	100 Ltrs		
	Bamboo Mats	150 Sqm.		
Puri Irrgn. Division.	Empty Cement bags (in nos.)	5,00,000		
	Sand in Cum.	14150		
	Bamboo mat (in Sqm.)	100		
	Bamboo (in nos.)	100		

4.1.4 CONTROL ROOM OF IRRIGATION DIVISIONS

Telephone Numbers of Officers of Prachi Irrigation Division:

Sl. No	Name of the Executive Engineer	Name of the Officer in Charge of the Control Room	Name of the Assistant Engineer	Name of Embankment	Name of the Junior Engineers different sections.
1	Name : Rabindra Kumar Nayak Residence : 9437211962 Mobile : 9437802912 Office : (0674) 2562427	Name : Padmanav Panda Residence (0674) 2436540 Mobile : 98612-72504 Office : (0674) 256242	Name of the Sub-Division : Baliaanta Name : M.K. Bhuayn Mob.:9937693345 (O) 0674-2461225	Kuakhai Left embankment (7.00 to 19 Km)	Name of the Section : Baliaanta (Sec.-II), Name of the J.E. : B.B. Tarenia, Res.: 0674-2564269, Mob. : 94371-07496
2			Name of the Sub-Division : Baliaanta Name : M.K. Bhuayn Mob.:9937693345 (O) 0674-2461225	Kushabhadra left embankment (00 to 30 Km)	Name of the Section : Baliaanta Name of the J.E. : S.K. Mohapatra Res. : 0674-2500575 Mob. : 9861129063 M. Mahasuara Mob.:9437205088
3			Name of the Sub-Division : Baliaanta Name : G.Das (O) 0674-2461225	Daya right embankment (15.00 to 33 Km)	Name of the Section : Bhubaneswar Sec.-III Name of the J.E. : B.K. Parida, Mob. : 9437155865
4			Name of the Sub-Division : Mundali Name : B. Purohit Mob. :9437418085 (O) 0671-2879549	Kuakhai right embankment (19.00 to 32.00 Km)	Name of the Section : Baranga Section, Mundali Sub-Division, Name of the J.E. : N.C. Swain Mob. : 9437134498
5				Name of the Sub-Division : Mundali Name : B. Purohit Mob. :9437418085 (O) 0671-2879549	Kuakhai right embankment (6.00 to 19.00 Km)

Telephone Numbers of Officers of Khordha Irrigation Division:

Sl. No	Name of the Executive Engineer	Name of the Officer in Charge of the Control Room	Name of the Assistant Engineer	Name of Embankment	Name of the Junior Engineers different sections.	
1	<p align="center">Name : Gyana Ranjan Mohanty Mobile : 9437281999 Office : (06755) 220729</p>	<p align="center">Name : Baleswar Nath Sahoo, AE(Estimator) Mobile : 9437303485 Office : (06755) 220729</p>	<p align="center">Name of the Sub-Division : Khordha Name : B.N.Sahoo Mob. : 9437303485</p>	Hada Left & Right Embankment	<p align="center">Name of the Section Khordha Irr. Section Name of the J.E. S.N. Patnaik Res.: 0674-2564269 Mob. :9937622729, 9438361922</p>	
2				Hadapada Right & Left embankment.	<p align="center">Name of the Section Jankia Irr. Sect., Jankia Name of the J.E. S.N. Patnaik Res.: 0674-2564269 Mob. :9937622729, 9438361922</p>	
3				Name of the Sub-Division : Salia Dam Sub-Division, Banpur Name : Sri Rabi Narayan Sethy Mob. : 9937521635 9438148670	Malaguni Right & Left embankment.	<p align="center">Name of the Section Jankia Irr. Sect., Jankia Name of the J.E. S.N. Patnaik Res.: 0674-2564269 Mob. :9937622729, 9438361922</p>
4				Name of the Sub-Division : Khordha Name : B.N.Sahoo Mob. : 9437303485	Kusumidhar Embankment	<p align="center">Name of the Section : Tangi Irr. Sect. , Tangi Name of the JE : S.K.Satpathy Mob. 9437389500</p>
5				Name of the Sub-Division : Khordha Name : B.N.Sahoo Mob. : 9437303485	Barakul saline Embankment/ Mangalajodi Gherry/ Block 1 Gherry/ Subhadrapur Cross Gherry/ Sitarampur Gherry	<p align="center">Name of the Section : Tangi Irr. Sect. , Tangi Name of the JE : S.K.Satpathy Mob. 9437389500</p>

Telephone Numbers of Officers of Puri Irrigation Division

Sl. No	Name of the Executive Engineer	Name of the Officer in Charge of the Control Room	Name of the Assistant Engineer	Name of Embankment	Name of the Junior Engineers different sections.
1	Name : Manoj Kumar Dash Residence (06752) 222823 Mobile : 9437026918 Office tel/Fax : (06752) 251397	Name : Sri Siba Prasad Mishra, Asst. Engineer Mob.: 9438669933 Residence : (06752)220252 Office : (06752) 251397	Name of the Sub-Division : Pipili Irrigation Sub-Division Name : Ajay Kumar Jena Res. (06758) 2381862 Mob. : 9437312752 (O) (06758) 240748	Bhargavi Right Embankment (00 to 800)	Name of the Section Bhargavi Syphon Sec.(Uttara) Name of the J.E. Sudhir Ku. Praharaj Res.: 2556269,(O) - 2465545 Mob. 9437309584
2				Daya left embankment (0/0 to 5.5 Km)	Name of the Section : Pipili Irrigation Name of the J.E. Susanta Ku. Dora Mob. : 9937838978

Telephone Numbers of Officers of Nimapara Irrigation Division:

Sl. No	Name of the Executive Engineer	Name of the Officer in Charge of the Control Room	Name of the Assistant Engineer	Name of Embankment	Name of the Junior Engineers different sections.
1	Name : Biswamohan Acharya Residence 06758-250232 Mobile :9437166969 Office : 06758-250240	Name : Sashi Bhusan Nanda Mob. : 9437604003 Office - 06758-250240	Name of the Sub-Division : Balipatna Canal Sub-Division Name : Umakanta Mohanty O : 0674-2462227 Mob. : 9438081061	Kuakhai Left Embankment from R.D. 00 to 12.00 Km.	Name of the Section Bhubanpur Section Name of the J.E. Pranakrushna Behera Res.: 0674-2571942 O. : 0674-2461203 Mob. : 9437133415
2				Kushavadra Right embankment from R.D. 00 to 4.00 Km	Name of the Section Bentapur Section Name of the J.E. : Khirod Mohapatra Mob : 9437107825
3				Kushavadra Right embankment from R.D. 4.00 to 10.00 Km	Name of the Section Balipatna Canal Section Name of the J.E. : Sunil Ku. Tosh Mob : 9937434513
4				Kushavadra Right embankment from R.D. 10.00 to 19.00 Km	Name of the Section Basantamal Section Name of the J.E. : Lamodhar Padhy Mob : 9338062537
5				Kushavadra Right embankment from R.D. 19.00 to 27.00 Km	Name of the Section Achutpur Section Name of the J.E. : Sanjay Ganan Mob : 9437211147
6				Bhargavi left embankment from R.D. 00 to 11.00 Km.	Name of the Section Balanga Embankment Sec. Name of the J.E. : Rajendra Prasad Mallick Mob : 9861357050
7				Bhargavi left embankment from R.D. 11.00 to 14.00 Km.	Name of the Sub-Division : Balanga Name : Debashish Pattnaik (O) 06758-259314 Mob. : 9437130363

Telephone Numbers of Officers of Minor Irrigation Division

Sl. No	Name of the Executive Engineer	Name of the Officer in Charge of the Control Room	Name of the Assistant Engineer	Name of M.I.P.	Name of the Junior Engineers different sections.
1	Name : Devaraj Sethy Office : (06755) 220502 Mobile : 9437302365	Name : P.C. Mohapatra Mobile : 9238582560 Office : (06755) 220502	Name of the Sub-Division : M.I. Irrigation Division, Khordha Name : L.K. Mohanty Mob. : 9437205866	Malaguni MIP	Name of the Section Malaguni Name of the J.E. S. Pradhan Mob. : 9937761737
2				Hada MIP	Name of the Section Sunakhala Name of the J.E. Kampani Behera Mob. : 9437206656
3				Kusuni MIP	Name of the Section Balugaon Name of the J.E. N. Behera Mob. : 943715091
4				Hadinal M.I.P	
5				Jayamangal MIP	
6				Bhangia MIP	Name of the Section Jatni Name of the J.E. N. Nath Mob. 9337027415
7				Bhendibundha MIP	Name of the Section Khordha Name of the J.E. K.C. Biswal Mob. 9238577709
8				Badjo MIP	Name of the Section Begunia Name of the J.E. S. Mohapatra Mob. 9437224111
9				Kundabandha MIP, Bhogada MIP, Chumakhia MIP, Diankabandha MIP, Harijana MIP	Name of the Section Tangi Name of the J.E. P.K. Sahoo Mob. 9861216489
10				Baishnavbandha MIP, Indravilli MIP, Chhamunia MIP, Kulapada MIP, Khajuribandha MIP	Name of the Section Bhubaneswar Name of the J.E. K. Sahoo Mob.
11				M.I.Colony maintenance, Charikhunti MIP, Kujimahal MIP, Naharagadia MIP	Name of the Section Mendhasal Name of the J.E.S.K. Mansingh
12				Derasa MIP, Jhumuka MIP, Mendhasal MIP, Kamarkhunti MIP	

Telephone Numbers of Officers of Drainage Division, Bhubaneswar .

Sl. No	Name of the Executive Engineer	Name of the Officer in Charge of the Control Room	Name of the Assistant Engineer	Blocks covered	Name of the Junior Engineers different sections.
	Name : Susanta Kumar Sahoo Residence Mobile :9437037441 Office : 2565323	Name : Debendranath Pradhan Office : 2565323	Name of the Sub-Division : Drainage Sub-Division No-I Name : Sri Bijay Kumar Kalta Res. : 2545543 Mob. : 9437282458 (O) 2565323	Balianta, Balipatna, Bhubaneswar, Jatni	Name of the Section Bhubaneswar, Sec.-I Name of the J.E. Dayanidhi Nath Mob. : 9337116245
			Name of the Sub-Division : Drainage Sub-Division No-II, Bhubaneswar Name : Somanath Sahoo Mob. : 9437636015 (O) 2565323		Khordha, Tangi, Chilika, Banpur, Begunia, Bolgarh
					Name of the Section Section-IV, Kakatpur Name of the J.E. Prodyumna Kr. Sahoo Res.: 2555705, (O) : 2565323 Mob. : 9437178326
					Name of the Section Section-II Name of the J.E. P.P. Panda
					Name of the Section Section-III, Khordha Name of the J.E. S.D. Mishra Name of the Section Section-IV, Tangi Name of the J.E. D. Ray

Telephone Numbers of Officers of Dam Safety Division Under Khordha District.								
Sl. No	Name of the Executive Engineer		Name of the Officer in Charge of the Control Room		Name of the Assistant Engineer		Name of Storm Water Drains	Name of the Junior Engineers different sections.
1	Name : Sri G.C. Sundaray Mobile : 9437073327 Office : (0674) 2395390		Name : Bansidhar Swain, A.E. Mobile : 9437482157		Name of the Sub-Division : Dam Safety Division, Bhubaneswar Name : Bansidhar Swain Mob. : 9437482157 (O) (0674) 2395390		Drain No- 3, 4, 5, 6, 7 & 10	Name of the J.E. Sri Amulya Pramod Das (O) -0674-2395340 Mob. 94376-27514

Telephone Numbers of Officers of Rural Works Division Under Khordha District.							
Sl. No	Name of the Executive Engineer	Name of the Officer in Charge of the Control Room	Name of the Assistant Engineer			Name of Roads	Name of the Junior Engineers different sections.
1	Name : Er. P. Patra Mobile :9861119364 Office : (0674) 2301787		Name of the Sub-Division : R.W. Sub-Division, Khordha	Name : A.K. Mohapatra	Res. 9437091192 (O) (06755) 223831 Mob. : 223831	Malipada Hadapada Road	Name of the Section : R.W. Section, Khordha , Name of the J.E. : Sri B. Mohapatra, Mob. : 9861266154
2						NH-5 to Lekhanpur	
3						Palla-Anda Road	Name of the Section : R.W. Section, Nirakarpur, Name of J.E. : Sri B. Mohapatra, Mob.: 9861266154
			Gurujanga Kajalgada Road				
4					Name of the Sub-Division : R.W. Sub-Division, Tangi	Name : Nilamadhav Sahoo	Mob.:9437111027
5						Bhagabati Temple-Bhuskapada	

CHAPTER - 4

Maps

- ❖ Administrative Map showing block boundary
- ❖ Road Network
- ❖ River Network
- ❖ Safe Shelters/ Mounds
- ❖ Health Institutions
- ❖ Boat Deployment
- ❖ Tube wells /Safe Drinking water
- ❖ Vulnerability Maps
- ❖ N.G.Os.

CHAPTER - 5

Capability Analysis

5.1 Inventories and Evaluation of Resources

5.1.1 Location of Mounds/Helipads

The Biju Patnayak Airport, Bhubaneswar is located 25 Kms from District Headquarter which can be used as Helipads at the time of need. In case of extreme urgency, School Play ground adjacent to BJB High School Khordha can be used as temporary helipads. During high flood, when the people in the marooned area cannot be easily approached by boats, air dropping of food packets would be necessary. The RTO, BBSR is authorized to arrange Vehicles for transportation of relief Materials to different locations and CSO, Khordha will arrange food packets at the time of need under close supervision with ADM, Bhubaneswar, which is the practice in previous calamities. On receipt of information from the District Headquarters for air dropping operation, the concerned Circle Officers and Zone Officers would intimate the affected persons on air dropping. The S.P., Khordha would make necessary arrangements to safeguard the Relief Materials at the time of air dropping.

5.1.2 Drinking Water Facilities

Sl.No	Name of the Block	Open Wells & Tube wells(Working)	Open Wells & Tube wells(Defunct)
1	Balianta	937	16
2	Balipatna	894	104
3	Banpur	917	70
4	Begunia	989	25
5	Bhubaneswar	616	32
6	Bolgarh	1001	16
7	Chilika	596	123
8	Jatni	622	9
9	Khordha	854	56
10	Tangi	936	120
TOTAL		8362	571

Source : Directory of drinking water tube wells- RWSS

5.1.3 PDS Godowns at Vulnerable Blocks

Sl.No	Name of the Block	Type of Storage Structures	Location	Capacity in Quintals	Contact Person
1	Balipatna	RC Roof with Pucca Flooring	Plot No 1358, Via :Bhapur Banamalipur	1000.00	Sumant Ku Mohapatra Mob : 9861816218
2	Balipatna	RC Roof with Pucca Flooring	Plot No 1082, Diwani Patna Mouza -Saripur	1000.00	Umesh Chandra Sahoo Mob: 9437143883
3	Balianta	RC Roof with Pucca Flooring	OSCS Godown, Saleswar Mouza -Bentapur	5000.00	Haraprasad Das Mob: 9439250720
4	Tangi	-do-	At - SanaPaika Sahi, Tangi	2000.00	Smt Surekha Behera Mob : 9437134691
5	Tangi	-do-	1032/1527, Tangi Block	1000.00	Harihar Das Mob: 9937716521
6	Khordha	-do-	Kuaputi, Haladia, Khordha	1180.00	Ajaya Kumar Jena Mob : 9861547641
7	Khordha	-do-	Jajarsingh, Khordha	1160.00	Ashok KuAgrawal Mob : 9861216364
8	Begunia	-do-	Pana Nagar, Begunia	2400.00	Prakash Ch Baliarsingh Mob: 9437421793

5.1.4 PRE-POSITIONING OF FOOD GRAINS

Name of the Block/NAC	Name of the G.P.	Name of the Vulnerable pockets	Quantity of essential commodities to be kept		Contact persons address & Phone
			Rice in Quintals	K. Oil in Ltrs	
1. Balipatna Block	17 GPs Hqrs	Banamalipur Balipatna Rajas(Adalabad)	100.00 at each retail Points	5000	A.K. Subudhi M.I. 9437374261
2. Baliaanta Block	16 GPs- All GP Hqrs	Bhingarpur	100.00 at each retail Points	5000	Sankarsan Behera, M.I. 9938877350
3. Bolgarh Block	2 GPs -Sagar Gaon, Bankoi	Sagar Gaon, Bankoi	100.00 at each retail Points	2000	Pankaj Mohanty, M.I.9437265510
4. Tangi Block	3 GPs-Tangi, Bhusandpur, Nirakarpur	Tangi	30 + 50 +50 at 3 GPs	1000	Narayan Pati , M I 9437090086
5. Khordha Block	5 GPs-Saradhapur Hirimul,Narangarh Orbarsingh,Dhiakhala	Saradhapur Hirimul,Narangarh Orbarsingh Dhiakhala	100.00 at each retail Points	3000	Saroj Ku Behera IS 9937357419
TOTAL			Q. 4130.00	16000	

5.1.5 DETAILS OF WHOLESALERS DEALING WITH FOOD MATERIAL /K. OIL (IN FLOOD PRONE AREA)

Name of the wholesaler / Storage Agent	Location	Contact details with Ph. No	Deals with type of Food materials/K.oil
Maa Duladevi Filling Station, Wholesaler of K.Oil	Utara Chhaka	9861062461	K. Oil 156KL.
Utkal Dyes & Chemical	Samantarapur, Bhubaneswar	9861905814	K. Oil 204KL.
M/S R.A. Surekha, Wholesaler	Ramachandra Pur,Jatni	9861071951	K. Oil 156 KL
M/S Bolgarh Kerosene Depot	Bolgarh	9437520953	K. Oil 132 KL
M/S Ganpat Ram & Sons	Jajarsingh, Khordha	9439009451	K. Oil 180 KL
S.K. Mohapatra, Storage Agent, Balipatna Block	Banamalipur	9861816218	BPL Rice Q.1219.25 AAY Rice Q.449.45
Umesh Chandra Sahoo, Storage Agent, Balipatna Block	Dewani Patna	9437143883	BPL Rice Q.1134.25 AAY Rice Q.469.35
Hara Prasad Das	Bentapur	9439250720	BPL Rice Q.2064.25 AAY Rice Q.906.50
Surekha Behera, Storage agent, Tangi	Tangi	9437134691	BPL rice Q.1876.50 AAY Rice Q.797.30
Harihar Das,Tangi	-do-	9937716521	BPL rice Q.1529.00 AAY Rice Q.662.55
Ajaya Kumar Jena	Kapileswar	9861567641	BPL Rice Q.719.75 AAY Rice Q.310.80
Ashok Ku Agrawal	Palla, Khordha	9861216364	BPL Rice Q.660.50 AAY Rice Q.299.60
Prakash Ch Baliarsingh	Pananagar	943721793	BPL rice Q.3335.25 AAY Rice Q.1424.85

5.1.6 Country Boats

The district has 7 motorised boats in its inventory, located at Baliana, Balipatna, and Jatni, Khordha as well as there is only a single boat at district headquarter. At the time of emergency it was the practice of using hired country boats available in the areas of Mangalajodi under Tangi Block and Balugaon. The nodal offices for boat liasoning is ADF, B&T, Balugaon with Phone no **06756-220429** & Asst Director, Inland Water Transport, Balugaon. BDO-Tangi can be contacted for boats from Manalajodi area under Tangi Block. The inventory of the boats can be found out from India Disaster Resource Network portal having address www.idrn.gov.in. In earlier cases Boats have been deployed to other district with proper coordination with the ADF (B&T) and IWT located at Balugaon. The State Port Engineer can be contacted with **0671-2608210** & **9439166900** for technical support for the boats supplied by SRC office. RTO-BBSR is the coordination officer for supply of required vehicles for transportation of boats. Following were the details of the liaison persons responsible for boat deployment.

