

CHAPTER –I

MULTI- HAZARD DISASTER MANAGEMENT PLAN

1.1 Why is it?

Losses caused by disasters continue to mount year after year throughout the world. So the need for an effective disaster management strategy to lessen the impact of disaster is increasingly being felt in many quarters and the need for strengthening organizational structure for disaster management is widely accepted.

Precise actions, procedures and responsibilities have to be clearly laid down well in advance to ensure timely response in case of any disaster. Therefore, a mechanism that takes into account multiple hazards and basic preparedness has to be articulated in the form of Quick Response Teams, Quick Assessment Teams, Reporting Procedures, Checklist and Handbooks. The mechanism also lays down crucial parameters, requirements and organizational composition of Emergency Operations Centers and Incident Command Systems. The disaster management plan is a document that includes every aspect of response and preparedness measures and acts as ready reckoner for the disaster managers at district level.

1.2 Objective

The objective of the plan is to identify all common elements of response, which acts as a base plan or a generic / modular plan for all response activities. It provides a framework basing on which other agencies and departments can outline their own activities for disaster response. This plan will then be supplemented with specific disaster management plan and will take into account the peculiar conditions that might arise due to the occurrence of specific disaster.

The District Disaster Management Plan (DDMP) has envisaged all the aspect of preparedness whereby receipt of the signal of an impending disaster would simultaneously energies and activate the mechanism for response and mitigation without loss of time. It enables the participating managers to know well in advance the task assigned to them and the manner of response, available resources including manpower, material, equipment and adequate delegation of financial and administrative powers.

The DDMP is in essence, the Standard Operating Procedure (SOP) in which the implementation of efforts on ground is well laid down. Activities such as evacuation, search and rescue, temporary shelter, food, drinking water, clothing, health and sanitation. Communications accessibility and public information, that are important components of disaster management, would follow on the activation of the DDMP.

1.3 Who formulates and Carries out the plan:

The Disaster Management Plans is the compilation of Block Disaster Management Plans and it evolves through a bottom up approach of preparing disaster management plan at village, GP and block level. The plan clearly indicates the role and responsibilities of each player of the team. The Collector at district level, Sub-Collectors at Sub divisional level and BDOs at the Block level head the team. The Sarpanch is the key player in GP level and the Community with guidance of Village Disaster Management Committee formulates and carries out this plan at village level. Civil Society Organisations also play a vital role during the implementation of this plan in the field.

CHAPTER-II

Overview of Sambalpur District

2.1 Locations and Physiography:

Sambalpur lies between latitude 20°54' to 22°11' North and longitude 83°49' to 84°45' East. The district has an area of 6657 sq.km out of which forest area is 3631.77 sq.km. The district consists of wide expanse of fairly open country fringed by forest-clad hills as well as series of low hill ranges of irregular shapes. The plains' elevation range from 146m to 228m above MSL whereas the highest elevation point marked to be as Pariapahar 762m above MSL in the border of Sambalpur and Deogarh district (TS No. 73C/7). River Mahanadi and Maltijhor control the major drainage system. The district forms a part of central basin of Mahanadi river.

2.2 Climate:

The district experiences extreme climate; where in summer mercury raises up to 47° C in the month of May and in winter it dips as low as 4.5°C during December/January. Humidity is normally 24% in winter and 35% in rainy season.

The rainfall data recorded in the district during the year from 2002 to 2005 are indicated below:

(In MM)

Year	January		February		March		April		May		June	
	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual
2002	14.3	0.22	24.4	Nil	16.4	Nil	17.6	Nil	30.9	30.3	218.7	162.1
2003	14.3	Nil	24.4	14.8	16.4	4.4	17.6	18.2	30.9	3.0	218.7	311.9
2004	14.3	3.93	24.4	3.88	16.4	9.7	17.6	41.8	30.9	0.22	218.7	116.02
2005	14.80	58.16	24.50	7.96	18.20	12.87	16.50	7.70	32.30	22.62	221.0	287.34

Year	July		August		September		October		November		December	
	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual
2002	469.6	206.9	430.9	400.5	224.3	233.1	61.6	15.5	14.7	Nil	3.6	Nil
2003	469.6	340.3	430.9	414.5	224.3	371.0	61.6	159.73	14.7	18.62	3.6	24.6
2004	469.6	387.56	430.9	540.84	224.3	143.27	61.6	69.29	14.7		3.6	
2005	429.5	625.29	442.4	295.73	224.7	151.51	54.7	163.02	12.7		4.4	

The normal annual rainfall in sambalpur district is 1527.0 MM against which the district has received 1048.62 MM in the year 2002 and 1681.25 MM in the year 2003 and 1316.51 MM in the year 2004. The Annual normal requirement of rainfall has been modified as 1495.7 MM w.e.f. 01.01.2005 by the Special Relief Commissioner, Orissa vide letter No.1746/SR dt.08.12.2004 of Dy.Relief Commissioner

2.3 Rain Recording Centres in the district and the Officer-in-Charge:

Sl. No.	Name of Rain Recording Centre	Officer in charge for the Rain Recording Centers
1	Bamra	P.C. Arca, Head Clerk
2	Dhankauda	Head Clerk
3	Jamankira	S.K. Behera, Head Clerk
4	Jujumora	P.K. Sahu, Head Clerk
5	Kuchinda	B.K. Panigrahi, Head Clerk
6	Maneswar	Head Clerk
7	Naktideul	T.K. Biswal, Head Clerk
8	Redhakhhol	L. N. Dehury, Head Clerk
9	Rengali	B.M.Patra

2.4 Geology:

Geologically, Sambalpur forms a part of Central Indian Craton, which has been stabilized since 2500 m.y. Most of the areas are covered by metamorphic rocks of Achaean age succeeded by sedimentary rocks of Proterozoic and Gondwana.