BOAT COORDINATION WING – Balugaon & Mangalajodi

OFFICE	Country Boats Available	Contact person	Designation	Contact Telephone No
Office of ADF(B&T), Balugaon	60	Birsingh Munda	ADF(B&T)	06756-220429 9437259619
		S N Ray	Supervisor	9437696687
		S.K Padhi	Hq FEO	9777921889
		Digambar Behera	Sr Clerk	9938131524
Office of Port & IWT, Balugaon	30	Goutam Chakraborty	EE, Mechanical	0671-2604177 9238604102
		Simanchal Das	Asst Engineer, Mechanical	9437016392
		K.C.Rath	JE, Mechanical	9437218180
		Sunaram Hansda	Amin cum Clerk	9437563234
BDO-Tangi	24	A.K.Satpathy	BDO-Tangi	06756-224249 9437524024
		Jayakrushna Barik	SEO	9437232805

Fibre Boat Position at Khordha District:

Sl.No	Name of the Block	No of Boats Available	Contact person	Contact Telephone No
1	Baliana	2	BDO-Baliana	0674 - 2464135
2	Balipatna	2	BDO-Balipatna	0674 - 2462223
3	Jatni	1	BDO-Jatni	0674 - 2490858
4	Khordha	1	BDO-Khordha	06755 - 220762

LIST OF PVT. BOAT OWNER - IWT, BALUGAON

Sl. No.	Name of the Boat Owners (Chilika Block)	Address	Category of Boat C.B./O.B.M.	Size of Boat	Carrying Capacity
1	Prabir Baidya, S/o- Kartika	At.Shanti Nagar, PO.Balugaon, Khordha	Country Boat	28' x 2'.6"	0.7 to 1.00 MT
2	Sri Gouranga Biswas, S/o- Atul	do	do	29' x 2'.6"	1.00 MT
3	Sri Sibumandal, S/o- Bidur	do	do	27' x 2'.5"	0.7 to 1.00 MT
4	Sri Mahadev Sarkar, S/o- Mendas	do	do	27' x 2'.5"	0.7 to 1.00 MT
5	Sri Mahendra Mandal, S/o- Sibam	-do-	do	28' x 2'.6"	0.7 to 1.00 MT
6	Sri Kishari Biswas, S/o- Srikanta	-do-	do	28' x 2'.6"	0.7 to 1.00 MT
7	Sri Naba Mandal, S/o- Panchuram	Vill-Gopabandhu Colony, At/Po-Balugaon, Dist-Khordha	do	27' x 2'.5"	0.7 to 1.00 MT
8	Sri Amar Mandal, S/o- Jatish	Vill-Samantapur At/Po-Balugaon, Dist-Khordha	do	27' x 2'.5"	0.7 to 1.00 MT
9	Sri Barun Mandal, S/o- Khakam	At.Shanti Nagar, PO.Balugaon, Khordha	do	28' x 2'.5"	0.7 to 1.00 MT
10	Sri Madhaba Haldar, S/o- Rama	Vill-Samantapur At/Po-Balugaon, Dist-Khordha	do	28' x 2'.5"	0.7 to 1.00 MT
11	Sri Laxman Behera, S/o-	-do-	do	28' x 2'.5"	0.7 to 1.00 MT
12	Sri Sunil Mandal, S/o- Raghunath	At.Shanti Nagar, PO.Balugaon, Khordha	do	27' x 2'.5"	0.7 to 1.00 MT
13	Sri Karan Sarkar, S/o- Gopal	-do-	do	30' x 2'.7"	0.7 to 1.00 MT
14	Sri Sahadev Manda, S/o- Pubal	Vill-Gopabandhu Colony, At/Po-Balugaon, Dist-Khordha	do	28' x 2'.6"	0.7 to 1.00 MT
15	Sri Biswajeet Mandal, S/o- Rabin	At/Po-Balugaon, Dist-Khordha	do	28' x 2'.6"	0.7 to 1.00 MT
16	Sri Sunil Mandal, S/o- Sudhir	Vill-Gopabandhu Colony, At/Po-Balugaon, Dist-Khordha	do	28' x 2'.6"	0.7 to 1.00 MT
17	Sri Goura Biswas, S/o- Mahendra	At.Shanti Nagar, PO.Balugaon, Khordha	do	27' x 2'.5"	0.7 to 1.00 MT
18	Sri Prahalad Mandal, S/o- Satya	Vill-Gopabandhu Colony, Balugaon	do	27' x 2'.5"	0.7 to 1.00 MT

Sl. No.	Name of the Boat Owners (Chilika Block)	Address	Category of Boat C.B./O.B.M.	Size of Boat	Carrying Capacity
19	Sri Sangant Mandal, S/o- Kajal	-do-	do	28' x 2'.6"	0.7 to 1.00 MT
20	Sri Aswini Biswas, S/o- Niranman	At.Shanti Nagar, PO.Balugaon, Khordha		28' x 2'.6"	0.7 to 1.00 MT
21	Sri Adibad Mandal, S/o- Upen	-do-	do	27' x 2'.5"	0.7 to 1.00 MT
22	Sri Bidhan Sarkar, S/o- Garak	Vill-Gopabandhu Colony, At/Po-Balugaon, Dist-Khordha	do	27' x 2'.5"	0.7 to 1.00 MT
23	Sri Bishnu Sarkar, S/o- Gouri	At.Shanti Nagar, PO.Balugaon, Khordha	do	28' x 2'.5"	0.7 to 1.00 MT
24	Sri Krishna Biswas, S/o- Gajendranath	-do-	do	28' x 2'.5"	0.7 to 1.00 MT
25	Sri Bimal Mandal, S/o- Hiralal	-do-	do	27' x 2'.5"	0.7 to 1.00 MT
26	Sri Tuku Mandal, S/o- Gousta	-do-	do	28' x 2'.6"	0.7 to 1.00 MT
27	Sri Kartik Mandal, S/o – Subal	-do-	do	28' x 2'.6"	0.7 to 1.00 MT
28	Sri Jogi Mandal, S/o – Bipin	-do-	do	27' x 2'.5"	0.7 to 1.00 MT
29	Sri Haran Biswas, Ananta	Vill-Ashok Nagar, At/Po-Balugaon, Dist-Khordha	do	27' x 2'.5"	0.7 to 1.00 MT
30	Sri Bimal Biswas, S/o- Autal	Vill-Samantarapur, At/Po-Balugaon, Dist-Khordha	do	28' x 2'.5"	0.7 to 1.00 MT

LIST OF PVT. BOAT OWNER - ADF (B&T), BALUGAON

Sl. No.	Name of the Boat Owners	Address	Category of Boat C.B./O.B.M.	Size of Boat	Carrying Capacity
1	Tapas Ray, S/o.Parsu	At.Shanti Nagar, PO.Balugaon, Khordha	Country Boat	28' x 2'.6"	0.7 to 1.00 MT
2	Gurudas Biswas, S/o.Hiralal	do	do	29' x 2'.6"	1.00 MT
3	Taraka Sarakar, S/o.Anil	do	do	27' x 2'.5"	0.7 to 1.00 MT
4	Tapan Biswas, S/o.Panchanan	do	do	27' x 2'.5"	0.7 to 1.00 MT
5	Amal Mandal, S/o.Hiralal	do	do	26' x 2'.5"	0.7 to 1.00 MT
6	Sibapada Mandal, S/o.Bidura	do	do	28' x 2'.6"	0.7 to 1.00 MT
7	Sankar Biswas, S/o.Goura	do	do	28' x 2'.6"	0.7 to 1.00 MT
8	Bidhan Biswas, S/o.Nandaram	do	do	28' x 2'.6"	0.7 to 1.00 MT
9	Ranjit Sarakar, S/o.Amulya	do	do	28' x 2'.6"	0.7 to 1.00 MT
10	Jagannath Biswas, S/o.Brajen	do	do	27' x 2'.5"	0.7 to 1.00 MT
11	Panchu Mandal, S/o.Bidyanath	do	do	28' x 2'.6"	0.7 to 1.00 MT
12	Rabin Sarakar, S/o.Goura	do	do	28' x 2'.6"	0.7 to 1.00 MT

Sl. No.	Name of the Boat Owners	Address	Category of Boat C.B./O.B.M.	Size of Boat	Carrying Capacity
13	Raju Gaini, S/o.Ratan	do	do	28' x 2'.6"	0.7 to 1.00 MT
14	Kartik Mandal, S/o.Subal	do	do	28' x 2'.6"	0.7 to 1.00 MT
15	Bankim Biswas, S/o.Brajen	do	do	27' x 2'.5"	0.7 to 1.00 MT
16	Ratan Sarakar, S/o.Nitei	do	do	27' x 2'.5"	0.7 to 1.00 MT
17	Sadan Mandal, S/o.Ratan	do	do	28' x 2'.5"	0.7 to 1.00 MT
18	Pabira Baidya, S/o.Kartika	do	do	28' x 2'.5"	0.7 to 1.00 MT
19	Rabin Mandal, S/o.Ratan	do	do	28' x 2'.5"	0.7 to 1.00 MT
20	Bhakta Biswas, S/o.Nima Chanda	do	do	27' x 2'.5"	0.7 to 1.00 MT
21	Goura Biswas, S/o.Mandar	do	do	30' x 2'.7"	1.00 MT
22	Nabin Biswas, S/o.Nandaram	do	do	28' x 2'.6"	0.7 to 1.00 MT
23	Supal Sarakar, S/o.Khagen	do	do	26' x 2'.6"	0.7 to 1.00 MT
24	Pravat Mandal, S/o.Sunil	do	do	26' x 2'.5"	0.7 to 1.00 MT
25	Taraka Ray, S/o.Sribachha	Swargadwar, Balugaon, Khordha	do	26' x 2'.5"	0.7 to 1.00 MT
26	Basudev Sarakar, S/o.Pagal	do	do	25' x 2'.5"	0.7 to 1.00 MT
27	Amal Biswas, S/o.Atul	Samantarapur, Balugaon, Khordha	do	28' x 2'.6"	0.7 to 1.00 MT
28	Bishnu Biswas, S/o.Mana	do	do	28' x 2'.6"	0.7 to 1.00 MT
29	Barun Mandal, S/o.Gagan	do	do	27' x 2'.5"	0.7 to 1.00 MT
30	Nagen Mandal, S/o.Ramajay	do	do	27' x 2'.5"	0.7 to 1.00 MT
31	Krushna Biswas, S/o.Debadas	do	do	28' x 2'.6"	0.7 to 1.00 MT
32	Mandar Sarkar, S/o.Harichandan	do	do	28' x 2'.6"	0.7 to 1.00 MT
33	Makhan Haldar, S/o.Rama	do	do	28' x 2'.5"	0.7 to 1.00 MT
34	Chandidas Mandal, S/o.Panchanan	do	do	28' x 2'.6"	0.7 to 1.00 MT
35	Madhaba Mandal, S/o.Nagen	do	do	30' x 3.0"	1.00 MT
36	Dapankar Sarakar, S/o.Dinesh	Gopabandhu Colony, Balugaon, Khordha	do	30' x 2'.6"	1.00 MT
37	Kartik Dhaly, S/o.Govinda	do	do	30' x 2'.6"	1.00 MT
38	Kalidas Mandal, S/o.Panchanan	do	do	28' x 2'.6"	0.7 to 1.00 MT
39	Tapan Baidya, S/o.Adhira	do	do	26' x 2'.5"	0.7 to 1.00 MT

Sl. No.	Name of the Boat Owners	Address	Category of Boat C.B./O.B.M.	Size of Boat	Carrying Capacity
40	Goura Sarkar, S/o.Narendra	do	do	30' x 2'.8"	1.00 MT
41	Prahallad Mandal, S/o.Satya	do	do	28' x 2'.6"	0.7 to 1.00 MT
42	Sapan Ray, S/o.Govinda	do	do	29' x 2'.7"	0.7 to 1.00 MT
43	Bidhan Sarkar, S/o.Taraka	do	do	26' x 2'.5"	0.7 to 1.00 MT
44	Sunil Biswas, S/o.Mukunda	do	do	30' x 2'.8"	1.00 MT
45	Pagal Sarkar, S/o.Haju	do	do	30' x 2'.8"	1.00 MT
46	Arjun Sarakar, S/o.Aruna	do	do	27' x 2'.5"	0.7 to 1.00 MT
47	Sukumar Biswas, S/o.Padma	Kalijugeswar, Balugaon, Khorhda	Country Boat	25' x 2'.5"	0.7 to 1.00 MT
48	Amal Sarkar, S/o.Subal	do	do	27' x 2'.5"	0.7 to 1.00 MT
49	Rakhal Mandal, S/o.Madhaba	Gopabandhu Colony, Balugaon, Khordha	do	26' x 2'.4"	0.7 to 1.00 MT
50	Ganesh Mandal, S/o.Narayan	do	do	28' x 2'.6"	0.7 to 1.00 MT

LIST OF PRIVATE BOAT OWNERS- TANGI BLOCK

Sl. No.	Name of the Boat Owners	Address	Category of Boat C.B./O.B.M.	Size of Boat	Carrying Capacity
1	Basant Behera, S/o.Mani	At. Mangalajodi	Country Boat	28'	15 to 20 Persons
2	Anil Mandal S/o – Lalita	At – Sundarpur Colony	-do-	30'	15 to 20 Persons
3	Sukanta Behera S/o – Antarjyami	At-Mangalajodi	-do-	27'	10 to 15 Person
4	Chinia Behera S/o – Aintha	-do-	-do-	27'	10 to 15 Person
5	Bhagyadhar Behera S/o- Rama	-do-	-do-	32'	20 to 25 person
6	Balaram Behera S/o – Akrur	-do-	-do-	30'	15 to 20 Persons
7	Kartik Behea S/o – Raghav	Kartiasahi	Power Boat	30'	25 to 30 person
8	Surendra Behera S/o – Madhu	At-Mangalajodi	-do-	35'	25 to 30 person
9	Madhu Behera S/o – Damodar	-do-	-do-	28'	25 to 30 person
10	Baban Behera S/o – Laxmidhar	-do-	-do-	34'	20 to 25 person
11	Tulu Behera S/o – Mahara	-do-	-do-	32'	25 to 30 person
12	Balia Behera S/o – Golakha	-do-	-do-	35'	20 to 25 person
13	Madhu Behea S/o – Brundaban	-do-	-do-	33'	25 to 30 person
14	Krushna Behera S/o – Natia	-do-	-do-	30'	15 to 20 Persons
15	Benu Behera S/o- Gouranga	-do-	-do-	32'	20 to 25 person
16	Babana BeheraS/o – Keshab	-do-	-do-	36'	30 to 35 person
17	Kalu Behera S/o – Jugala	-do-	-do-	34'	25 to 30 person
18	Krushna Behea S/o – Rankanath	Kartiasahi	-do-	32'	20 to 25 person
19	Kambhupani Behera S/o – Kunja	-do-	-do-	32'	20 to 25 person
20	Rankanath Behera S/o – Banambar	-do-	-do-	35'	25 to 30 person
21	Meru Behera S/o – Kunja	-do-	-do-	35'	25 to 30 person
22	Basanta Behra S/o – Aintha	-do-	-do-	30'	15 to 20 Persons
23	Dushasan Behera S/o – Dama	-do-	-do-	30'	15 to 20 Persons
24	Shiva Behera S/o – Shikhar	At-Mangalajodi	-do-	34'	25 to 30 person
25	Rabindra Behera S/o – Bhima	-do-	-do-	30'	15 to 20 Persons

5.1.5. Permanent School Building-cum-Cyclone Shelters:

(Primary School)

Sl. No	Block	G.P.	Village	Name of Pry./M.E. Schools	Type of Building
1	Balianta	Bentapur	Bentapur	Bentapur P.S.	Double / Open
2		Biswanatpur	Biswanathpur	Biswanathpur P.S.	Double / Open
3		Deulidharpur	Dudurabasta	Dudurabasta P.S.	Double / Open
4		Jaydev	Sahebnagar	Sahebnagar P.S.	Double / Open
5		Jhintيسان	Chadeibar	Chadeibar P.S.	Double / Open
6		Kakarudrapur	Kakarudrapur	Kakarudrapur	Double / Open
7		Kakarudrapur	Jagannathpur	Jagannathpur UP School	Double / Open
8		Rama Chandrapur	Rama Chandrapur	Rama Chandrapur	Double / Open
9		U.D.brahmapur	Gadasrirampur	Gada Srirampur	Double / Open
10		U.D.brahmapur	Jasuapur	Jasuapur P.S.	Double / Open
11	Balipatna	Amanakuda	Arilo	Arilo Pry. School	Double / Open
12		Bhakarasaahi	Gulam Md. Patna	Gulam Md. Patna	Double / Open
13		Bhapur	Bhapur	Bhapur U.P. School	SS
14		Bhapur	Banamalipur	Banamalipur Pry. School	Double / Open
15		Deulidharpur	Abhayamukhi	Abhayamukhi Pry. School	SS
16		Deulidharpur	Marthapur	Marthapur Pry. School	SS
17		Deulidharpur	Abhayamukhi	Abhayamukhi Pry. School	Double / Open
18		Deulidharpur	Ambadiha	Ambadiha Pry. School	Double / Open
19		Dhanahara	Dhanahara	U.P. School	SS
20		GaredhiPanchan	Kiajori	Kiajori Pry. School	Double / Open
21		GaredhiPanchan	Barilo	Batilo Pry. School	Double / Open
22		Guapur	Guapur	M.E. School	SS
23		Kurunjipur	Aloi	Aloi M.E. School	SS
24		Kurunjipur	Padmapur	Padmapur M.E. School	SS
25		Kurunjipur	Dalakasoti	Dalakasoti Pry. School	SS
26		Nariso	Nuapatna	Nuapatna Pry. School	Double / Open
27		Nariso	Khajuripada	Primary School	SS
28	Nariso	Nariso Srirampur	U.P. School	SS	
29	Balipatna	Nariso	Shri Rampur	Shri Rampur Pry. School	Double / Open
30		Pampalo	Daroda	Daroda UGME School	SS
31		Pampalo	Nuapada	Nuapada Pry. School	Double / Open
32		Pampalo	Kulantiara sasan	Kulantiara sasan P.S.	Double / Open
33		Rajasa	Danapada	Danapada	Double / Open
34		Rajasa	Danpada	Danpada Pry. School	Double / Open
35		Soman sasan	Chitalpur	Chitalpur Pry. School	Double / Open
36		Turintira	Bhagalpur	Bhagalpur ME School	SS
37			Badadihasahi	Badadihasahi Pry. School	Double / Open
38	Bhubaneswar	BBSR M.C.	Gautam Ngr.	Gautam Nagar Pry.School	DS
39		Chandaka	Pathargadia	Pathargadia Pry. School	Double / Open
40		Mancheswar	Hansapal	Hansapal Pry. School	DS
41		Paikerapur	Paikerapur	Paikerapur Pry. School	Double / Open
42		Sisupal	Sisupal	Sisupal UP School	Double / Open

High Schools

Sl. No	Block	G.P.	Village	Name of Pry./M.E. Schools	Type of Building
43	Balianta	Balianta	Balianta	Balianta High School	DS
44		Benupur	Benupur	Acharya Harihar Bidyapitha, Banapur	SS
45		Bhingarpur	Bhingarpur	SB High School, Bhingarpur	SS
46		Jhintيسان	Panikata	J. Sasan Panchayat High School	SS
47		Kakarudrapur	Kakarudrapur	Sri Sri Patitapaban High School	SS
48		Sarakana	Sarakana	Bhagabati Bidyapitha, Sarakana	SS
49		Satyabhamapur	Satyabhamapur	Satyabhamapur High School	SS
50	Balipatna	Bhakarajahi	Gola MD.Patna	B.High School	DS
51		Bhapur	Banamalipur	Banamalipur Girls' High School	SS
52		Bhapur	Banamalipur	Govt. High School	DS
53		Deulidharpur	Abhayamukhi	Barahi High School	SS
54		Garidipanchan	Balipatna	S.B. High School	DS
55		Guapur	Pubagada	Pubagada High School	SS
56		Kurunjipur	Aloi	Aloi High School	SS
57		Kurunjipur	Kurunjipur	Ramachandrapur High School	DS
58		Nariso	Nariso	Nariso G.P. High School	DS
59		Pampalo	Chanahat	Peoples High School	SS
60		Rajasa	Rajasa	Gopabandhu High School	SS
61		Soman sasan	Mukundadaspur	Mukundadaspur High School	DS
62		Turintira	Bhagalpur	Bipin Bihari High School	SS
63	Banpur	Banpur NAC	Banpur NAC	Banpur Govt. Boy's High School	DS
64		Banpur NAC	Banpur NAC	Banpur Govt. Girls' High School	DS
65		Galua	Bhimpur	Banambar Academy, Bhimpur	DS
66		Gambharimunda	Gambharimunda	Gambharimunda Govt. High School	DS
67		Kumaranga	Kumaranga	Nilakantheswar Bidyapitha	DS
68		Nachuni	Nachuni	Nachuni Godavarish Bidyapitha	DS
69	Begunia	Baghamari	Baghamari	Raghunath Dev High School	SS
70		Begunia	Begunia	Gopabandhu High School	DS
71	Bolgarh	Bankoi	Bankoi	Bankoi High School, Bankoi	DS
72	Bhubaneswar	Barimunda	Barimunda	Bapuji Bidyapitha, Barimunda	DS
73		BBSR M.C.	Baramunda	Bapuji Bidyapitha	DS
74		Jadupur	Jadupur	S.Mamtaz Ali High School	DS
75		Kalyanpur	Gandarpur	Sri Sri Aurobindo Bidyapitha	DS
76		Naharakanta	Naharakanta	MB Bidyapitha	DS
77		BBSR M.C.	Khandagiri	Khandagiri Govt. High School	DS
78		BBSR M.C.	B.M.C.	BB School for Blind, Unit-3, BBSR	DS

Sl. No	Block	G.P.	Village	Name of Pry./M.E. Schools	Type of Building
79	Bolgarh	Arikama	Arikama	Panchayat High School	SS
80		Bolgarh	Bolgarh	Baman High School	DS
81		Deuli	Gopalpur	Anchalika High School	SS
82	Chilika	Balugaon	Balugaon	Balugaon High School	DS
83		Haripur sasan	Haripur sasan	Laxmidhar Bidyapitha	DS
84		Jaripada	Kalupada Ghat	K. Girls' High School	DS
85		Jaripada	Kalupada Ghat	Kalupadaghat High School	DS
86		Nimikheta	Chasangara	Bhaleri High School	DS
88	Jatni	Aragul	Aragul	Aragul High School	DS
89		Jamukoli	Jamukoli	Labanagiri Bidyapitha	SS
90		Mendhasala	Mendhasal	Govt. High School, Mendhasala	DS
91	Begunia	Gadamanitri	Gadamanitri	Gadamanitri High School	DS
92	Khordha	Khordha Mplty.	Khordha Mplty.	B.J.B. High School	DS
93		Orbarsingh	Orabarsingh	Anchalika High School	DS
94		Palla-totapada	Palla-totapada	Panchayat High School	DS
95	Khordha Mplty.	Khordha	Khordha Mplty.	Gurujanga High School	SS
96	Tangi	Barakul	Barakul	Chilika High School, Barakul	DS
97		Kantalabai	Kantalabai	S.T.U. Academy	DS
98		Kuhudi	Kuhudi	Janata High School	DS
99		Nirakarpur	Nirakarpur	KB Academy, Nirakarpur	DS
100		Olasingh	Olasingh	Dasarathi High School, Olasingh	DS
101		Tangi	Tangi	B.D.B.P., Tangi	DS
102		Tangi	Tangi	Govt. S.T. School	SS

DS-Double Storied, SS – Single Storied

5.1.6 LIST OF SHELTER PLACES LOCATED AT DIFFERENT BLOCKS

Sl.No	Name of the Block	Name of Shelter Place
1	Bhubaneswar	Kendupatna High School
2		Barang College
3		Hanspala UP School
4		Mancheswar High School
5		Padmakesar Sevashram
6		Samantarapur UP School
7		Dhauri Pahad
8		Aurobindo Vidyapitha, Gandarpur
9		Tikarpada UP School
10		Kalyanpur UP School
11		Govt High School, Mendhasal
12	Balianta	Budhakandi P.S.M.E. School
13		Saran G.P House
14		Balakati High School
15		Bakresara High School, Bhingarpur
16		Balianta U.P. School
17		Nakhara U.P. School
18		Satyabhamapur M.E. School
19		Acharya Harihar Bidyapitha, Benupur
20		Sri Sri Patitapaban High School, Kakarudrapur
21		Satyabhamapur High School
22		Bhagabati Bidyapitha, Sarakana
23	Balipatna	Orakhanda Mahavidyalaya
25		Purunjipur Primary School
26		Dalakasoti U.P. School
27		Rajas U.P. School
28		Goria U.P. School
29		Giringa Urdu U.P. School
30		Bhapur Prachisri School
31		Amanakuda Prachisri School
32		Banamalipur High School
33		Kudapatna U.P. School
34		Kantapada U.P. School
35		Nariso U.P. School
36		Nariso High School
37		Darada U.P. School
38		Makundapur U.P. School
39		Grampanchayat High School, Nariso
40		Benapanjari High School
41		Jatni
42	Bramhankundala U.P. School	
43	Kusumati High School	
44	Panchagaon U.P. School	
45	Khordha	Narangarh High School

46		Masania Matha
47		Tapanga High School
48		Golabai High School
49		Orabarasingh U.P. School
50		Keranga High School
51		Kumbhilo High School
52		Pubusahi High School
53		Orami Primary School
54		Dihakhala Primary School
55		Lekhanpur Primary School
56		Saradhapur Primary School
57	Begunia	Karadagadia U.P. School
58		Baghamari High School
59		Atri U.P. School
60		Lokanathpur U.P. School
61		Bhagabati Girl's High School, Tulasipur
62		Tulasipur High School
63		Gadamanitiri High School
64		Bhogoda P.S.M.E. School
65	Bolgarh	Arikama U.P. School
66		Sagargaon High School
67		Bankoi High School
68		Benugadia Patna U.P. School
69	Bamana High School, Bolagarh	
70	Tangi	Nirakarpur College
71		Bhusundapur High School
72		Dasarathi High School, Olasingh
73		Rameswar High School
74	KB Academy, Nirakarpur	
75	Banpur	Antarakiari U.P. School
76		Salia Revenue I.B.
77		Aladihatna U.P. School
78		Narendrapur U.P. School
79		Padmapur U.P. School
80		Gambharimunda U.P. School
82		Sunakhala Revenue I.B.
83		Nachuni Godabarish Bidyapitha
84		Banambar Academy, Banpur
85		Niladriprasad Sevasrama
86	Chilika	Haripur High School
87		Badakula U.P. School
88		Balugaon U.P. School
89		Ankula U.P. School
90		Nairi U.P. School
91		Chilika High School
92		Bhagabati Bidyapitha, Soran
93		Dasarathi High School, Kalupadaghat
94		Champatipur M.E. School

5.2 Capability Analysis of Institutions in the District

5.2.1 A. List of Health Institutions:

Name of the PHC/CMC	Coverage Area	Name of the M.O.	Contact Ph. No. Office	Contact Mob. No.
Botalama CHC	Begunia Block	Dr. D.Sahoo	06755-212152	9437107613
Balakati CHC	Balianta Block	Dr. H.Kar	0674-2464411	9437616983
Bankoi PHC	Bolgarh Block	Dr. Samir Kanta Champati	06755-234812	9437411580
Haladia PHC	Khordha Block	Dr.H.S. Munir	06755-224160	9437069751
Tangi Ug PHC	Tangi Block	Dr. R.C.Mohanty	06755-224219	9437278264
Mendhasal PHC	BBSR Block	Dr. P.K.Das	0674-2113009	9861170084
Balugaon CHC	Chilika Block	Dr. S.S.Pattanayak	06756-220442	9437129912
Jatni CHC	Jatni Block	Dr. K.P.Das	0674-2492033	9437007650
Balipatna UgPHC	Balipatna Block	Dr. K.P.Bhuyan	0674-2462256	9437081922
Banapur CHC	Banpur Block	Dr. Minati Pattanayak	06756-223379	9438040110

B. Staff Position of Health Institutions

Sl. No	Block PHC	No. of PHC(N) & AH	No. of Sub-Centre	No. of Village Covered	Medical Officer available	LHV	HW(F)	Support Staff
1	Banpur CHC	4	19	198	11	3	21	2 Other Paramedicals
2	Balugaon CHC	4	20	138	11	3	21	-do-
3	Tangi Ug. PHC	6	24	164	15	4	24	-do-
4	Botalama CHC	10	21	152	23	2	28	-do-
5	Bankoi PHC	6	23	160	16	4	23	-do-
6	Haladia PHC	5	20	124	14	2	20	-do-
7	Mendhasal PHC	4	22	163	10	4	27	-do-
8	Jatni CHC	4	13	91	13	2	17	-do-
9	Balakati PHC	3	20	131	9	3	23	-do-
10	Balipatna CHC	3	20	156	9	3	23	-do-
	Total	49	202	1477	131	32	227	20

C : List of ASHA Volunteers

Name of the Block	No. of ASHA	GP Covered	Contact Person with Tel. No.
Khurda	134	20	Concerned Medical Officer in Charge of PHC/PHC(N)
Balianta	108	15	
Bhubaneswar Rural	96	19	
Begunia	133	21	
Chilika	118	14	
Bolgarh	127	19	
Balipatna	114	14	
Jatni	78	13	
Banpur	107	13	
Tangi	149	20	
Total	1164	168	

D: Emergency Drugs Available

Name of Drugs available	Place of Availability	Stock Quantities	Responsible person with address
I.V. Fluids	Central Store	10550bt.	ADMO (medl.)
Inj. ASV 10ml	-do-	1020VL	-do-
Inj. Ampicillin 500 mg	-do-	Nil	-do-
Ciprofloxacin tablets	-do-	69980 Tabs	-d-
Inj. Paracetamol syrup	-do-	160 bt	-do-
Tab. Cotrimexazole	-do-	36000T	-do-
Cap. Doxycycline 100mg	-do-	74000C	-do-
Cap. Tetracycline 250mg	-do-	20600C	-do-
Tab. Halazone	-do-	1023400Tabs	-do-
Tab. Metronidazole 400mg	-do-	343300Tabs	-do-
Tab. Norfloxacin 100mg	-do-	23700 Tabs	-do-
Tab. Ibuprofen 400mg	-do-	178000Tabs	-do-
ORS Packets	-do-	54995 packets	-do-
Bleaching Powder	-do-	150Bags X 25Kg each	-do-
Anti Diarroheal Syrup	-do-	1810 bt	-do-

E : Infrastructure Availability

Name PHC/PHC(N)	No. of Beds	No. of Oxygen Cylinders	Vehicles	Surgical Equipments	Contact Person and Tel. No.
Banpur	30	10	2	Yes	9438040110
Balugaon	16	2	2	Yes	9437129912
Tangi	16	2	5	Yes	9437278264
Botlama	16	5	3	Yes	9437107613
Bankoi	6	3	2	Yes	9437411580
Haladia	6	1	3	Yes	9437069751
Mendhasal	6	4	2	Yes	9437922367
Jatni	30	4	3	Yes	9437007650
Balakati	30	2	4	Yes	9437616983
Balipatna	32	2	3	Yes	9437081922
Total	188	35	29		

G : Flood Prone Areas Vs Health Services:-

Sl. No	Name of the Block	No. of GP (Prone areas)	No. of Villages		Population	No. of Institution	
			Marooned	Partially submerged		PHC/CHC	SC
1	Balipatna	14	19	4	79396	1	14
2	Balianta	15	6	2	84872	1	15
3	Bhubaneswar	11	0	2	65377	1	11
4	Jatni	6	0	2	41488	2	6
5	Khurda	10	13	2	70708	1	10
6	Begunia	7	0	2	31767	3	7
7	Tangi	10	1	1	74033	1	10
	Total	73	39	15	447641	10	73

H : Medical Relief Centers

Name of the Block	Medical Relief Center(MRC)			Total
Balipatna	Pampalo	Nichintpur	Rajas	3
Balianta	Kulasahi & Phulapala	Sarkana		3
Bhubaneswar	Itipur			1
Jatni	Pandiabilli	Budhapada		2
Khurda	Masania	Manapur		2
Begunia	Baghamari	Tulasipur		2
Total MRC				13

I: Control Room of CDVO:

Control rooms has been functioning at CDVO office as a prepreparedness measures for the cattle population of the district. In case of any eventualities, folling Telephone nos can be contacted. The control Room of CDVO

Zone	AREA Covered	Officer in Charge & support staff	Contact Nos
Khurda	Khordha Sub Division	Dr D.Behera, Addl VAS, Khordha Head Clerck	06755-223067 9938504081 9853535369
Bhubaneswar	Bhubaneswar Sub Division	SDVO-Bhubaneswar	0674-2540924

5.2.2. List of Police Station with Outpost location

Designation of Officer	Office	Mobile No	FAX
Police Commissioner	0674-2530035	9937010020	
D.C.P, BBSR	0674- 2540555(O)/2535922(R)	9437018659	2540444
C.I. of Police, BBSR	0674-2393540		
D.I.B. Inspector	0674-2540294		
Reserve Inspector	0674-2540153	9861350885	
IIC,Airfield P.S	0674-2590192	9437226762	
IIC,Balianta P.S	0674-2461259	9437014111	
IIC,Balipatna P.S	0674-2462219	9937208642	
IIC,Baragada P.S	0674-2310320	9437088833	
IIC,Capital P.S	0674-2533732	9437216300	
IIC,Chandaka P.S	0674-2466055	9437262999	
IIC,Chandrasekharpur P.S	0674-2741999	9437092640	
IIC,Jatni P.S	0674-2490656	9437276466	
IIC,Khandagiri P.S	0674-2350100	9437279982	
IIC,Kharvelanagar P.S	0674-2534272	9437100700	
IIC,Laxmisagar P.S	0674-2571099	9437223262	
IIC,Lingaraj P.S	0674-2340475	9437256110	
IIC,Mancheswar P.S	0674-2585881	9437117177	
IIC,Mahila P.S.	0674-2530694	9437230489	
IIC,Nayapalli P.S	0674-2556668	9438554433	
IIC,Sahidnagar P.S	0674-2541064	9437079988	
Janla O.P.	0674-2460405		
S.P., Khordha,	06755- 220535(O)2552791(R)	9861076612	
SDPO, Balugaon	06756-220430	9437208824	
SDPO, Khordha	06755-220508	9438803510	
IIC,Balugaon P.S	06756-220436	9437322335	
IIC,Banpur P.S	06756-223127	9437275539	
IIC,Begunia P.S	06755-230128	9438153186	
IIC,Bolgarh P.S	06755-232628		
IIC,Jankia P.S	06755-240026	9437302240	
IIC,Khordha P.S	06755-220519	9437057002	
IIC,Tangi P.S	06756-224221	9437413221	
IIC,Nachuni Outpost	06756-225068	9437368757	
IIC,Nirakarpur PS	06756-212567	9438213047	
IIC,Khordha Sadar	06755-220062	9437203480	

5.2.3 List of Fire Stations with Resources Available

Sl. No	Name of the Fire Station	Contact Phone No	Manpower Available	Resource Available
1	Khordha	101, (06755) 220733	SO - 1	MFE - 1
			LFM - 2	Towing Tender - 2
			Driver - 2	Fire Pump - 1
			Fire Man - 14	
2	Jatni	0674 - 2490808	SO - 1	MFE - 1
			LFM - 2	Towing Tender - 1
			Driver - 2	Fire Pump - 1
			Fire Man - 7	
3	Begunia	06755 - 230108	SO - 1	MFE - 1
			LFM - 2	Towing Tender - 1
			Driver - 2	Fire Pump - 1
			Fire Man - 6	
4	Bolgarh	06755 - 232630	SO - 1	MFE - 1
			LFM - 1	Towing Tender - 1
			Driver - 2	Fire Pump - 1
			Fire Man - 6	
5	Tangi	06755 - 224222	SO - 1	MFE - 1
			LFM - 2	Towing Tender - 1
			Driver - 2	Fire Pump - 1
			Fire Man - 6	
6	Balugaon	06756 - 220444	SO - 1	MFE - 1
			LFM - 1	Towing Tender - 1
			Driver - 2	Fire Pump - 1
			Fire Man - 7	
7	Bhubaneswar	101 0674-2312088	AFO - 1	MFE - 7
			ASO - 1	Towing Tender - 4
			LFM - 2	Fire Pump - 3
			Driver - 4	
			Fire Man - 15	
8	Chandrasekharapur	NA	SO - 1	MFE - 1
			LFM - 1	Towing Tender - 1
			Driver - 2	Fire Pump - 1
			Fire Man - 4	
9	Balipatna	0674-2462204	SO - 1	MFE - 1
			LFM - 1	Towing Tender - 1
			Driver - 2	Fire Pump - 1
			Fire Man - 6	

- **SO** – Station Officer, **LFM** - Leading Fire Man, **MFE** – Motor Fire Engine.

Communication and Media including Mass Media

Wireless and V.H.F. stations are the quickest means of communication of weather warning and other important messages on flood and cyclone. Regular wireless, V.H.F. sets are available in all police stations. All the block headquarters were connected by VHF sets with district Collectorate.

Sl. No	Location of VHF station	Exact Place of Location	Battery Fitted	VHF Working	Other VHF Station to which 2 way communication established	Road Distance of location from Dist. HQ	Aerial Distance	Condition of Tower
Base Station								
1	Balianta Block	Office Room	Yes	Yes	All stations	45 KM	30KM	Working
2	Balipatna Block	Office Room	Yes	Yes	All stations	55 KM	40KM	Working
3	Jatni Block	Office Room	Yes	Yes	All stations	12KM	7KM	Working
4	Tangi Block	Office Room	Not Working	Yes	All stations	40KM	25KM	Working
5	Khordha Block	Office Room	Not Working	Yes	All stations	1KM	0KM	Working
6	Chilika Block	Office Room	Not Working	Yes	All stations	65KM	40KM	Working
7	Banpur Block	Office Room	Yes	Yes	All stations	80KM	45KM	Working
8	Begunia Block	Office Room	Yes	Yes	All stations	25KM	15KM	Working
9	Bolgarh Block	Office Room	Not Working	Yes	All stations	45KM	30KM	Working
10	Banpur Tehsil	Tahasil Office	Yes	Yes	All stations	80KM	45KM	Not Receiving Signal
11	Balugaon NAC	NAC Office	Not Working	Not Working	All stations	70 KM	40KM	Working
12	Collectorate, Khordha	Collectorate Khordha	Not Working	Not Working	All Stations	0KM	0.0KM	
13	Sub-collector, BBSR	Sub-collector's Office	Yes	Yes	All stations	38KM	20KM	Working
14	Sub-collector, Khordha	Sub-collector's Office	Yes	Yes	All stations	3KM	0.5KM	Working
15	SPL Circuit House, BBSR	Camp Office, BBSR	Yes	Not Working	All stations	35KM	20KM	Not Working
Mobile Stations								
16	Collector, Khordha	Vehicle of Collector, Khordha	Yes	Not Working	All Stations			Working
17	ADM - BBSR	ADM BBSR s Vehicle	Yes	Not Working	All Stations			Working
18	ADM - Khordha	Vehicle of ADM, Khurda	Yes	Not Working	All Stations			Working
19	PD, DRDA	Vehicle of PD, DRDA	Yes	Yes	All Stations			Working
20	Sub-Collector, BBSR	Vehicle of Sub Collector, BBSR	Yes	Not Working	All Stations			Working
21	Sub Collector-Khurda	Vehicle of Sub Collector, Khurda	Yes	Not Working	All Stations			Working

The District administration is coordinating with OSDMA for repair of the VHF installations. In case of extremely emergency situation, the wireless and VHF facilities available with Police will be utilized.

5.4. Administrative Preparedness

The entire district has been divided into zones & sub zones for effective management of resources at the time of disasters. For the purpose of relief operation the flood affected area divided into zones as well as sub zones. The Zones have been formed according to the jurisdiction of block and urban local bodies. The BDOs/Tahasildars will be the zone officers in respect of their block area. Similarly the executive officers will be the zone officers in respect of urban areas.

5.5. Senior Officers In Charge of Flood Prone Blocks

For the ensuing Flood/Cyclone Season' 2009, the following Senior Officers are hereby kept in-charge of the areas noted against each for possible Flood/Cyclone-Rescue-Relief-Rehabilitation management.

Sl.No	Senior Officers Assigned	Areas Responsible
1	ADM - Khordha	Overall Charge – Relief & Rehabilitation/DEOC
2	ADM-Bhubaneswar	BMC Area
3	Addl. PD, DRDA, Khordha	Balianta / Balipatna Block
4	Project Director, DRDA, Khordha	Balianta Block
5	Sub Collector , Bhubaneswar	Bhubaneswar & Jatni Block and arrangement for Relief materials.
6	Sub Collector , Khordha	Khordha/Tangi Block
7	DPC,SSA, Khordha	Chilika & Banpur Block / Banpur & Balugaon NAC

Besides this, the concerned Block Development Officers / Executive Officers of Urban Local Bodies shall remain in-charge of relief operation in their respective jurisdictions under the administrative supervision of concerned Sub-Collectors. Concerned Sub-Collector will also assist the Senior Officers in rescue, relief and rehabilitation measures.

5.6 Zone /Addl Zone Officers In Charge of Flood Prone Blocks

For smooth operation of rescue, relief & rehabilitation for the ensuing Flood / Cyclone Season'09 in Bhubaneswar Sub-Division area. (except BMC) each of the Zonal Blocks are divided into sub-zones as under. The B.D.Os / Executive Officers of ULBs will work as Zone Officer for the entire Block/ULBs. The Tahasildars will coordinate the Disaster Preparedness machinery in their Tahasil along with being responsible for the rescue-relief-rehabilitation of the Sub-Zones assigned to them.

<i>Sl. No.</i>	<i>Name of the Officer</i>	<i>Name of the Block</i>	<i>Designated Zone/Sub-zone</i>	<i>G.P.s covered</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1	BDO, Balipatna.	Balipatna	Zone Officer	All G.Ps
2	Addl. Tahasildar, Bhubaneswar	-do-	Sub-Zone-I	Amanakud, Bhapur Deulidharapur, Nariso
3	Addl. Tahasildar, Bhubaneswar	-do-	Sub-Zone-II	Rajas, Somana Pampalo
4	Addl. Tahasildar, Bhubaneswar.	-do-	Sub-Zone-III	Kurunjipur, Narada Marthpur, Aitalanga Guapur
5	Tahasildar, Balipatna.	-do-	Sub-Zone –IV	Majjihara, Bhakarsahi Garedipanchan
6	BDO, Baliaanta	Baliaanta	Zonal Officer	All G.Ps
7	Tahasildar, Baliaanta	-do-	Sub-Zone-I	Sarakana, Puranapradhan Jhintيسان
8	Addl. Tahasildar, Bhubaneswar.	-do-	Sub-Zone-II	Prataprudrapur, Jayadev Bhingarpur(part) Benupur, Baliaanta Jaganathpur
9	Addl. Tahasildar, Bhubaneswar.	-do-	Sub-Zone-III	Satyabhamapur, Bainchua, Bhingarpur (part) Umadeiberhampur Bentapur, Pratapsasan
10	BDO, Bhubaneswar.	Bhubaneswar	Zone Officer	All G.Ps
11	Tahasildar, Bhubaneswar	-do-	Sub-Zone-I	Andharua, Barimunda, Basuaghai, Chandaka, Dhada, Daruthenga Dhauli, Itipur, Kalarahanga, Kalyanpur,
12	Addl.. Tahasildar, Bhubaneswar	-do-	Sub-Zone-II	Kantabada, Mendhasal, Nanput, Paikarapur, Patrapada, Raghunathpur, Sishupal, Tamando, Tikarapada
13	BDO, Jatni	Jatni	Zone Officer	All GPs
14	Tahasildar, Jatni	-do-	Sub-Zone-I	All GPs
15	Executive Officer, Jatni Municipality.	-do-	Sub-Zone-II	Jatni N.A.C.

The Zone Officers/Sub-Zone Officers in their respective jurisdiction shall ensure.

- Constitution of rescue & relief team.
- Positioning of boats at strategic locations.
- Identification of rescue places.
- Storage and availability of adequate relief materials including dry food, baby food, cattle feed where-ever necessary

- Other food related arrangement including health, sanitation, veterinary.
- Liaise with people's representative like Ward Member/Sarpanch/P.S. Members/Z.P. Member/ eminent persons of the locality/ NGO where-ever available for smooth rescue & relief administration.
- B.D.Os are squarely responsible for proper maintenance of accounts, stock & store of relief materials.
- Inform the senior officers like Sub-Collector, Bhubaneswar/ A.D.M., Bhubaneswar/ Project Director, DRDA, Khordha/Collector, in case of any problem.
- Must stay in their area of operation.
- Sub-Zone Officers will be assisted by extension officers / VLWs & Secretary of concerned GPs.
- To take steps to guard the weak and vulnerable points in embankments through village volunteers, Home Guards and Police constables etc.
- If situation so warrants, start distribution of emergent relief in marooned areas after obtaining approval of Collector/Sub-Collector concerned.
- There may be necessity of more vehicles for undertaking rescue and relief operation. In such circumstances they will immediately contact the Sub-Collectors concerned.
- Apart from Govt. Country boats there may be necessary of private country boats. In such cases the Zone and Addl. Zone Officer may request to District EOC for sending country boats.
- To keep District Control Room informed about the situation and relief measures.
- To assess damages through field staff and submit preliminary report within twice in a day on occurrence of the calamity.
- To assess detailed damage and submit final damage report to District and Sub-Collector's office within a week.
- Tahasildars will assess the damage to the private houses through Revenue field staff and staff deputed from other offices. After assessment of damages they will conduct at least 10% test check to ensure correctness of the enumeration. Addl. Tahasildars and other officers deputed from different offices may also be engaged for checking. After final assessment, proposal is to be sanctioned by Tahasildars concerned and submitted to Sub-Collector/ District Office for approval of House Building Grant u/r 81(1) and 82(3) of Orissa Relief Code and simultaneously requirement of funds should be indicated. All such assessment works should be completed within 7 days from the date of occurrence.

- In case of human casualty, the Tahasildars concerned will bring proforma report from Revenue Inspectors within 24 hours and submit report to District Collector at once for consideration of sanction of ex-gratia u/s 254 of Orissa Relief Code.
- Call up the Officers and ensure that they remain in headquarters until the situation becomes normal.
- Prepare a logbook for recording chronological sequence of events time to time.
- Co-ordinate with Line Departments for early restoration

CONTROL ROOM AT SUB-DIVISION, TAHASIL AND BLOCK LEVEL

Similar to the District Control room, at lower level control room are also formed at Sub-division, Tahasil and Block levels which will be supervised by the Zone Officer during emergency periods. The procedures lay down for these control rooms are as follows:

- Control Rooms will be managed by an Officer and supported by clerk/Revenue Supervisor/Extension officer and a peon.
- The Head of office will ensure proper working of the control room telephones.
- A register will be maintained in the control room to record the messages and warning received over telephones and action taken thereon.
- The Sub-divisional level Control Rooms will keep constant touch with the District Control Room during and after occurrence of any calamity
- In case any message of devastating nature is received, this should immediately be passed on to Collector/Addl. Dist. Magistrate/concerned Sub-Collector and necessary action to be taken according to their instructions.

List of NGOs involved in Disaster Management.

Sl. No.	Name of NGO	Contact Officials	Contact Address	Telephone No
1	Viswa Jeevan Seva Sangh(VJSS)	Kodanda Baral	At/Po- Palhahat, Khordha	06755-223018/222536 Mobile : 9437264549
2	Bhairabi Club	Laxman Barisal	At/Po- Narangarh, Khordha	06755- 245027 Mob : 9937161527
3	Darbar Sahitya Sansad(DSS)	Kedar Choudhary	At – Sodhua, Po- Dala Kasoti, Balipatna-752102,	Ph- 2468529
4	Pragati Parishad	Dilip Ojha	At/PO- Balipatna,	0674-2462166 Mob: 9937486701
5	Sarvodaya Vikash Samiti(SVS)	Praful Rout	At- Raiguru Basudeipur Po- Balkati-752100,	Ph-2464426 Mob: 9238689997
6	Jaydev Club	Nath Babu	At/Po Balianta, Khordha	Mob : 9937949782
7	TRIVENI	Sudarsan Dixit	AT/Po Sarkana, Balianta	0674-2464361
8	Juba Jyoti Cultural Association	Rishna Mandhata	At/Po – Badapari, Khordha	06755-224028 , Mob - 9437195715
9	UDYAMEE	Srikant Rath	Banapur,	06756-223182
10	Mother Teresa Seva Pratishan	Manoj Mohanty	Banpur,	06756-223019 9937131761
11	WORD		Banpur	Mob : 9937387267
12	Narayan Seva Sangha(NSS)	Gouranga Champati	Bolgarh	06755 – 232576(o), 232592(R)
13	SAPID, Bolgarh	Abhya Das	At/Po – Tangisahi, Bolgarh,	94371-76464
14	Maa Harichandi Youth Club MHYC	Ananta Palei	Vill-Patharkata, Po Baradi,Chilika	0674-2334278 9937164678
15	Life Line Care, Jatni	Bijan Pratihary	Jatni	0674 - 2490050
16	Seva Dharitree, Tamando, Jatni	Om Prakash	At/Po – Arikama, Jatni	0674- 2401174 Mob : 9437190119
17	Padmashree, Jatni	Hochimin Sastri	At : Bachara, PO-Jatni	0674- 2492740, Mob - 9437107124
18	SWARDO, Bhubaneswar	Basudev Bhatta	Bhubaneswar	Mob -9337121064
19	Jana Kalyan Samaj, Bhubaneswar		Bhubaneswar	Mob - 9861168138

CHAPTER - 6

Prevention & Response Strategies

6.1 Planning Assumptions

COLLECTOR

- Proper functioning of Control Rooms to be monitored
- Closure of breaches and embankments to be ensured
- Alternate arrangements to those cut off areas to be planned
- Senior Level Officers should be deployed before the areas get cut off
- Boats should be deployed
- Storage of food (Baby food, dry food) in vulnerable pockets to be monitored
- Arrangements for keeping drainage clear to be made
- Army/paramilitary force assistance to be alerted
- Relief measures to be organized

SP

- There will be communication problem.
- There will be law and order situation in the affected areas.
- Army and Civil Defense assistance will be required.
- Routes might be blocked with carcasses/fallen trees.
- There will be a traffic jam on the roads.

DISTRICT EMERGENCY OFFICER

- Information will be flowing from all sources to the Control Room.
- Update information to be received from block level.

CDMO

- Outbreak of epidemic or medical emergency as secondary disaster.
- Contamination of water and food, requirement of adequate drugs and medical accessories.
- Unclean disaster affected site.
- Disruption of communication and transport facilities.
- Disruption of labs and hospital, urgent need for mental health crisis council for disaster victims.
- Disruption of sanitation facilities.
- Loss of power and missing people in shelters may increase disease and injury.

RWSS

- Most of the water available will be unfit for drinking.
- Existing storage bodies of water may be damaged and unusable.
- There will be an alternative need of water (water pouches) to assist victims in rescue operation.
- People to be informed of emergency supply of water.
- Tankers and portable containers to be acquired for distribution of water.
- Sources of possible water sources and unacceptable water sources to be identified.
- Water to be distributed to camps and hospitals.

6.1.1 Responsibility of different Officers in Pre & Post Disaster Situations.

Duties → Officer ↓	Normal time.	1 st warning	Post Disaster.
EE, CESC	<p>Ensure cross checking of power supply HT lines and replace old materials used in the power supply.</p> <p>He should see that all wiring are in service connections are rectified.</p> <p>He should see that the report regarding cyclone warning should be reported to other subordinate offices.</p> <p>The field staff should see that electrical supply in the places where cyclone may be severe to be cut off in advance.</p>	<p>On receipt of the 1st warning it should be communicated to all the subordinate staff.</p> <p>He should see that all the vehicles under his control be kept in perfect order.</p> <p>Alert the entire staff to return their Hqrs. And get in touch with immediate requirement.</p>	<p>Restoration of power lines to:-</p> <ol style="list-style-type: none"> 1.Hospital, Water supply 2.Control Room 3.Fire Stations and to other offices on priority basis <p>Live wires on ground should be removed promptly.</p> <p>Damaged or fallen electrical poles should be immediately replaced and obstructions on roads should be got removed.</p>
EE, Irrigation.	<p>The branches to canal drain to be closed.</p> <p>Strengthening & cross checking of vulnerable embankments</p> <p>The obstruction in the canals if any should be got removed immediately to be enabling free flow of water.</p> <p>The doors and shutters of the canals are to be test checked and satisfied that they are in good condition.</p> <p>The instruments and materials etc. required attending to immediate repairs breach of closures etc. should be prepositioned at vulnerable places</p> <p>Water supply in to canals should be out off by closing the sluices.</p>	<p>1st warning should be communicated to all the subordinate staff.</p> <p>They should be alerted to check whether the canals and drains are in proper condition to allow free flow of water.</p> <p>The stations tour should take their duty places and be readily available.</p> <p>Keep sufficient no. of vehicles for one by the staff on control duty.</p>	<p>Damages due to Hazards to Govt. properties lives of man and cattle etc. should be assessed and reported to Tahasildars, Sub-Collector concerned immediately.</p>

<p>FIRE OFFICER.</p>	<p>Alert messages to fire personnel and checking of fire tenders.</p> <p>Materials required for use in emergency should be indented for and kept in reserve</p> <p>Message received from public on disaster for help should be immediately attended.</p> <p>Keep in touch with each of the other fire stations in the district.</p>	<p>The 1st warning should be immediately communicated to fire stations.</p> <p>The staff should be called on for duty.</p> <p>Full complement of the staff should be available for the vehicles should be obtained and kept in reserve.</p>	<p>Removal of collapsed houses, walls etc. should be attended</p> <p>Persons involved in house collapsed should be promptly reserved.</p> <p>Report on the relief activities, under taken should be promptly reported.</p>
<p>EE, R&B</p> <p>EE, NH div.</p>	<p>Govt. buildings should be inspected and necessary repairs to be got executed to with standing hazards affected.</p> <p>Public addresses equipment should be obtain kept ready.</p> <p>Specific duties should be assigned to the field staff.</p> <p>The field staff should proceed to the place of work allotted and is ready to attend any eventualities.</p>	<p>The 1st warning should be communicated immediately to all subordinate officers.</p> <p>The Sub-Divisional public relation officer should be available at their Hqrs.& got ready for cyclone duty with short notice.</p>	<p>Photographs of damages should be taken. The field staff should convey information regarding the quantum of disaster loss of property to lives.</p> <p>They should be posted with up-to-date information and the information should be passed to the Collector immediately.</p>
<p>CDMO</p>	<p>Sufficient stock of medicines / disinfectants / vaccines should be kept ready at different places in the District.</p> <p>List of medical staff to serve in specific places should be drawn and kept ready in advance.</p> <p>Keep sufficient First aid kits.</p> <p>To keep sufficient Ambulance.</p> <p>Movement of Medical Teams</p>	<p>The 1st warning of the cyclone should be communicated to all the subordinate officers, Health Officers.</p> <p>The staff of the entire Dept. should be altered to attend the emergency duty with short notice.</p> <p>Sufficient No. of vehicle in good condition to be kept ready.</p>	<p>The injured persons should be lifted to the nearest Hospital after first aids.</p> <p>Preventive action to arrest spreading of infections diseases should be taken</p> <p>a) Chlorination. b) Disinfections. c) Inoculation. d) To set up sufficient no. of medical camps to meet the situation.</p> <p>Daily situation report to District Control Room</p>

SP	<p>Detailed plan of action fixing various duties to different officers and the Deptt. should be kept ready in the event of any hazard.</p> <p>Police wireless/VHF sets to be kept in order & their installations position to be identified.</p> <p>The public in cyclone zones should be alerted to vacate their place of residence.</p> <p>Properties of the public should be guarded at the time of evacuation of the people.</p> <p>Control Room to be started.</p>	<p>Soon after 1st warning of cyclone is received all the subordinate police staff should be alerted.</p> <p>The home guards should be alerted.</p> <p>Sufficient No. of vehicles should be reserved for cyclone duty.</p> <p>Communication of warnings through VHF to all police stations.</p> <p>Police stations in turn to communicate to villages.</p>	<p>Help should be rendered to the affected persons to reach rehabilitation centers.</p> <p>Transportation of injured person to Health Centres.</p> <p>Record of identification of the dead should be maintained.</p> <p>Asst. Public and departmental officers in cyclone relief operation.</p>
RTO CSO TDM	<p>List of vehicles running condition to be requisitioned & kept ready.</p> <p>MVI/Asst. MVI will report before A.D.M.</p> <p>Asst. Engineer & Jr. Engineers will remain alert.</p> <p>To contact all Block Control Room and Collectors Office.</p> <p>Installation of wireless systems and telephones to be ensured for communication</p>	<p>Availability of petrol, oils should be ensured.</p> <p>The R.T.Os and M.V.Is should be asked to serve requisition orders on owners of vehicles for cyclone duty.</p> <p>Soon after receipt of 1st warning all the instruct the GP level functionaries to be ready All telephone sets to be informed of disaster warning</p>	<p>Electricity Dept. for restoration.</p> <p>Roads and buildings for clearance.</p> <p>Restoration of Telephone lines to control room to Collector, Hospital, fire station S.P. and other offices as per the list appended.</p>

<p>TAHASILDAR /BDO'S</p>	<p>Updatation of Block Disaster Management Plans</p> <p>List of villages likely to be marooned to be maintained.</p> <p>List of officers appointed for evacuation and maintenance of relief center to be kept.</p> <p>List of place selected for feeding centers storerooms etc. to be kept ready.</p> <p>Evacuation.</p> <p>To get suppliers of required information</p> <p>To keep in touch with all department officers, Sub-Collector & Control Rooms to proceed with relief preparation</p> <p>To keep track of voluntary organization.</p>	<p>To disseminate the 1st cyclone warning by communicating it to local officers and village level workers and.</p> <p>To take steps to serve orders of requisition of services of employees.</p> <p>To take steps to obtain the required No. of vehicles.</p> <p>To contact the control room of Collector frequently for instruction on matter requiring order to kept informed of the situation.</p>	<p>To call for Block level Relief committee meeting to discuss the relief measures to be taken.</p> <p>Local schools to be declared closed.</p> <p>To asses the loss of human life and cattle</p> <p>Teams of enumerate houses damaged/deaths in details.</p> <p>Arrange feeding centers if necessary.</p>
------------------------------	--	--	--

6.2 Disaster Specific Measures and Approaches

Short Term Measures

Type of Sector	Sub Sector	Mitigation Measures	Responsible Dept.	Time Frame
Infrastructure development	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the BDOs and DI & PRO	During the last week of May & 1 st week of July every year
	Road	Repair of vulnerable points identified by the departments	PWD, RD	By 15 th of June
	Embankments	<ul style="list-style-type: none"> • Receiving the Height of the embankment points identified • Repair of Vulnerable points identified 	Irrigation Department	By 15 th of June
	Safe Shelters & Multi purpose Cyclone shelters	Ensure maintenance of shelters	RD department, DI and CI of Schools	Before 15 th of June

When the disasters are inevitable, the only way is to mitigate its impact. This falls under the Short Term Measures like immediate relief, reducing the response time to avert any losses, provide the vulnerable and affected people with the basic needs, supply of minimum essential items to those who have lost their properties and movables, grant of long/short term loans at a concessional rate.

Long Term Measures:

The Long Term Measures to be followed include maintenance and repair of the embankments of the rivers and canals going through the district, construction of embankments, bank protection and watershed management, bio-mass production by the forest/horticulture department.

Sector Wise Vulnerability Reduction Measures

Type of Sector	Sub Sector	Mitigation Measures	Responsible Deptt.	Time Frame
Communication & Infrastructure	Communication	Ensure maintenance and good running condition of communication systems	Telecom and District Administration	By 31 st of May
	Drinking water and sanitation	<ul style="list-style-type: none"> ▪ Repair of the Damaged standpoints ▪ Check the Leakage of overhead tanks and pipes 	RWSS	All the time
	Technology Dissemination	Installation of VHF in all the block headquarters	OSDMA and District Administration	Before April 30 th
Health/Animal Husbandry	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and CDVO	By May 31 st and after the receipt of warning
	Vaccination	Stock piling of vaccines	CDVO & CDMO	By April 30 th
	Training	Health care, sanitation, first aid	CDVO & CDMO	After the 1 st Natural Calamity Meeting
Livelihood	Awareness	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and CDVO	By May 31 st and after the receipt of warning
	Agriculture	<ul style="list-style-type: none"> ▪ Flood resistant crops/ Alternative cropping ▪ Drought resistant short duration paddy ▪ Crop insurance ▪ Coordination with Irrigation and DRDA 	Agriculture and horticulture department	Normal period Pre flood Period
	Horticulture	<ul style="list-style-type: none"> ▪ Nursery raising ▪ Insurance 	Horticulture Department	<ul style="list-style-type: none"> ▪ Normal period ▪ Pre flood
Insurance	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and CDVO	During normal period
	Livelihood	Ensure insurance of livestock, crops, work sheds/workshops etc.	Agriculture, Cooperative Society	During normal period
	Life	Awareness	NGOs	During normal period

6.3 Mock Drill

For the District Disaster Management Plan to be successful it is important that a mock drill of the plan be carried out in presence of and under the supervision of nodal officer deputed for district and the District Collector. The mock drill should be enacted in the pre disaster season; twice a year after the District Natural Calamity Committee Meeting is convened. The mock rehearsal should start from the Control Room. This will help in finding out the preparedness level for the district level functionaries.

6.4 Plan Evaluation

The purpose of evaluation of DDMP is to determine

- The adequacy of resources
- Coordination between various agencies
- Community participation
- Partnership with NGOs

The ease of understanding and using the plan will also be important consideration

The plan will be updated when shortcomings are observed in

- Organizational structures
- Available technologies
- Response mechanism following reports on drills or exercises

6.5 Dissemination of DDMP

The responsibility for dissemination of the plan is vested with EOC at the Collectorate. The plan can be seen at **www.khordha.nic.in**

In order for the DDMP to be effective it must be disseminated, government departments, NGOs and other agencies and institutions within the district

Effective dissemination of plan requires a well designed and focused training. Training activities are carried out under the guidance and direction of the Collector/ Orissa State Disaster Management Authority (OSDMA).

6.6 Post- Disaster Evaluation

A Post- disaster evaluation should be done after the withdrawal of relief and rehabilitation activities in order to assess

- The nature of state intervention and support,
- Suitability of the organizational structure,
- Institutional Arrangements,
- Adequacy of Operating Procedures,
- Monitoring mechanism,
- Information tools,
- Equipments,
- Communication System, etc.

The impact studies on the above operations for long term preventive and mitigation efforts are to be undertaken. Evaluation exercises may be undertaken to understand the perceptions about disaster response in terms of

- Adequacy of training
- Alert and warning system,
- Control Room functions,
- Communication plans,
- Security,

- Containment,
- Recovery procedures,
- Monitoring.

6.7 Plan Update

The DDMP is a “Reference Handbook ” and the Collector will ensure updating it every year before May, according to the format approved by DLNCC, taking into consideration

- The resource requirements
- Updates on human resources
- Technology to be used
- Coordination issues

The soft copy of the District Disaster Management Plan or DDMP is with the District Emergency Operation Center, which will ease the process of updating the DDMP regularly. All the line departments at the district level can view thye DDMP in the website of District NIC. The address is www.khordha.nic.in . A training programme on different disaster preparedness measures had been organized by the member convener of the District Disaster Management Committee during the month of April / May every year. During Emergency Period distribution of area is done block wise for checking shelter, Godowns, communication and coordination

CHAPTER 7

Institutional Arrangements at the District Level

Disaster Management Committee at the District Level (Natural Calamity Committee)

- **Meeting of the District level Disaster Management Committee**

The District Disaster Management and Natural Calamity Committee is the apex planning body at the district level and will play a major role in preparedness and mitigation. A District Disaster Management/Natural Calamity Committee has to be formed in the district to assist the Collector in

- Reviewing the threat of disasters
- Vulnerability of the district to different disasters
- Evacuation process to reduce risk and emergency response
- Considering suggestions for improvement of the response document i.e. District Disaster Management Plan

Responsibility of DDMC Committee

- To educate the public on different flood and cyclone hazards and what Protective steps should be taken
- To make arrangements for emergency action
- To effect evacuation from the Coastal Villages when necessary
- Rescue and Rehabilitation
- Post Flood and Cyclone action and review

The District Disaster Management Committee will meet at least once in six months i.e. in the month of May and November before the Disaster season (Cyclone) of Orissa coast under the chairmanship of the District Collector. An emergency meeting will be called by chairman whenever information is received from the India Meteorological Department, Storm Warning Center that a tropical depression is located in the Bay of Bengal and is expected to intensify and move towards Orissa coast. The Committee will meet almost daily till the emergency is over. The DDMC-Khordha is having the following functionaries.

- **District Disaster Management Committee**

Sl.No.	Functionaries	Designation
1	District Collector, Khordha	Chairman
2	President, Zilla Parishad, Khordha	Member
3	Addl. District Magistrate, Khordha	Member
4	Superintendent of Police, Khordha	Member
5	Project Director DRDA, Khordha	Member
6	DSWO, Khordha	Member
7	CDMO, Khordha	Member
8	CDVO, Khordha	Member
9	DAO, Khordha	Member
10	DWO, Khordha	Member
11	Civil Supplies Officer, Khordha	Member
12	RTO - Khordha	Member
13	Sub-Collector, Khordha	Member
14	Sub- Collector, Bhubaneswar	Member
15	Secretary, Bhairabi Club, Kurumpada, Khordha	Member
16	Secretary, DSS, Sodhua, Balipatna, Khordha	Member
17	Project Officer, UNDP, Khordha	Member
18	District Emergency Officer, Khordha	Member Convenor

The District Collector should include in the agenda of the District Coordination Meeting, the subject of up-dating of the district disaster management plan by incorporating the changes in names of officers, of telephone numbers and addresses of the officers concerned. The District Collector should also take review of changes in other indicators pertaining to the district like creation of additional infrastructure, development projects, changes in inventories, etc. and incorporate these changes while updating the Plan. The members should substantiate/assist the Committee with all the updated information about their concerned areas of operation time to time.

•**Police/Arm Force:**

The Superintendent of Police in the district will get in touch with the District Collector for assistance in rescue, evacuation and emergency relief measures under intimation to the State Relief Commissioner. As disaster and natural calamities can occur at any point of time hence Army may be called up on to assist the civil authorities in rendering rescue and relief operation.

Standard Operating Procedures for Police Dept

- The Superintendent of Police must work in close co-ordination with the District Collector on receipt of a warning or alert on an emergency situation.
- The Superintendent of Police must designate three senior officers of the district Collector for co-coordinating the activities of the police Department in the District Control Room.
- These senior officers deputed by the Superintendent of police for the District Control Room will work in three shifts in the control Room.
- During normal times, the police department under the Superintendent of Police must assess the preparedness level and report the same as per format (Preparedness Checklist for police as given below) to the District Control Room every six months.
- They should have continues contact with the District Control Room over VHF during the crisis
- The Police Department under the Superintendent of Police must maintain a list of disaster prone areas in the district, along with the details of nearest police Stations and their contact phone numbers.
- The police Department under the Superintendent of police must organize training programmes on handling of hazardous chemicals for Police Officers in collaboration with Deputy Director of industrial Safety and health to facilitate more effective handling of road accidents involving hazardous substances.
- The Police Department under the Superintendent of Police must identify a police Station in the city, which can be used as a public information center for disseminating information to the public.

Scope of Work Police/ Arm Force

- Road cut off, repairing and Building of approach road.
- Rescue operation / evacuation
- Escort/convoy the relief material
- Referring the dropping zone (Breach sites, Cut off and marooned areas) do the air dropping
- Relief and Rehabilitation operation

Home Guards/NSS/NCC & Voluntary Organizations:

Services of Home Guards, Member of NGOs/CBOs etc. may be utilized in the following manner:

- They will circulate weather warnings among the people after getting such messages from Zone/Addl. Zone officers.
- Inform local medical staff about out break of epidemic.
- Assist the Officials of different Departments for clearance of fallen trees and Debris etc. from the roads.
- Inform CESU staff about damage of electric installations.
- Help Veterinary staff for disposal of carcasses.
- Act as guide to the OSAP rescue party/Army rescue party if deployed for rescue and relief operations.
- Assist the Relief Officers in distribution of relief materials.
- Regularly listen to weather bulletin from All India Radio and disseminate the same to the local people.

Assist the Sub-zone Officer in evacuating the people from low-lying areas.

7.1 District EOC and Linkages with Other EOC at State and District Levels

DISTRICT EOC:

The District EOC aims for an effective and realistic District Disaster Management Plan with fail proof communication, accurate databases in order to make optimal utilization of Men, Material and Resources to prevent the loss to lives as well as minimize the loss of property ensuring fastest restoration of the situations.

7.3.1 PURPOSE OF DISTRICT EOC

The District EOC is under control of the District Collector, which will be operational round the clock and is the nerve center for the following activities.

- To monitor & Co-ordinate and Implement the actions/activities for effective disaster responses as well as management of available resources.
- In a disaster time the District EOC will operate under the central authority of the District Collector, exercising emergency power to issue directives to all departments to provide emergency response service.
- EOC will co-ordinate with the State disaster response machinery like State Relief Commissioner, Bhubaneswar and Orissa State Disaster Mitigation Authority (OSDMA) for appropriate support and smooth flow of information.
- The EOC will be manned round the clock for emergency responses.
- The District EOC will be placed in the Emergency Section of the District Collect orate.

The EOC shall be in overall charge of the Collector. In the absence of Collector, ADM (Emergency), PD, DRDA, Emergency Officer or any other Officer on duty at that point of time shall remain in charge of EOC. The person in charge of the EOC shall be personally responsible for implementation of the Standard Operating Procedure (SOP).

Assembly in EOC

Following staff and officers shall assemble in the EOC . Collector, ADMs, SP, PD, DRDA, District Social Welfare Officer, Emergency Officer, Sub-Collector, Tahasildar and few BDOs, CSO, DIPRO, CDMO and RTO, All staffs of the Emergency section, Stenos to Collector and ADMs and other staffs as desired by the Collector.

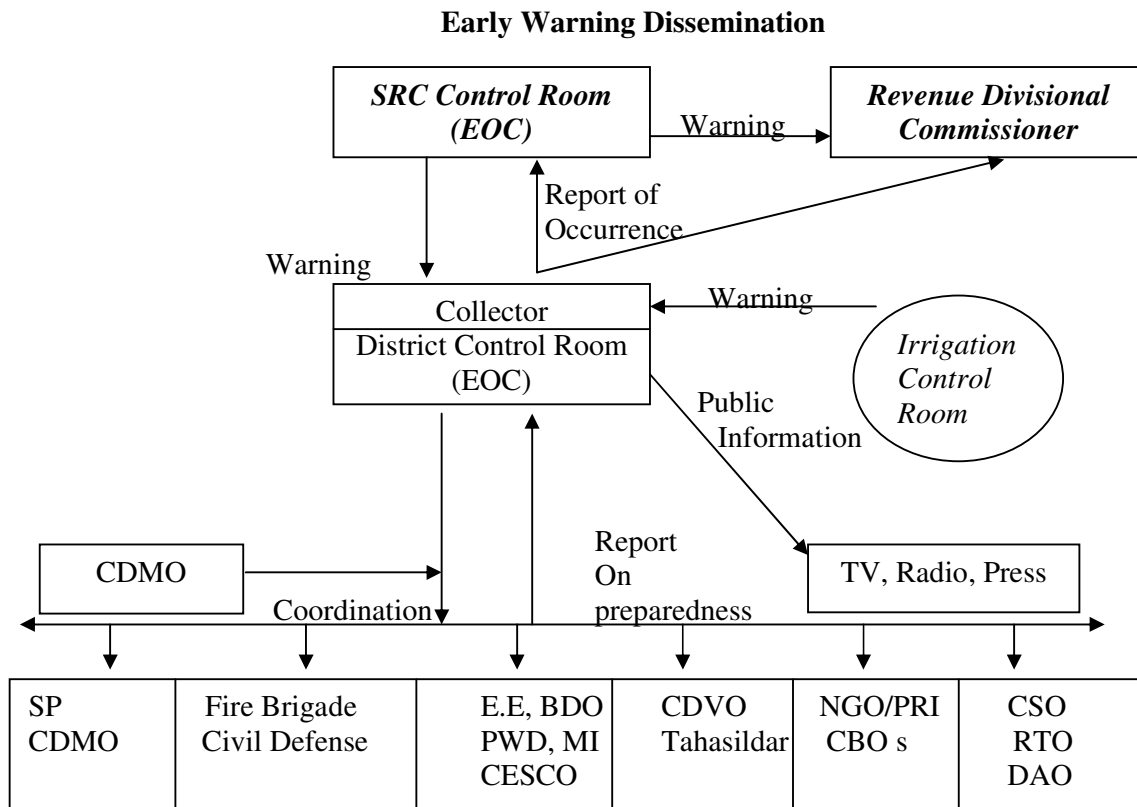
Apart from these any other officer or staffs who get the information from any other sources will reach/inform the EOC immediately for further onward actions.

7.3.2. Preparatory Actions for EOC:

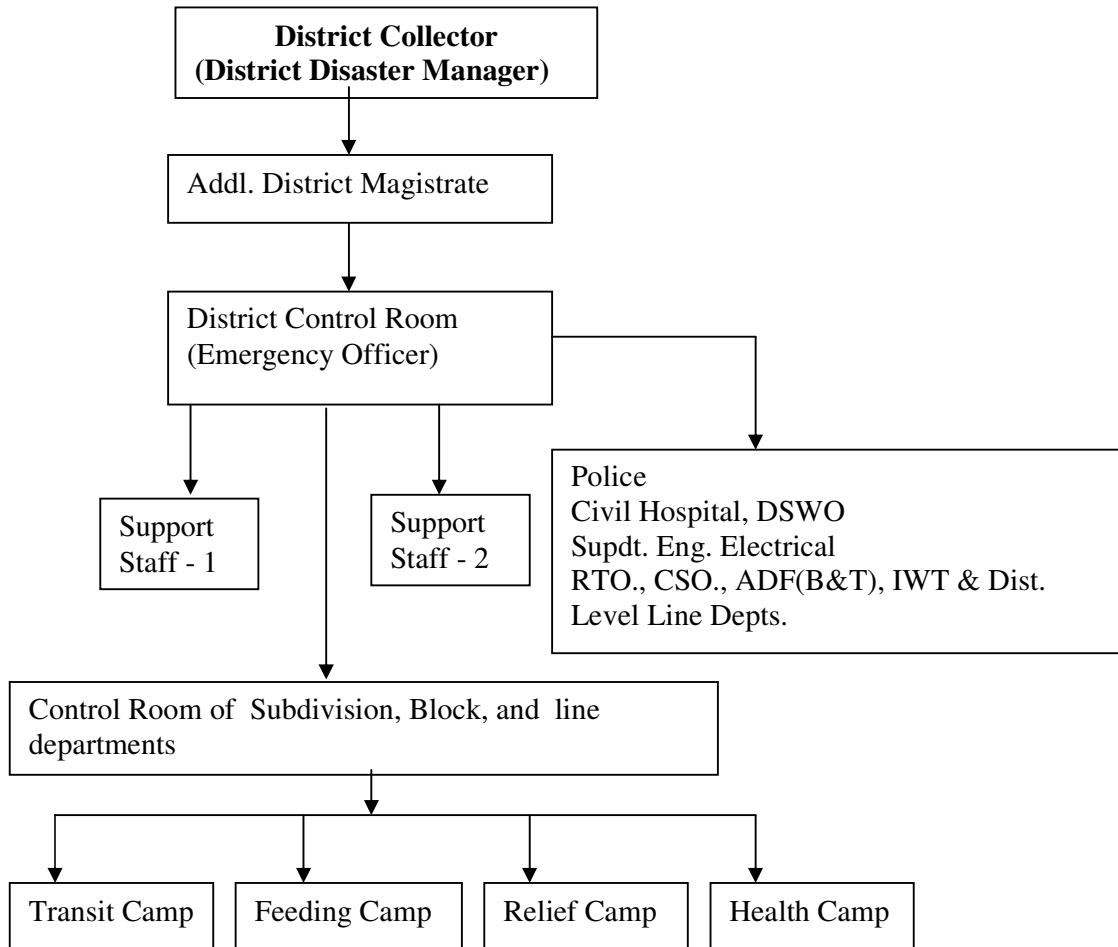
Following preparatory steps will be taken up for keeping the Control Room functional during emergency.

- a. phone line will be cross checked in EOC along with FAX
- b. Kerosene as well as petrol to be stocked for running the generators.
- c. Charge the VHF sets and testing to be done.
- d. Keep two four wheelers ready for emergency operations.
- e. Internet Connectivity to be verified by DIO, NIC along with Broadband Connections
- f. Alert all field officers like BDOs/Tahasildars /MOs/VAS/ Telephone Operators/ Agriculture/R.W.S.S./R.D./R.&.B./ICDS/Irrigation/NH/CESCO / PHD/Municipality /MLAs/MPs/Station Director, AIR/DIPRO who will inform the Media.

7.3.3. District Control Room and Linkages with Other Control Rooms at State and District Levels



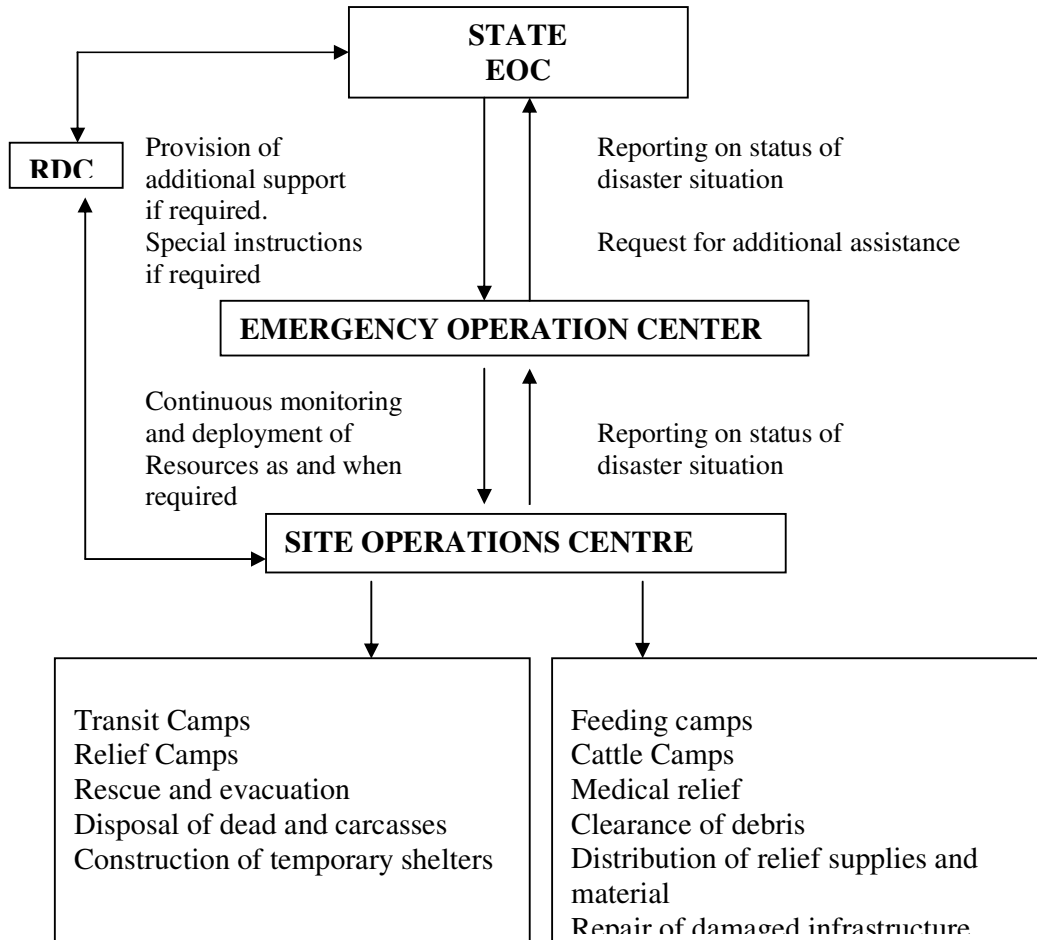
7.3.4 CO-ORDINATION STRUCTURE AT DISTRICT EMERGENCY OPERATION CENTER



7.3.5. EMERGENCY RESPONSE STRUCTURE

Sl. No.	Officials	Responsibilities
1	COLLECTOR & DISTRICT MAGISTRATE	<ul style="list-style-type: none"> • Emergency Meeting • Overall disaster management. • Fixation of Responsibilities to different officials. • Instruction to block level Officials.
2	S.P./DCP	<ul style="list-style-type: none"> • Interaction with Collector and other official regarding situations. • Placement of Forces for relief operations
3	C.D.M.O	<ul style="list-style-type: none"> • Stock and storage of medicine at different points as well as in sub points. • Charge distribution and deployment of different staffs for speedier health services. • Temporary Distribution points as well as setting up of delivery mechanism. • Vehicle deployment and establish of mobile Vans/ Ambulances.
4	CSO/Emergency Officer.	<ul style="list-style-type: none"> • Control Room and allied functions. • Collection of statistics and compilation of reports and returns.
5	C.S.O	<ul style="list-style-type: none"> • Collection & diversion of food and other materials for affected area • Stock positions at different locations.
6	Fire Officer	<ul style="list-style-type: none"> • Deployment of Fire Brigade in case of Fire Accident
7	RTO/ MVI	<ul style="list-style-type: none"> • Requisition of vehicle
8	Nizzarat Officer.	<ul style="list-style-type: none"> • Allocation of duty to vehicle and issue POL
9	DIPRO/TDM	<ul style="list-style-type: none"> • Information and Communication facilities. • Warning dissemination. • Setting of temporary installations for Communication.
10	DDO/DSWO	<ul style="list-style-type: none"> • Allocation of duty to area to voluntary Organization after consultation with Collector. • Organising Relief Materials for Resource Tracking.
11	EE, Irrigation	<ul style="list-style-type: none"> • Updation of the situation

7.3.6 Activity Wise Flow of Information between Revenue Control Room, EOC and Site Operations Centre



7.3.7 Normal Time Activity

Scope of work for the District Control Room

❖ Normal Time Activity

The normal time activity of the EOC under the guidance of the District Collector is to:

- Ensure that all warning and communication systems, instructions are in working condition.
- Receive information on a routine and regular basis from the departments on the vulnerability of the various Grampanchayats and Villages to disaster
- Receive reports on preparedness from the relevant district level departments and other departments, as per the formats. Based on these reports, the EOC will forward the Preparedness Measures details on behalf of the Collector to the Revenue Control Room, State Relief Commissioner, Revenue Divisional Commissioner and OSDMA.

- Upgrade and update District level disaster mitigation action plan according to changing scenarios in the district
- Data bank updation and maintain an inventory of resources.
- Update all information in the GIS.
- Inform Emergency Operations Centre (EOC) under Relief Commissioner of any changes including updating of data bank and annexure
- Monitor preparedness measures including simulation exercises undertaken by various departments
- Ensure proper dissemination of DDMP at the district level, local level and disaster prone areas.
- Identify appropriate NGOs/Civil society Organization, with their capacities who can be mobilized during the time of disaster and can be helpful in community level disaster preparedness.
- Organize post-disaster evaluation and update DDMP accordingly
- Prepare reports and documents on district level disaster events and submit the same to EOC.

7.3.8 Warning or Occurrence of Disaster

- **During Emergency**
 - Weather tracking and early warning dissemination
 - To collect and transmit information regarding matter relating to natural calamity.
 - Mapping of vulnerable areas
 - Database on civil society organizations and their activities
 - Database on volunteers
 - Facilitate regular meetings of civil society organizations and issue updates
 - Flow of information to central control room in Special Relief Commissioner's office and OSDMA.
 - District level training of officials and NGOs in emergency response
 - Men and material management in emergencies with proper inventorization

Flood and whether warning system notices received from central flood forecasting control room stations, or any such weather warning notices received from Govt/ Board of Rev /IMD will immediately be transmitted to the control room of the Sub collectors by the control room stationed at district headquarters for keeping the people of the areas alert.

The Sub-collectors will transmit the weather warning and other warning to the Zone officers and other officers who will take steps to alert the people of their respective areas. DIPRO of this district will also alert people of their respective jurisdiction through mike, if situation so warrants.

PREPAREDNESS FOR NATURAL CALAMITIES - 2010

- 1) The District Natural Calamity Committee meeting for the Flood/Cyclone Season'2010 was held under the Chairmanship of Collector, Khordha on 21.5.2010. Conscious decisions have been taken for taking preparedness measure for the ensuing calamity season. A copy of the decisions taken in the District level Natural Calamity Committee meeting is enclosed hereto.
- 2) Senior Officers has been assigned for possible Flood/Cyclone - Rescue - Relief - Rehabilitation management. ADM, Bhubaneswar will be in charge of B.M.C. area. PD, DRDA for Baliana and Balipatna Block & Sub-Collector, Khordha will be in charge of Khordha and Tangi Block. BDO, Bhubaneswar will remain in charge of Bhubaneswar Block area, while Sub-Collector, Bhubaneswar has been assigned for arrangement of Relief materials. Further, concerned Block Development Officers / Executive Officers of Urbal Local Bodies have been assigned to remain in charge of relief operation in their respective jurisdiction under the administrative supervision of concerned Sub-Collectors. ADM, Khordha will remain in overall charge of Flood/Cyclone - Relief - Rescue - Rehabilitation measures of the District.
- 3) Special arrangements have been made for mobilisation of Private Boats in times of exigency. Special Relief Branch, Board of Revenue has supplied six numbers of Power Boats to Khordha district which has been stationed at Baliana, Balipatna, Jatni & Khordha Block. In the meanwhile, temporary engagement of Launch Drivers / Khalasis for the seven Power Boats has been done. An inventory of 105 Private Boat owners has been prepared by A.D.F (B&T) & IWT , Balugaon and BDO, Tangi. Laision Officers have been assigned at the O/o.A.D.F. (B&T), Balugaon and BDO, Tangi for deployment of Boats in times of exigency within a short response time.
- 4) As an alternative mode of communication, District headquarter has been connected with VHF network with all the ten Blocks. Besides this, all the BDOs, Tahasildars and Senior Officers as PD, DRDA, ADM, Khordha, ADM, Bhubaneswar, Sub-Collector, Khordha, Sub-Collector, Bhubaneswar have been provided with VHF Mobile sets.
- 5) For BMC Area , A special meeting on drainage congestion and clearance was held on 25.5.2010, where Hon'ble MLA s of Bhubaneswar Central, Bhubaneswar North & Ekamra-Bhubaneswar and officials of Dam Safety, Drainage and BMC attended.

CHAPTER - 8

Mitigation Strategies for Different Hazards

8. Mitigation Measures:

8.1 Sector wise Vulnerability Reduction Measures.

SECTOR	MITIGATION MEASURES	AGENCY RESPONSIBLE
INFRASTRUCTURE DEVELOPMENT	<ul style="list-style-type: none"> Improving Information Education and communication activities through walling, posters, street play, volunteers training, village task force training. Mass rallies during normal period. 	Leading NGOs/CBOs/VOs/SHGs.
	<ul style="list-style-type: none"> Repair/ Restoration of vulnerable points on Roads before unset of monsoon. 	R&B, NH, RD, Panchayat Samiti.
	<ul style="list-style-type: none"> Repair of vulnerable points in river/canal Embankment during free flood period. 	Irrigation/ Minor irrigation.
	<ul style="list-style-type: none"> Ensuring proper maintance of shelter places constructed by default agencies. 	Block/Concern village committee.
	<ul style="list-style-type: none"> Ensure maintance and proper functioning of electronic communication system 	Telecom dept.
	<ul style="list-style-type: none"> Immediate Response for Repair/Replacement of Tube wells/Pipe line water supply system. 	RWSS/PHD.
	<ul style="list-style-type: none"> Proper maintenance of VHF system. 	Head of office of the concerned location.
HEALTH/ ANIMAL HUSBANDRY	<ul style="list-style-type: none"> By way of IEC activities through walling posters, street play, village task force/volunteers training, during normal period. 	By leading NGOs. & CDVO.
	<ul style="list-style-type: none"> Adequate stock piling of vaccines should be ensured for vaccination before Disaster 	CDMO, CDVO.
	<ul style="list-style-type: none"> Training Programme of common people should be programmed for Health care, sanitation and first Aid from village level to district level. 	CDMO, CDVO.
LIVELIHOOD SECTOR & INSURANCE	<ul style="list-style-type: none"> By way of IEC activities through walling posters, street play, village task force/volunteers training, during normal period. 	CDMO, CDVO, lead NGOs
	<ul style="list-style-type: none"> To reduce adverse impact on AGRICULTURE farmers should be advised alternating cropping pattern/flood resistance crops. Drought resistance short duration paddy seeds are made available to farmers. Ensuring crop insurance Raising of Nursery in the horticulture farms & insurance coverage of horticultural products. 	Dy. Director, Agriculture, Dy. Director, Horticulture.

8.2 CRISIS RESPONSE STRUCTURE

Early warning dissemination

PREPAREDNESS	RESPONSIBILITY
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Setting up control room and manning of Control Room round the clock. <input checked="" type="checkbox"/> Assignment of duties to the District level officials and Sub-collectors/ Tahasildars / BDOs <input checked="" type="checkbox"/> Arrangement of vehicle and sound system for information dissemination <input checked="" type="checkbox"/> NGO coordination and assignment of duty <input checked="" type="checkbox"/> Proper record keeping and transmission of information to all the levels. <input checked="" type="checkbox"/> Early warning to fisherman. <input checked="" type="checkbox"/> Holding of Natural calamity meeting. <input checked="" type="checkbox"/> Ensure functioning of warning systems & communication systems. <input checked="" type="checkbox"/> Create awareness with the target groups. <input checked="" type="checkbox"/> Ensure Mock drill. 	<p>*All District level officials.</p> <ul style="list-style-type: none"> • All Sub collectors. • All Tahasildars. • All BDOs • DIPRO. • Leading NGOs. • DDO (Nodal officer of NGOs)

Evacuation

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> To warn people about the impending danger & to leave for safer places. <input checked="" type="checkbox"/> To co-ordinate with Civil defence-NGOs/Secy. Rajya Sainik Board/Police for support. <input checked="" type="checkbox"/> Arrangement of boats/vehicles etc. for evacuation <input checked="" type="checkbox"/> Evacuate people of marooned areas and administer emergent relief. <input checked="" type="checkbox"/> Organize trained task force members. <input checked="" type="checkbox"/> Deployment of police for maintaining law & order & peace keeping during evacuation <input checked="" type="checkbox"/> Mobilize people to go to identified/safer shelters. <input checked="" type="checkbox"/> Deployment of Power Boat/Country Boat (Govt./Private) for evacuation. 	<ul style="list-style-type: none"> • All Sub collectors. • All Tahasildars. • All BDOs • DIPRO. • Leading NGOs. • Police.
---	---

Search And Rescue

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Deployment of Police/Fire Brigade for search and rescue. <input checked="" type="checkbox"/> Co-ordination with the NCC/NSS/Civil Defense/Rajya Sainik Board etc. for rescue operation <input checked="" type="checkbox"/> Ensure availability of the rescue materials. <input checked="" type="checkbox"/> Prepare inventory of shelter places and map indicating the shelter centers. <input checked="" type="checkbox"/> Provide & arrange Rescue kit at risk areas. 	<ul style="list-style-type: none"> * Police * Fire Brigade. * Leading NGO. * Tahasildars. * Sub-collectors. * BDOs. * Programme Co-ordinators of NSS/NCC Defence units.
---	--

Medical Aid

PREPAREDNESS	RESPONSIBILITY
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Deployment of Medical staff. <input checked="" type="checkbox"/> Stock pilling of Life saving drugs/ORS packets/Halogen tablets. <input checked="" type="checkbox"/> Treatment of the injured persons and Transportation of the injured to hospitals. <input checked="" type="checkbox"/> Awareness messages to stop the outbreak of epidemics. <input checked="" type="checkbox"/> Disease surveillance and transmission of reports to the higher authorities on a daily basis. <input checked="" type="checkbox"/> Vaccination. <input checked="" type="checkbox"/> Constitute mobile teams and visit the worst affected areas. <input checked="" type="checkbox"/> Disinfections of Drinking water sources. <input checked="" type="checkbox"/> Identification of site operation camps. <input checked="" type="checkbox"/> To obtain/transmit information on natural calamities to District Control Room. <input checked="" type="checkbox"/> Advance inoculation programme in the flood/Cyclone prone areas. <input checked="" type="checkbox"/> Arrangement of fodder/medicines for the animals <input checked="" type="checkbox"/> Vaccination ,Cite operation camps, Carcasses disposal . 	<ul style="list-style-type: none"> * CDMO * CDVO * SDMO * SDVO * MEDICAL OFFICERS of PHC/CHCs. * ICDS * Leading NGOs. * Sarpanch

Shelter Management.

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Identification of Shelter/Temporary shelter in high elevated places and arrangement of tents etc. <input checked="" type="checkbox"/> Arrangement of Food/Drinking water /Medicine in the shelter places. <input checked="" type="checkbox"/> Person's allocation for each shelter. <input checked="" type="checkbox"/> Arrangement of transportation. <input checked="" type="checkbox"/> Arrangement for safe shelter for animals. <input checked="" type="checkbox"/> Providing the lighting facilities for shelter places. <input checked="" type="checkbox"/> Deployment of Police Personnel <input checked="" type="checkbox"/> Temporary supply of safe drinking water. 	<ul style="list-style-type: none"> *Sub-collectors. *Tahasildars *BDOs *Medical Officers *Paramilitary Forces *Police. *PHD/RWSS. *RTO/MVI
---	--

Emergent Relief / Free Kitchen Operation.

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Deployment of vehicle. <input checked="" type="checkbox"/> Procurement and transportation of Relief materials to affected pockets/areas. <input checked="" type="checkbox"/> Arrangement of free kitchen in the shelter camps & affected areas. <input checked="" type="checkbox"/> Assigning responsibilities to officials for distribution of emergent relief / running of free kitchen. <input checked="" type="checkbox"/> Coordinating with the NGOs /Other voluntary organization & PSUs for continuing Relief Operation. <input checked="" type="checkbox"/> Monitoring. 	<ul style="list-style-type: none"> Sub-collectors. DDO Tahasildars BDOs Medical Officers Paramilitary Forces Police. PHD/RWSS. RTO/MVI Leading NGO
--	--

Health and Sanitation Response structure.

PREPAREDNESS	RESPONSIBILITY
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> List of the Medical staff members with contact address/telephone number. <input checked="" type="checkbox"/> Stock position of medicines at District /Sub-division/PHC/CHC/AWC. <input checked="" type="checkbox"/> Plan and indent position of stock. <input checked="" type="checkbox"/> Trained voluntary staffs /task forces /Anganwadi workers on use and providing min. Health services to the community. <input checked="" type="checkbox"/> Arrangement of Mobile Health unit for inaccessible pockets/Health awareness campaign. <input checked="" type="checkbox"/> Stock position of medicine for animals <input checked="" type="checkbox"/> Ensuring supply of safe drinking water arrangement for supply of safe drinking water. <input checked="" type="checkbox"/> Disinfectant for purification of water. <input checked="" type="checkbox"/> Arrangement of mobile team and assigning specific operational area for supply of water. <input checked="" type="checkbox"/> Involvement of volunteers/village level workers. 	<p>CDMO CDVO PHD RWSS Sub-collectors. Tahasildars BDOs Medical Officers Paramilitary Forces Police.</p> <p>PHD/RWSS. RTO/MVI</p>

Infrastructure Restoration.

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Formation of task force with specific equipments. <input checked="" type="checkbox"/> Assigning responsibilities for specific areas. <input checked="" type="checkbox"/> Emergency cleaning of debris to enabled reconnaissance. <input checked="" type="checkbox"/> Coordinate road-cleaning activities to assist local relief work. <input checked="" type="checkbox"/> Begin clearing roads, assemble causal labour provide a work team carrying emergency tool kits. <input checked="" type="checkbox"/> Towing vehicles, Earth moving equipments, cranes, construct temporary roads. <input checked="" type="checkbox"/> Keep National & other Highways clear from disaster effects. <input checked="" type="checkbox"/> Damage assessment <input checked="" type="checkbox"/> Monitoring. 	<p>NH Authorities R &B Police. PHD/RWSS. RTO/MVI All line departments All Tahasildars. All BDOs.</p>
---	--

CHAPTER 9

Role and Responsibilities in Planning, Preparedness, Response, Recovery, Training and Awareness

9.1 NGOs and CBOS (Mahila Samities, SHGs, Youth Clubs, etc.)

NGOs and CBOs are the primary functionaries at the village level. Their basic roles and responsibilities would include

- ❖ Organizing NGOs according to their specialization to form response groups
- ❖ Awareness building within the community
- ❖ Prepare Community Contingency Plan in their area of operation
- ❖ Review and analyze past disasters
- ❖ Work closely with the community in identifying the risk population such as elderly and disabled, children, pregnant women, sick, single women and people residing on the seashore
- ❖ Formation of Task Forces by involving their own volunteers and young boys and girls (17 to 25 years) of the village
- ❖ Capacity building of the Task Forces
- ❖ Mobilizing and utilizing the community funds during the time of emergency
- ❖ Specifying roles and responsibilities of the Task Force
- ❖ Mock drills for finding out the suitability / adequacy of preparedness
- ❖ Maintaining transparency in activities
- ❖ Being accountable to District Administration

9.2 Coordination of Multiple Agencies

- ❖ Multiple agencies like International Agencies (UN Agencies, etc.) to coordinate with district administration for rehabilitation
- ❖ Help to be taken from International NGOs and National Donor Agencies to meet additional support, if any

9.3 Armed and Paramilitary Forces

- ❖ To identify, access escape routes to be followed during emergency so as to ensure passing of vehicles with least inconvenience.
- ❖ To plan adequate contingency measures for manpower, transport and Communication
- ❖ To document traffic control, measures to be followed during emergency
- ❖ To assess and plan for augmentation of existing facilities if needed
- ❖ To help the response groups in carrying out activities in a organized manner

CHAPTER 10

Information, Education and Communication (IEC)

10.1 Plan Dissemination and Evaluation

The responsibility of plan dissemination is vested with the EOC, at the Collectorate

In order for the DDMP to be effective it must be disseminated at two levels:

- a. To the district authorities, government departments, NGOs and other agencies and institutions within the district and
- b. To general public

10.2 Dissemination of Other IEC Materials

The DIPRO at the district level will carry on the dissemination of IEC materials and NGOs at the block and village level during normal time (selected during Post Natural Calamity Committee meeting, presided over by the ADM. The activities of DIPRO and NGOs would include

- ❖ Walling,
- ❖ Poster. Pamphlets and brochure preparation and distribution
- ❖ Street plays, Volunteers training,
- ❖ Task force training, etc.

10.3 Training and Drills

The training programmes are organized for different levels of functionaries from district level officials identified NGOs, Private Sector Organizations in order to equip them to extend training facilities to functionaries at blocks and village level as well as organize simulation exercises within the community.

The objective of full scale drill include evaluation of the following

- Practicality of the plan (structure and organization)
- Adequacy of communication and interactions among the agencies and the public
- Emergency equipment effectiveness
- Adequacy of first aid and rescue procedures
- Adequacy of emergency personnel response and training
- Public relation skills
- Evacuation and count procedures
- Timely updating of BCPS
- Coordination with the CBOs / NGOs

10.4 Village Disaster Management Plans and Mock Drills

Role of the Community

- First respond to disaster
- Participate in preparedness programme
- Sharing of disaster preparedness cost
- Playing as pressure group / advocacy
- Supporting communication System

The Community Based Disaster Preparedness should be done as per the following stages

- ⇒ Formation of Block Level Disaster Committee
- ⇒ Training of line department and volunteers
- ⇒ Formation of GP level Committee
- ⇒ Developing Community Contingency Plans in the Villages
- ⇒ Training of Task Forces
- ⇒ Periodic mock drills
- ⇒ Coordination of GP and Block
- ⇒ Updating information

Mock drills are important in normal times as well as during the emergency. The mock drill and preparedness for disaster are considered as a part of police duty. Every **six month**, there should be a mock drill in all of the police stations of the district to make them alert / fit to cope with any situation. Security Plan for all industries to be reviewed and approved by CISF at regular intervals. Similarly all police stations should have internal security scheme, based on which they should have mock drills and update it for safety measures as per requirement.

Besides a contingency drill should be enacted during the cyclone/ flood season so that everyone knows what he/she should do and where he/she should go. It is advisable to have a mock drill at night during the rain, by cutting of the electricity in the village/ block/ district (as per the time chosen for the mock drill at each level). This exercise will help learn possible problem that would be faced. These learned lessons could be utilized in preparing the contingency plan in a much-prepared manner.

10.5 Setting up of Disaster Volunteer Force – Identification and Training

An analysis of the situation of the village community forms the first task for preparedness. After analysis, the villagers would form different groups to carry on the activities for disaster preparedness. The motivated and willing male and female group members have to find out the roles and responsibilities of each group. The groups may be formed for warning, rescue and evacuation, water and sanitation, relief and food, damage assessment, shelter management, etc. This will form the **Disaster Management Teams**.

For warning DMT members could be young boys and girls of the village (17 to 25 years) who will be trained to understand radio warnings and act fast to spread the warning throughout the village.

The members for rescue and evacuation group need to be physically strong (both men and women) and in the age group of 18 to 35 years. Gram Rakhi/ Chaukidar should be the member of this group. Inclusion of civil defense personnel would be useful if available in the village. This team can coordinate with the government to avail the facilities for rescue and evacuation, both in terms of rescue training, rescue infrastructure and equipment and ensuring the alertness of the rescue team of the government. Both men and women members may look after the **water and sanitation** responsibilities at the shelters as well as outdoors

The members of the **relief group** would collect, distribute relief materials such as food supply, utensils, clothes, kerosene, diesel, etc and coordinate all the relief requirements of the other action groups. Both men and women members have to be capable of interacting with the local authorities to ensure adequate supplies reach the village in time.

The members of **shelter management group** shall have more women members preferably SHG members and Anganwadi Workers (AWW). They will be at the shelters and safe houses looking after the evacuees' food, water and medication requirements. This group can also coordinate with the government authorities to ensure that health and sanitation facilities are available for extra vulnerable like women and children.

There can also be a **First Aid and Medical Group**, with equal numbers of men and women, Those with some knowledge of nursing (such as trained dais and AWW/ ANMs) will be preferable. The members have to go through intensive training and drills for first aid and medical responsibility. Other such group might be the **Patrolling group** and the **Liaison group**

10.6 Standard Operating Procedures.

FOR EMERGENCY OPERATION CENTER, KHORDHA

TEL: 06755- 220002, 1077

LOCATION: COLLECTORATE BUILDING, KHORDHA.

PRE DISASTER

Early Warning:

Officer in charge of EOC: The Emergency Operation Center shall be in overall charge of the Collector. In the absence of Collector, ADM's, PD DRDA, Emergency officer or any other officer or staff on duty at that point of time shall remain in charge of Emergency Operation Center. The person in charge of Emergency Operation Center shall be personally responsible for implementing the SOP. S/he shall take all decisions as outlined below and sign for the Collector on all reports mentioned below. S/he shall not wait for orders from anybody.

1. **Assembly in District EOC:** Following staff and officers shall assemble in the Emergency Operation Center on getting any information from any source about any emergency. Apart from these, any other officer or staffs who get the information from any source will reach the Emergency Operation Center.
 - 1.1. Collector, ADMs, PD DRDA, District Social Welfare Officer, Emergency Officer, Sub-Collector, Khordha, CSO, DIPRO and RTO.
 - 1.2. All staffs of Emergency Section
2. Getting the Emergency Operation Center ready: Following preparatory steps will be taken up for keeping the Emergency Operation Center functional during emergency.
 - Telephone Connection
 - Electrical Installations
 - Back Up Power Supply
 - EOC Manual
 - VHF and Communication Equipments
 - Information and allied equipments
 - Warning Procedures Check List.
3. Alert message to be give to field officers like BDOs, Tahasildars, MOs, VAS, Police, Industries, Telephone, Agriculture, RWSS, RD, R&B, ICDS, Irrigation, CESCO, NH,

PHD, Municipality/ULBs , MIs, CI of schools , Station Director, All India Radio. Through VHF and Telephone.

- 3.1. Cross Checking of up availability of food (rice, chuda and *Gur*) and kerosene at block headquarters, with storage agents and other inaccessible pockets will be carried out by CSO, Khordha.
4. Health sector: CDMO will take stock of the following items through Health Emergency Operation Center .
 - 4.1. Medicines, bleaching powder, and halogen/chlorine tablets.
 - 4.2. Movement of medicines, bleaching powder, etc. to PHCs/CHCs if not done early.
 - 4.3. Ensure Medical officers are in place at the PHCs and CHCs through police stations, blocks and Tahasildars.
 - 4.4. CDMO shall decide the locations of camps.
 - 4.5. All CDPOs shall be teamed up with the MO of PHC/ CHC with their vehicles and supervisors.
5. Veterinary measures: CDVO will take stock of Cattle feeds and will contact immediately to MD, OMFED after verifying the stocks within the district.
6. Boats: Requisition boats within district.
7. Make a thorough assessment of relief items available in stock at different places.
8. Functional distribution of work: Following functional distribution of works shall be done. Each team will have staff and resources. The team leader will have full powers to take decisions
 - 8.1. Transportation team
 - 8.2. Stock and store team
 - 8.3. Finance team
 - 8.4. Information and office documentation team
 - 8.5. Food and other relief items team
 - 8.6. Civil Society and International Organisations co-ordination team
9. Civil Society Organisations: Get in touch with civil society Organisations. Allot them areas or functions. Get them introduced to the field functionaries. Ask them to prepare a list of volunteers. Make a quick inventory of their resources. Contact UN agencies & other international relief agencies (if possible). Make a quick assessment of district needs and expectations from different agencies.

10. Press briefings: Press briefings if required will be carried out by the competent authority, decided by the Collector.
 - 10.1. Message to public over local cable or alternative networks.
11. Regularly contact required with R.D.C., S.R.C., OSDMA & Dam Safety Divisions
12. Give written orders for identifying places for starting free kitchens. Issue clearance for 3 days.
13. Regularly check up <http://www.metocph.nmci.navy.mil/jtwc.html> and www.imd.gov.in and other web sites for tracking of emergency situations.
14. Check the Resource database site www.idrn.gov.in for resource mobilization.
15. Keep spare copies of district maps. Jurisdiction maps of all irrigation divisions shall be kept ready in good numbers.
16. Requisition School/ College for army/ police forces staying and movements.
17. Looking at the onset of emergency and after making quick preparations, convene Emergency meeting of important official and non-official agencies. Give them clear instructions.

MITIGATION PLAN

Short Term Measures

When the disasters are inevitable the only way is to mitigate its impact which could fall under the short term measures like immediate relief, reducing the response time to avert any losses, the basic needs of the vulnerable and affected people to be given. Those who have lost their properties, movables, those minimum essential items to be supplied, even smaller loans at a concessional rate for long/ short term loan etc.

Long term measures

The long Term Measures like maintenance and repair of the embankments of the rivers and canals going through the block. Construction & repair of vulnerable embankments as well as closure of breaches would save lives and property, bank protection and watershed management to be followed on a large scale basis.

Mitigation plans

Non-Structural- The non-structural methods in handling disasters have been gradually evolved by the community with the traditional knowledge and strength which have been time tested, economic, cost effective, user friendly technology and local people themselves can do it such as disseminating warning through traditional instruments available in each village, constructing Varendahs much higher than the ground level so that the house won't be damaged during flood etc. such non-structural mitigation plans to be made popular and encouraged as people themselves could do it. Financial incentives will encourage people to adopt it.

Operating Procedure Guidelines for Warning:

Loss of life and property is significantly reduced because of preparedness measures and appropriate warning systems. Indiscriminate warning may result in non-responsiveness of the people. From the District Emergency Operation Center the warning will be disseminated to the blocks and from blocks to panchayat offices. From the panchayat warning will be disseminated to the village warning groups by local means or through beating drums, ringing of bells, hoisting of flags or any method which can be easily visualised. The panchayat Emergency Operation Center in charge is the Panchayat secretary. The block administration is the prime agency responsible for issuing disaster warning. Besides the police, irrigation, meteorological departments etc. will communicate the same to the Blocks.

Operating Procedures for Evacuation:

Disasters by their very nature like flood, cyclone etc. requires evacuation of communities before hand to a safer place which was identified in the contingency plans at the blocks, panchayats as well as village levels. It is important to understand the nature of threat and the procedures to be adopted after receiving warning. All agencies involved in evacuation must have a common understanding of their roles and responsibilities in order to avoid confusion and panic behavior. Different situations demand different priorities and hence the

responsibility for ordering evacuation is assigned to different agencies. All evacuations will be ordered only by the Collector/BDO, Police, and Fire Brigade or by the Industries Security Officer. For appropriate security and law order situations evacuation should be undertaken with assistance from village disaster management committee, village evacuation, rescue and shelter management task force members. All evacuations should be reported to the BDO/Collector or Superintendent of Police immediately.

General Guidelines for Evacuation

The block level exercise of preparation of Block Contingency Plan (BCP) is generally expected to identify the risk prone locations and possible areas for evacuation. The BCP also identifies the safe locations which can be used as emergency shelters/sites for temporary evacuation. The map indicating the location of flood/cyclone shelter should be with the concerned agencies responsible for this operation.

The selection of such safe sites is done keeping in mind the following:

- ☞ Shelter Sites are within 1-2 kilometer of dwellings.
- ☞ The evacuation routes are away from the marooned /submergence or flood-prone areas.
- ☞ Evacuation routes do not include roads likely to be submerged in flood, but may include pathways.

Ensuring proper evacuation by seeking community participation along the following process

- ☞ Evacuation is undertaken with assistance from village disaster management committee, rescue and shelter management team members if available and community based Organisations (CBOs) like youth clubs for appropriate security and order.
- ☞ Care is taken to see that evacuation routes are not blocked.
- ☞ It is always preferable to encourage the entire family to evacuate together as a unit.
- ☞ In case of inadequate transport or limited time, community participation for emergency evacuation in the following order:
 - Seriously injured and sick
 - Children women and handicapped
 - Old
 - Able-bodied

(An evacuation plan on a priority basis helps avoid stampede and confusion)

Emergency Evacuations Procedure

Families should be encouraged to take adequate supplies of water, food, clothing and emergency supplies.

The families should be encouraged to assemble the following disaster supplies kit.

- Adequate supply of water in closed unbreakable containers
- Adequate supply of non-perishable packaged food and dry rations
- A change of clothing and rain gear
- Blankets, Plates, glasses, plastic mugs and jericans
- A battery-powered radio, torch, lantern, match box etc
- Cash and jewellery and precious materials

- Personal medicines
- A list of important family documents including ration card, passport, bank passbook address/telephone book (of relatives), certificates, driving license, property documents, insurance documents etc.
- Special items including foods, for infants, elderly or disabled family members.
- Ask people to shut off electricity, gas and water at main switches and valves before leaving.
- Ask people to listen to a battery-powered radio and follow local instructions.
- Advice people to these steps is followed:
 - Wear protective clothing
 - Secure their homes. Close and lock doors and windows.
 - Turn off the main water valve and electricity.
 - Leave early enough to avoid being trapped.
 - Follow recommended evacuation routes. Shortcuts may be blocked.
 - Not to move or drive into flooded areas.
 - Stay away from downed power lines.
 - Animals may not be allowed in public shelters.
 - Community should set the livestock free.
- If possible, the community may be advised to carry the livestock along with them.(if the evacuation does not involve transportation by vehicles).

Procedure for Evacuation of Marooned persons

With all the administration intentions for early warning and evacuation, there may not be adequate time opportunity for evacuation of all. Communities' individuals may be marooned. In cases of marooned communities, the administration may decide to reach out these for providing relief supplies or may decide to evacuate them.

In case the administration decides to evacuate marooned persons:

- Evacuation must be carried out within the shortest possible time.
- The marooned persons must be transferred to transit camps
- Marooned people must be provided with Water, Medicines, First-aid, Cooked food Emergency transport for the seriously injured & Motorised boats.
- The senior medical officer of PHC should accompany the rescue team along with required medical kit and ensure priority for shifting of those seriously injured or requiring immediate medical attention.
- Water supplied must be in accordance with acceptable standards of potable water. It is the responsibility of medical officer to check the water quality.

HOW TO DOCUMENT A DISASTER EVENT

The Event – The Disaster event can be recorded with all available details. In the event of a natural disaster like Cyclone, records can be maintained date wise from formation of cyclone till it hits a particular place.

History of the Event –

- I Cycle of the event.
- II Nature
- III Intensity
- IV Some past data on damages (if available)

1. Causes of Disaster –

- I Climate
- II Geological
- III Environmental Degradation
- IV Any other Causes

2. Map of the affected area showing areas highly affected, moderately affected and less affected.

3. Damage Assessment –

- | | | | |
|-----|----------------|------|-----------------------|
| I | Human life | VI | Horticulture |
| II | Livestock | VII | Silviculture |
| III | Houses | VIII | Ecology / Environment |
| IV | Infrastructure | IX | Others |
| V | Agriculture | | |

Response –

(Government Response)

- I State Government
- II Central Government (Various sector like Army/ Health Services /Civil Defence etc.)

(Non-Government Response)

- I Local
- II National
- III International

(Community Response)

4. Rehabilitation –

- I Temporary Shelter
- II Physical Rehabilitation
- III Social Rehabilitation
- IV Psychological Rehabilitation
- V Economic Rehabilitation

5. Self-Assessment for improvement of services in future / existing shortcomings.

6. Community Perception about relief (Independent survey by some professional organization).

7. Lesson learned and future strategy.

GLOSSARY

Annexure Check Lists: Do's and Don'ts

Operational Guidelines of What to do in the event of a Cyclone

Do's	Don'ts
Listen to the Radio/ TV / Public Addressing System for advance information and advice.	<p>Do not go outside or into a beach during a lull in the storm.</p> <p>Be away of fallen power lines, damage bridges And structures.</p> <p>Do not go for side sight seeing</p>
Allow considerable margin for safety.	
A cyclone may change direction, speed or intensity within a few hours, so stay tuned to the radio / TV for updated information.	
Tape up large windows to prevent from shattering.	
Move to the nearest shelter or vacate the area if this is ordered by the appropriate government agency.	
Stay indoors and take shelter in the strongest part of the house / society.	
Open windows on the sheltered side of the house if the roof begins to lift.	
Find shelter if you are caught out in the open.	
If you have to evacuate, do not return until advice.	

Operational Guidelines of What to do in the event of a Flood

Do's	Don'ts
Listen to the Radio/ TV/ Public Addressing System for advance information and advice.	<p>Do not enter floodwaters on foot if you can avoid it.</p> <p>Never wonder around a flooded area.</p> <p>Do not allow children's to play in, or near, floodwaters.</p> <p>Do not drive into water or unknown death and current.</p> <p>Do not it food or drink water, which is affected by floodwater.</p>
Disconnect all electrical appliances and move all valuable personal and household goods and clothing out of reach of floodwater, if you are warned or if you suspect that floodwaters may reach the house.	
Move vehicles, Farm animals and Movable goods to the highest ground nearby.	
Turn off electricity, gas if you have to leave the house.	
Lock all outside doors and windows if you have to leave the house.	
If you have to evacuate, do not return until advice.	

Operational Guidelines of What to do in the event of a Heat Wave

Do's	Don'ts
Listen to the Radio/ Tv/ Public Addressing System for advance information and advice.	Avoid standing under direct sun. Avoid Long Drives.
Finish the work at the morning or leave it to the evening.	
Drink Sufficient Water & take Food	
Keep your head away from the direct heat. Use Clothes, Cap, Umbrella or Glasses	
Keep Stock of water & Wear light dresses.	

Operational Guidelines of What to do in the event of a Drought Situation

Do's	Don'ts
Save Water & Stock Water	Stop misutility of Water
Arrange for alternate cropping's	
Contact Nearest Agriculture Office	

Operational Guidelines of What to do in the event of a Tornado

Do's	Don'ts
Listen to the Radio/ TV/ Public Addressing System for advance information and advice.	Do not run and do not wander round the streets. Keep away from buildings, walls, slopes, electricity wires and cables & stay in the vehicle.
Turn off Electricity	

Operational Guidelines of What to do in the event of a Earthquake

Do's	Don'ts
Listen to the Radio/ TV/ Public Addressing System for advance information and advice.	Do not run and do not wander round the streets. Keep away from buildings, walls, slopes, electricity wires and cables & stay in the vehicle. Do rush to the doors or exits, never use the lifts keep well away from windows, mirrors, chimneys and furniture. Do not rush to the doors or exists, never use the lift. Avoid places where there are used electric wires and do not touch any metal object in contact with them. Do not re-enter badly damaged buildings and do not go near damage structures.
Teach all members of your family how to turn off the electricity, water and gas supply.	
Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed.	
Keep away from Old, Tall or ditched buildings, electricity wires, slopes and walls, which are liable to collapsed.	
Stop the vehicle away from building, walls, slopes, electricity wires and cables.	
Live your badly damaged house.	
Collect water containers, food items and ordinary and facial medicines.	

WHOM TO CONTACT

STATE LEVEL AGENCIES

**FIRE: 101, POLICE: 100, AMBULANCE: 102,
Emergency Operation Center - 1070**

Important Telephone Numbers of State Level Agencies

SL. NO	DESIGNATION	STD CODE	PHONE NUMBER	RESIDENCE PHONE. NO	FAX
1	SRC office (Cuttack)	0671	2607203		2607203
2	SRC (Bhubaneswar)	0674	2536721/2534180 (BBSR)/	2544077 9437078780	2534176
3	MD, OSDMA	0674	2395531/2536891/ 2395379	2544066 9437078780	2391871/ 2396681
4	Add. RC (BBSR)	0674	2394320		
5	State Emergency Operation Center	0674	2390161/2394320		2395692 2534176
6	RDC (CD), Cuttack	0671	2608362		2607906
7	UNDP, Bhubaneswar, Orissa	0674	2558796 / 2558797		2558798
8	State Representative, UNICEF	0674	2393977-80		2393976
9	Head, WFP	0674	253358/253361		2533879
10	St.John Ambulance	0674	2531485	2563481 9437016485	
11	Indian Red Cross Society	0674	2392389	2556410	2401242
12	Civil Defence	0674	2431981	2432280	
13	IMD, Bhubaneswar	0674	253486	2534737	
14	Cyclone Warning Centre	0674	2534386/2534410		2534627
15	Cyclone Warning Intercom	0674	2538945	2534737	
16	Cyclone Detection Radar	06722	222147		
17	Commdt ODRAF, Cuttack	0671	2442148	2442442	2442148

District Level Agencies: FIRE: 101, POLICE: 100, AMBULANCE: 102, EOC-1077
District Administration (Khordha)

Sl. No.	Name of the Offices	Office	Residence
1.	Emergency Operation Center (Khordha)	220002 / 1077	
2.	Collector, Khordha	220001	2536949(Camp Office.) 9439583443
3.	Special Circuit House, BBSR	2392288	
4.	ADM, Khordha	221755	9437334137
5.	ADM, Bhubaneswar	2393440	9937264033
6.	Sub-Collector, Khordha	220220	9438423585
7.	Sub-Collector, Bhubaneswar	2432301	9437226644
8.	P.D.,DRDA, Khordha,	220755	9437014244
9.	S.P., Khordha	220535	9439550050
10.	Dy Collector,Election, Khordha	220937	9437150552
11.	District Welfare Officer, Khordha	221169	9861448331
12.	D.I. & P.R.O., Khordha	211615	2301463/ 9437230587
13.	D.I. & P.R.O., Bhubaneswar	2391143	9238568085
14.	D.A.O., Khordha	220523	9437296565
15.	Asst. Soil Conservation Officer, Khordha	220798	9437493053
16.	D.F.O., Khordha	220539	220540 9437000935
17.	Horticulturist, Khordha	220553	9556848922
18.	C.S.O., Khordha	220607	9437185455
19.	R.T.O., Bhubaneswar	2540904	2531081 9437123801
20.	C.M.O., Capital Hospital, BBSR	2391983	2540727 9437308717
21.	C.D.M.O., Khordha	221419	9437072426
22.	C.D.V.O., Khordha	220732	9937114401
23.	District Labour Officer	2391992	9437081447
24.	District Panchayat Officer, Khordha	220922	220345 9861379199
25.	District Planning Officer, Khordha	221081	2381413 9437560338
26.	District Social Welfare Officer, Khordha	221902	9861187069
27.	Soil Conservation Officer,Puri at BBSR	2471525	2572669 9437221727

Revenue Department : State			
Sl. No.	Name of the Offices	Office	Residence
30	Revenue Deptt. Control Room (Bhubaneswar)	2390266 2322677 & 688	FAX-0674- 2393540
31	Spl. Relief Commissioner, Orissa, Bhubaneswar	2395692/ 2534177 (BBSR)/ 2603346 (CTC)	
32	Orissa State Disaster Mitigation Authority, (OSDMA), Bhubaneswar.	2395398 / 2395379 / 2395531	FAX - 2391871/ 2396681
33	Secretary to RDC (CD), Cuttack	2603475	
34	RDC (CD), Control Room	2603084 / 2608362	
35	Under Secretary, Spl. Relief Branch, Cuttack	2607107	
36	State Port Engineer, SRB, Cuttack	95671-2608210	9439166900
BLOCK DEVELOPMENT OFFICER		Office	Mobile
37	B.D.O., Khordha	220762	9437498727
38	B.D.O., Begunia	230125	9437065094
39	B.D.O., Bolgarh	232625	9938540575
40	B.D.O., Tangi	956756-224249	9437524024
41	B.D.O., Chilika	956756-225026	9439049079
42	B.D.O., Banpur	956756-223130	9437239562
43	B.D.O.BBSR	2396683(2432185)	9938190816
44	B.D.O., Jatni	2490858	9437297300
45	B.D.O., Baliana	2464135/2112035	9437386765
46	B.D.O., Balipatna	2462223	9437212029
EXECUTIVE OFFICER (ULBs)			
47	Bhubaneswar Municipal Corpn., BBSR	2431403	9438084284
48	Khordha Municipality, Khordha	220674	9861467190
49	Jatni Municipality, Jatni	0674-2490826	9438435783
50	Banpur NAC, Banpur	956756-223091	9437060891
51	Balugaon NAC, Balugaon	956756- 220489/220754	9437384788
TAHASILDARS			
52	Tahasildar, Bhubaneswar	2432442	9437156194
53	Tahasildar, Jatni	0674-2492016	9937636535
54	Tahasildar, Bolgarh	232053	9437100244
55	Tahasildar, Banpur	06756-223133	9437757053
56	Tahasildar, Begunia	230200	9437209882
57	Tahasildar, Khordha	220248	9438077968
58	Tahasildar, Tangi	224311	9437293030
59	Tahasildar, Balipatna		9437205535
60	Tahasildar, Baliana	2464360	9777527007
61	Tahasildar, Chilika		9437281528

Other Lines Department : (State level) FLOOD / CYCLONE :			
Sl. No.	Name of the Offices	Office	Residence
62	Flood Cell Control Room, Bhubaneswar	2395953 / 2398670	Fax-2395953
63	Flood forecasting Division, Saheed Nagar, Bhubaneswar	2590427	
64	Flood Control of C.W.P.C. , Bhubaneswar	2397086	2397361
65	Chief Engg. & Basin Manager, Lower Mahanadi Basin Flood Cell	2390185	2420402 / 9437029402
66	Chief Engineer, Delta Flood Control	2390185	
67	S.E. Irrigation, Flood Control, BBSR	2560625/ 2560236	
68	Deputy Controller, Civil Defence, BBSR	2394199	
69	Orissa Remote Sensing Application Centre, BBSR	23093545	
70	Director, Metrological Centre, BBSR	2534627	2534737
71	Director, IMD (BBSR) Cyclone Warning Centre	2534386	
72	Secy., Orissa Red Cross Society, BBSR	2392389	2391424
73	City Control Room, Police, Bhubaneswar	2393399	9437442646
74	Asst. Director, Fishery, Balugaon	220429	2310425/9437442646
75	Dy. Supdt. of Fishery, Balugaon		9938315618
76	Asst. Engineer, IWT, Balugaon		9437016392
Irrigation Departments :		Office	Residence
77	Exe. Engineer, Prachi Irrigation Divn., BBSR.	2562427	2563422 / 9437087058(M)
78	Exe.Engineer, Nimapara Irrgn. Division, Nimapara	956758-250240	956758-250232 9437166969
79	Exe.Engineer, Khordha Irrgn. Division, Khordha	220729	9437281999
80	Asst. Engineer, Irrigation Divn., Khordha		9437303485 (M)
81	S.D.O., Irrigation Sub-Division, Banpur	956756-220352	
82	Exe. Engineer, Puri Irrigation Division	956752-251397	222823/9437026918
83	Balianta Canal Sub-Division	2111004	9937693345
84	Pratap Nagari Sub-Division	0671-2686406	9437101831
85	Niali Kenal Sub-Division	0671-2803344	9437080464
86	Kantapada Irrigation Division	0671-2805428	9437313902
87	Munduli Irrigation Sub-Division	0671-2879549	9437318085
88	Exe. Engineer, Dam Safety, BBSR	2395390	2370327/9437073327
89	Exe. Engineer, Drainage Divn., BBSR	2565323	2560191/9937478558
90	Exe. Engineer, R.W.S.S., Bhubaneswar	2384286	9438420111
91	Asst. Engineer, R.W.S.S., Khordha	220652	9861257830
92	Exe. Engineer, L.I. Division, Bhubaneswar	2391847	2558533/9437066883
93	Exe. Engineer, R & B Division, Khordha	220594	9861119364
94	Exe. Engineer,Rural Works, Bhubaneswar	2301787	
95	Exe. Engineer, M.I. Dvn., Khordha	220502	2541922 9437302365

R & B			
<i>Sl. No.</i>	<i>Name of the Offices</i>	<i>Office</i>	<i>Residence</i>
96	Exe. Engineer, R&B Divn.-I, BBSR	2530896	9437164947
97	Exe. Engineer, R&B Divn.-II, BBSR	2392694	9437001992
98	Exe. Engineer, R&B Divn.-III, Bhubaneswar	2391240	2562190 9437084728
99	Exe. Engineer, R&B Divn.-IV, BBSR	2390245	9437084728
100	S.D.O., R&B Divn., Khordha	220524	220711 9937444952
P.H.D.			
101	Exe. Engineer, P.H.D. No.-I, Bhubaneswar	2390322	2534660/9437031784
102	Exe. Engineer, P.H.D. No.-II, BBSR	2542821	2396827 9437036452
103	Exe. Engineer, P.H.D. No.-III, BBSR	2540578	2530094 9437036452
104	S.D.O., P.H.D., Bhubaneswar	2425312	2530603
105	S.D.O., P.H.D., Khordha	220580	9437462672
Electricity Division, Khordha:			
106	Exe. Engineer, B.E.D., Bhubaneswar	2587025/2587024	2398383(Res) 9437011278 / 9437011278
107	Exe. Engineer, Electrical Division, Khordha	220530	2433778 9838362932
108	S.D.O., Electrical Division, Khordha	220541	
109	Exe. Engineer, B.C.D.D.-I, Bhubaneswar	2392340	2396832/9437011276
110	Exe. Engineer, B.C.D.D.-II, Bhubaneswar	12551809/255182 8	2415676/9437011277
111	Exe. Engineer, B.E.D., Balugaon	956756-220479	221679 / 9437094259
112	Nimapara Electrical Division	956758-252722	
Post & Telecom :			
113	Jr. Telephone Officer, Khordha	220250	
114	Post Master, Khordha	220587	

FAX NUMBERS

01. Collector, Khordha	06755-221567 0674-2536949
02. D.R.D.A., Khordha	06755-222245
03. S.P., Khordha, Bhubaneswar	0674-2540444
03. S.R.C., Orissa, Bhubaneswar	0674- 2393540
04. S.R.C., Orissa, Cuttack	0671-2607203
05. Revenue Deptt., Control Room, Bhubaneswar	0674-2402540
06. G.A. Deptt., Bhubaneswar	0674-2416348
07. Revenue Divisional Commissioner (CD), Cuttack	0671-2607906
08. O.S.D.M.A., Bhubaneswar	0674- 2391871/2396681
09. Orissa Remote Sensing Application Centre, BBSR	0674-2300681
10. Director, Metrological Centre, BBSR	0674-2534410 / 2534627

7

VSAT Phone Numbers :

Sl.No	Designation of the officers allotted VSAT Phones	Satellite Phone Number
1	Revenue Control Room	762834613
3	Collector, Cuttack	762834539
4	Collector, Ganjam	762834551
5	Collector, Jajpur	762834563
6	Collector, Bhadrak	762834559
7	Collector, Baleswar	762834555
8	Collector, Jagatsinghpur	762834571
9	Collector, Puri	762834543
10	Collector, Kendrapara	762834567
11	Collector, Anugul	762834599
12	Collector, Malkanigiri	762834575

INFORMATION DISSEMINATION

District Control Room will update the warning distribution system from different websites available and will disseminate the message to the line departments for onward actions. The lists of Website are mentioned below.

- www.metocph.nmci.navy.mil for US NAVY WEBSITE
- www.imd.gov.in for Indian Meteorological Department WEBSITE
- www.cnn.com/weather for CNN WEBSITE
- www.bbc.co.uk/weather for BBC WEBSITE
- www.weather.co.uk for Sify website to get the local weather report
- www.ori.nic.in for NIC, Websites of Orissa

REFERENCES :

- 1. Orissa Relief Code**
- 2. District Contingency Plans of 1991, 2001**
- 3. Lessons Learnt Orissa Floods 2001**
- 4. Information Collected from Blocks, Line Departments, Post Office, DI & CI of Schools, DRDA,**
- 5. Footnotes of Workshop and Natural Calamity Committee Meetings**
- 6. District Control Room Manual**
- 7. Community Contingency Plan for Flood and Cyclone**

LIST OF FLOOD PRONE BLOCKS & GPs

Name of The Block	No.	Name of the G.Ps.	Name of Flood Prone Rivers
Khordha	1	Brajamohanpur	Malaguni Rajua
	2	Golabai Sasan	
	3	Jankia	
	4	Orabarasingh	
	5	Pubusahi	
	6	Dhaulimuhan	
	7	Kanpur	
	8	Keranga	
	9	Naranagarh	
	10	Garh Haladia	
Begunia	11	Tulasipur	Mandakini Gobara Rana
	12	Sarua	
	13	Simor	
	14	Baghamari	
	15	Durgapur	
	16	Pangarasingh	
	17	Podadiha	
Bolgarh	18	Arikama	Hada
	19	Asarala	
	20	Dhalapathar	
	21	Gediapalli	
	22	Manibandha	
	23	Bankoi Desa	
	24	Sagargaon	
	25	Badakumari	
Tangi	26	Sarapari	Malaguni Kusumi Chilika
	27	Balipatpur	
	28	Bhusandpur	
	29	Chhanagiri	
	30	Lendo	
	31	Nirakarpur	
	32	Rameswar	
	33	Nuagarh	
	34	Kantalbai	
	35	Sundarpur	
Chilika	36	Singipur	Chilika & Kansari River
	37	Chandeswar	
	38	Haripur	
	39	Jaripada	
	40	Sana Nairi	
	41	Nimikheta	
	42	Balugaon NAC	
	43	Barkul	
Banpur	44	Kumaranga Sasan	Salia River
	45	Nandapur	
	46	Tumuraput	
	47	Banpur NAC	

Name of The Block	Sl.No	Name of the G.Ps.	Name of Flood Prone Rivers
Jatni	48	Padhansahi	Daya, Rajua & other streams
	49	Jamukoli	
	50	Barakuda	
	51	Kantia	
	52	Chhanaghar	
	53	Benapanjari	
Bhubaneswar	54	Barimunda	Kuakhai, Daya & Gangua
	55	Dhauri	
	56	Itipur	
	57	Raghunathpur	
	58	Sisupal	
	59	Basuaghai	
	60	Daruthenga	
	61	Kalyanpur	
	62	Mancheswar	
	63	Paikerapur	
Balianta	64	Patrapada	Kuakhai Daya, Dhanua & other streams
	65	Bentapur	
	66	Benupur	
	67	Jaya Dev	
	68	Prataprudrapur	
	69	Satyabhamapur	
	70	Bainchua	
	71	Bhingarpur	
	72	Jagannathpur	
	73	Kakarudrapur	
	74	Puran Pradhan	
	75	Sarakana	
	76	Umadei Brahmapur	
	77	Balianta	
78	Jhinti Sasan		
79	Pratap Sasan		
Balipatna	80	Amanakuda	Kushabhadra Prachi Bhargavi
	81	Guapur	
	82	Marthapur	
	83	Bhakarsahi	
	84	Bhapur	
	85	Deulidharpur	
	86	Kurunjipur	
	87	Majjihara	
	88	Turintira	
	89	Garedi Panchan	
	90	Nariso	
	91	Pampalo	
	92	Rajas	
	93	Somana Sasan	

AVERAGE RAINFALL HISTORY OF KHORDHA DISTRICT

MONTHLY AVERAGE RAINFALL OF KHORDHA DISTRICT													
Year / Month	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec	TOTAL
Normal	12.4	24.3	22.1	28	60.7	196.2	304.9	320.6	234.5	149.3	50.4	5.00	1408.4
1993	--	--	--	28.18	49.34	298.32	320.1	402.61	235.73	126.07	13.36	--	1473.71
1994	--	19.44	2.18	38.87	21.27	164	374.79	501.1	311.02	160.85	1.9	--	1595.42
1995	20.17	26.72	15	7.04	44.9	228.7	168.55	264.01	185.16	304.27	112.86	--	1377.38
1996	13.66	8.7	0.72	16.74	33.02	150.27	198.83	241	76.07	75.31	9.09	--	823.41
1997	42	11.9	15.45	100.18	16.1	151	224	575.4	267.3	37.5	8.6	32.00	1481.43
1998	8.9	53.4	60.45	81.8	35.2	169.9	328.02	179	262	222.28	106.5	--	1507.45
1999	--	--	0.2	--	126.4	169.52	162.4	238.5	179.65	548.8	42.9	5.10	1473.47
2000	--	30.3	--	44.65	68.45	277.46	333.05	293.36	123.82	368	0.2	--	1539.29
2001	--	1.9	50.99	21.27	80.7	387.55	688.86	345.09	214.8	200.4	66.4	--	2057.96
2002	11	0	--	21.6	116.1	168.2	225.6	372.2	198.5	59	16.8	--	1189
2003	--	24.5	2.7	3.5	6.2	160.1	327	530.1	262	521.2	8.4	21.80	1867.5
2004	--	--	--	42.4	17.1	93.6	292.1	238.3	144.2	227.2	--	--	1054.9
2005	32	--	33.9	15	41.8	107.5	332	197.4	416.9	221	38.6	--	1436.1
2006	--	--	195	8.9	105.1	188.8	432.3	582.9	279.9	45.7	22.3	--	1860.9
2007	--	42	11.6	20.3	81.5	255.9	133.5	304.2	475.8	75.3	2.1	-	1402.2
2008	18.2	34.9	16.9	46.6	41.5	317.8	293.06	302.7	332.6	29.1	14	0.00	1447.36
2009	0	0	0	4.3	52.4	74	568.82	291.24	206.5	137.8	62.35	0.00	1397.41
2010	4.3	0.7	0	0.6	132								137.6

IMPORTANT PARA IN ORISSA RELIEF CODE

Functioning of Control Room (Para 10 & 47 of ORC)

Control Room is functioning in District Office with telephone No. 06755-220002 /1077 round the clock with the effect from 1.5.2009 and the same will continue till 30.11.2009. Control Rooms are also functioning in the Offices of the Sub-Collectors/Tahasildars/Block Development Officers and in other District Level Officers. The case of any natural calamities viz – flood or cyclone etc immediately after the occurrence it will be the responsibility of village level workers to inform the facts to the nearest RI who will pass on the information to the nearest Police Station for transmission of the message to the Sub-Collector and Collector's Control Room also keep the concerned zone officer and Tahasildar informed. Revenue Inspector's are trained at Tahasils level for the purpose.

Wireless Station (Para 55 of O.R.C)

All the Police Station and Out-posts in the Dist are equipped with VHF/HF for transmission of the flood /cyclone messages. Special Relief Commissioner has been moved for installation of temporary V.H.F. Centers at the following places to facilitate transmission of flood/cyclone messages.

Rain Recording and Submission of Rainfall Reports(Para 49 of O.R.C.)

Rain recording stations are available in all the blocks of this district. The Head Clerks of the Blocks are acting as Rain Recording Officers under the supervision of the respective Block Development Officers. The rainfall reports from each rain recording station shall be transmitted to the District Control Room daily through V.H.F./ Telephone/ Messenger.

Gauge Reading (Para 50 of O.R.C.)

The gauge reading stations of different rivers are available at different places in the district as shown. The gauge readings will be transmitted by the flood control cell to the District Control Room every hour when the gauge reading is near or above danger level. When the gauge reading is fairly below the danger level, the same will be transmitted once a day by 5 P.M., Gauge readings at the above Gauge stations shall be communicated to the Revenue Control Room through phone/Fax from the District Control Room.

Dissemination of Weather Reports , Flood Bulletin etc. (Para 52 of O.R.C.)

Immediately on receipt of weather warnings and bulletin above high flood from the Metrological Center of the Government of India at Bhubaneshwar or from the Revenue Department/ Special Relief Commissioner, the same shall be communicated to the superintendent of Police. Executive Engineers of the Water Resources Department, the Sub-Collectors, Executive Officers of U.L.Bs., Tahasildars and Block Development Officer who shall without loss of time disseminate the messages among the people through their respective agencies and caution them so that they will be in readiness to shift to flood shelters or other safer places in the event of high floods. The people, will also be asked to refer to the special weather/flood bulletin of T.V./Radio during such periods.

Storage of Foodstuff in Interior Areas (Para 57 of O.R.C.)

To ensure that food grains/food-stuff are available in the interior areas which are likely to become inaccessible during flood, Civil Supplies Officer, Khordha, has been reported to store adequate amount of rice and also to keep stock of Kerosene. Other dry foods like chuda, mudhi, guda , bread and other necessaries like candle, match box etc, will be arranged immediately for distribution among the marooned people in the event of high flood.

Selection of Flood Shelters (Para 60 of O.R.C.)

In the flood prone areas, buildings belonging to Government, educational institutions etc, have been selected for providing immediate shelter to the people on evacuation from the flood affected areas. In case of necessity temporary flood shelters shall also be constructed with bamboos, Tarpoline etc. School cum Cyclone Shelters are already constructed and handed over to the concerned school authorities by the Govt. and other executing agencies. These can also be used as Shelter places.

Organisation of Relief Parties for Rescue and Relief Operation (Para 60 of O.R.C.)

In the event of high flood it will be necessary to rescue the marooned people and to distribute emergent relief to the people affected by the calamity. For smooth management of rescue and relief operation, the Sub-Collector have been instructed to constitute Relief Parties in advance indicating their area of jurisdiction. The employees of the local Government offices shall be included in such relief parties. NGOs will also be involved in the programmed.

Arrangements for Army Assistance (Para 61 & 69 of O.R.C.)

In case of severe and wide spread calamity, the assistance of army personnel may be sought for relief and rescue operation. In such contingency, necessary arrangements shall be made to requisition the army to assist the civil authorities through Special Relief Commissioner / Government following the procedure laid down under paragraph 61 and 69 of the Orissa Relief Code

Daily Reporting of Flood Situation (Para 71 Of O.R.C)

As per para 71 of Orissa Relief Code instructions have been separately issued for submission of daily situation report by the Block Development Officer /Tahasildars in the prescribed format through wireless message from the date of occurrence of the flood till after 3 days of the abatement of flood. The required flood information will be collected by the V.L.Ws and Extension Officers who will furnish the same to the Block Office by 2 P.M. everyday. Besides , other line department officers will also pass on the information relating to their department officers who will also pass on the information relating to their department to the respective Block Development Officers. The Block Development Officers will compile and transmit the information as per the format of the daily situation report through the nearest police wireless by 3 P.M. to District Control Room.

Transport :

In the event of any Natural Calamity, vehicles may be required for sending the relief parties and relief materials including foodstuff to the affected areas. The Regional Transport Officer will make requisition and provide such vehicles with the help of his enforcement staff as per the requirement.

Disposal of Dead Bodies (Para 73 Of ORC)

The dead bodies of human beings, if any, found in the flood-affected areas in case of high flood, shall ordinarily be made over to their relatives and friends, if available, for cremation or burial. When there are no claimants for dead bodies, those shall be cremated/buried at the Govt. cost i.e. Health Department. Chief District Medical Officer, Khordha will issue necessary instructions to their officer and staff in the field in this regard. Similarly, carcasses of cattle and other animals shall be buried by the Animal Resources Development Department. Chief District Veterinary Officer will issue necessary instruction in this regard.

Assessment of Damage (Para 74 to 77 of O.R.C)

Damages caused by the Natural Calamity to the private and public properties and loss of life are assessed by the Revenue Agency. The Tahasildars are to collect such information with the help of his staff through the local enquiry. The Block Development Officers and the Extension Officers in this work if necessary will assist them and officers may be specially deputed by the Collector to assist the Tahasildars in this work where there is large-scale damage. This report of damages would be submitted without delay. The other departments will similarly assess their losses and submit reports within the stipulated time.

Restoration of Communication and Power Supply(Para 86 of ORC)

In case of high flood, the communication and power supply to the affected areas are usually cut off. The respective departments will take immediate steps for restoration of the communication as well as power supply after abatement of flood.

Law and Order

In case of occurrence of any Natural Calamity, there is change of law and order problems. Transportation and distribution of relief materials may require police protection. The Superintendent of Police will issue necessary instruction to all Inspector officer/officer officers in the District in the direction of maintenance of law and order in such eventuality and to render necessary assistance to the District/Sub-Divisional authorities for smooth management of relief and rescue operation.

ORISSA RELIEF CODE: REVISED NORMS

The of Orissa is prone to one or other to be of natural calamity every year. All such calamities bring large-scale devastation and make the life miserable for the vulnerable population. The extent of damage is so much that it becomes impossible on the part of vulnerable family or the community to recover. Governmental intervention and assistance is essential to help the populace to overcome the post disaster situation.

The Orissa Relief Code provides a set of rules and guidelines to ensure quick response from Government in providing assistance from Calamity Relief Fund (CRF) to the affected persons. Of late, the guidelines have been amended to coop up with the changed situation. Brief highlights of the norms are as follows.

1. Natural Calamities notified by Government of India for assistant from Calamity Relief Fund (CRF)

- Flood, Cyclone, Earthquake, Drought, Fire & Hailstorm.
- Recently added – Tsunami, Landslide, Avalanche, Cloud Burst & Pest Attack.

2. Food Assistance

Types of Assistance:

- (a) Emergent assistance
- (b) Ad hoc food assistance, or
- (c) Food assistance on card
- (d) Free Kitchen

(a) Emergent assistance: - for people marooned during a disaster.

- Distribution of Chuda, Muddhi, Gur, Salt, Kerosene, Matchboxes including cooked food and clothing.
- Emergent Relief in shape of rice, wheat, chuda, Mudhi, ragi etc@ 1 Kg per adult per day and 500 Gms per child (below 12 years of age) per day .

Collector	Up to 3 days
RDC	Up to 7 days including 3 days sanctioned by Collector
SRC	Up to 15 days including 7 days above
Government	Beyond 15 days.

(b) Ad hoc Food Assistance : - when post distress conditions persist, for

- Person attending the sick or infant children who cannot go out and earn their livelihood.
- Able-bodied persons but temporarily rendered weak due to want of food, malnutrition or as a result of illness.
- People deprived of cooking their food due to inundation.
- To be sanctioned by Collector for specific households.

(c) Food Assistance on card: - can be sanctioned to prevent starvation any time.

Eligibility :

- (i) Mentally challenged person
- (ii) Crippled or invalid persons
- (iii) Blind persons
- (iv) Advance age or physical infirmity
- (v) Helpless windows
- (vi) Persons attending sick or infant children
- (vii) Able-bodied persons weak due to want of food, malnutrition or illness.

Sarapanch	Up to 10 days
BDO	Up to 30 days
Sub-Collector	Up to 45 days
Collector	Up to 120 days.
Mayor,BMC/Chairperson(ULBs)	Up to 10 days.

(d) **Free Kitchen :** Rs 20 per adult & Rs 15 for Child per day.

3. Ex-gratia Assistance in the event of death due to disasters notified by GoI

- Inform within 24 hours with details.
- Initiate case record for sanction of ex-gratia in favour of bereaved family members.
- Ex-gratia to be sanctioned by Collector.
- Disbursement within 7 days from available cash.
- Maintain a register showing details.
- Rs.1,00,000/- per person.
- No age and income bar
- Scale same for any no. of persons of a family.
- Boat capsized during normal period – Rs.10,000/-.
- Lightning – Rs.50,000/-
- Heatwave – Rs. 10,000/- from CMRF
- Snakebite during Flood – Rs.100,000/-
- Snakebite during normal period – No assistance from CRF
- Death due to Heavy rain – No assistance from CRF
- Drowning during normal period – No assistance from CRF

4. Assistance in case of Injury

- Loss of limb or eyes (40%) - Rs.35,000/-
- Grievous injury requiring hospitalisation for more than one week – Rs.7,500/-

5. House Building Assistance admissible :

- Pucca Houses Fully Damaged : Rs.35,000/-
- Pucca Houses Severely Damaged : Rs.5,000/-
- Pucca Houses Partially Damaged : Rs. 1500/-
- Kucha House Fully Damaged : : Rs. 10,000/-
- Kucha House Severely Damaged : Rs. 2,500/-
- Kucha House Partially Damaged : Rs. 1500/-
- Huts Damaged/Destroyed : Rs 2000/-

a) Test Check

- Tahasildar / Addl. Tahasildars : 50%
- Sub-Collector : 25%
- Collector / ADM : Sample Check

b) In case of Fire Accidents

- Shops fully damaged : Rs.2,000/-
- Shops substantially damaged : Rs.1,000/-
- Cow Shed : Rs 2000/-

IF

Annual income of the shop owner <Rs.25,000/-

Shop not insured, and not located on objectionable Govt. land.

- Assistance in case of fire accidents shall be provided in both urban and rural areas to both BPL and APL categories.
- HBA to be given to victims who have constructed houses on Unobjectionable encroached government lands.
- No HBA shall be sanctioned and provided to persons who have built houses on objectionable government land. But emergency relief shall be administered in all cases of fire accidents for 2 weeks.

6. Shelter Materials and Utensils for Fully Damaged Houses :

- Rs.400/- in lieu of Polythene per household
- Rs.1000/- for utensils per household
- Rs.1000/- for clothing per household.

7. Agriculture Input Subsidy :

Crop loss of 50% and above of small & marginal farmers –

- Rs.1,000/- per ha. in Rain fed areas.
- Rs.2,500/- per ha. in irrigated areas.

In case of Severe Natural Calamity in 2nd consecutive year, besides per farmer up to 2ha. maximum for other farmers.

8. Betelvines damaged :

- Rs.50/- per decimal
- Maximum Assistance of Rs.500/- for 10 decimal
- Detailed list to be approved by Collector before disbursement

9. Agricultural land sand cast :

- If sand deposit >6 inches and less than one foot
- Rs.6, 000/- per ha. to small and marginal farmers.
- Detailed list to be approved by Collector before disbursement

Test Check

- Revenue Supervisor - 100%
- Tahasildar / Addl. Tahasildar - 20%
- Sub-Collector / ADM - 10%
- Collector – Sample test in 5 village

10. Assistance to Artisans in handicrafts

- Traditional crafts
- For damaged equipments - Rs.2000/- per person
- For raw materials - Rs. 2000/- per person
- For repair of looms etc. – Rs.2000/- per loom
- Purchase of yarn & materials - Rs.2000/- per loom

ILLUSTRATIVE LIST OF ACTIVITIES OF IMMEDIATE NATURE IDENTIFIED

1. Drinking Water Supply:

- i) Repair of damaged platforms of Hand pumps/Ring wells/Spring-tapped chambers/Public stand posts, cisterns.
- ii) Restoration of damaged stand posts including replacement of damaged pipe lengths with new pipe lengths, cleaning of clear water reservoir (to make it leak proof).
- iii) Repair of damaged pumping machines, leaking overhead reservoirs and water pumps including damaged intake – structures, approach gantries / jetties.

2. Roads

- (i) Filling up of breaches and potholes, use of pipe for creating waterways, repair and stone pitching of embankments.
- (ii) Repair of breached culverts.
- (iii) Providing diversions to the damaged/washed out portions of bridges to restore immediate connectivity.
- (iv) Temporary repair of approaches to bridges/embankments of bridges., repair of damaged railing bridges, repair of causeways to restore immediate connectivity, granular sub base, over damaged stretch of roads to restore traffic.

3. Irrigation:

- (i) Immediate repair of damaged canal structures and earthen/masonry works of tanks and small reservoirs with the use of cement, sand bags and stones.
- (ii) Repair of weak areas such as piping or rat holes in dam walls/embankments.
- (iii) Removal of vegetative material/building material/debris from canal and drainage system.

4. Health

Repair of damaged approach roads, buildings and electrical lines of PHCs / Community Health Centres.

5. Community assets of Panchayat

- a. Repair of village internal roads
- b. Removal of debris from drainage/sewerage lines
- c. Repair of internal water supply lines
- d. Repair of street lights
- e. Temporary repair of primary schools, Panchayat ghars, community halls, anganwadi etc.