Metamorphic rocks of Achaean age belong to Dharwarian group. The rock types include schists, gneisses, porphyritic granite, younger granite (grey & pink coloured), quartzite, banded iron formation (BIF), charnockites, khondalites and intrusives like amphibolites, basic/ultrabasic rocks, nepheline syenite, pegmatites and quartz veins. The Kolhan group (equivalent to Dhanjori group) comprising meta sedimentary rocks underlain by granite gneiss and BIF. The regional trend of the litho units is NNE-SSW to NE-SW. Sambalpur town is situated on the quartzite and quartz schist exposures having trend ENE-WSW belonging to Proterozoic age. The nepheline-syenite outcrops are marked around Redhakhhol.

The archaean rocks are overlain by proterozoic sediments such as quartzite/sandstone and shale. These rocks are exposed on SW rim of Hirakud reservoir, which forms eastern margin of the Chhatisgarh basin. The proterozoics are unconformably overlain by Lower Gondwana rocks (Talcher & Damuda group) represented by shale, sandstone and coal seams. The rocks are exposed around Rail and Koing in Redhakhhol sub division.

A prominent fault known as North Orissa Boundary Fault (NOBF) is running from northwestern border to eastern coast and forms a boundary between north Orissa craton in north and Eastern Ghat Mobile Belt in the south. The other fault is running from Sambalpur to Sonepur in NE – SW direction.

2.5 Geography:

Sambalpur district with a total area of 6,704 Sq. Kms. is surrounded by Deogarh district in the east, Bargarh and Jharsuguda districts in the west, Sundergarh district in the north and Subarnapur and Angul districts in the south. The district has three distinctive physiographic units such as, Hilly Terrain of Bamra and Kuchinda in the north, plateau and ridges of Rairakhol in the southeast and valley and plains of Sambalpur sub-division in the southeast. Sambalpur district experiences extreme type of climate with 66 rainy days and 153 centimeters rainfall on an average per annum. Most of the rainfall is concentrated in the months from June to October visited by southwest monsoon. Mercury raises upto 49° Celsius during May with intolerable heat wave and falls as low as 4.5° Celsius during December with extreme cold. The rainfall is highly uneven and irregular and consequently drought in extensive areas is a common feature.

The district forms a part of the Mahanadi River basin. Mahanadi, the longest river of the state, entered into the district in the northwestern border, where the famous Hirakud Multipurpose Dam Project is built. Other important rivers of the district are the Maltijor, the Harhad, the Kulsara, the Bheden and the Phuljharan. Total land under cultivation in the district is 173540 hectares. Some villages of the district are inaccessible during the rainy season. Presence of a number of nallas without bridges cut off the villages from the nearby roads. The district is served by National highway No.6 & 42 with major district roads and a section of South Eastern Railways. Rural electrification has been extended to 63.6% of the villages of the district. Telecommunication Network is not adequate to cater to the needs of the people in the rural areas. Drinking water facilities are available in villages mostly from tubewells.

2.6 Topography:

Sambalpur district forms part of the Northwest upland of Orissa, which is rolling and multiplying the ground slopes from a height of 776 ft. to a height of 460 ft. The thick blanket of black cotton soil all over the district has been made somewhat sticky by the yellow earth developing in the undulating topography of the district. Isolated hills rising sharply from the surface are a regular sight.

Sambalpur at a glance:

01	Population (2001 Census)	Male Female Total Ratio of Male/Female population	4,68,950 4,54,805 9,23,755 1000:970
02	Literacy	Male Female Total	78.87% 54.79% 67.01%

03	Agricultural Indication (2001 Census)	Cultivators Agricultural Labourers Marginal Labourers	91,000 1,34,000 1,39,000
04	Hospitals & Medical Colleges	Medical College Headquarter Hospital Subdivisional Hospital Community Health Centre P.H.C./Mobile Health Unit Ayurvedic Hospital Homeopathic Hospital	01 01 03 05 35 13 14
05	Sub Divisions	3- Sambalpur, Kuchinda & Redhakhol	
06	Tahasils	4-Sambalpur, Kuchinda Redhakhol & Rengali	
07	Revenue Villages	1325	
08	Revenue Circles	40	
09	C.D. Blocks	9	
10	Gram Panchayats	148	
11	Police Stations	19 (One Women P.S.)	
12	Police Outposts	10	
13	Municipality	1 (Sambalpur)	
14	N.A.Cs	4 (Burla, Hirakud, Kuchinda & Redhakhol)	
15	Area of the district	6657 Sq. Km.	
16	Density of population	140 per Sq. Km.	
17	Forest Area	3631.77 Sq. Km.	

Source: District Statistical Handbook-2001

2.7 Important Tribes and Caste:

i) GOND: - **Gonds** are the most important tribe of Sambalpur. They were very much influential in this part of Orissa. A large no. of Zamindaris of Sambalpur were in the hands of the *Gonds*. The *Gonds* are of small structure and dark in colour with sound health. *Gonds* are very fond of hunting. Now-a-days they are engaged in agriculture.

ii) SOURA: - *Souras* are generally live near the Forest. They are of two kinds, (a). *Laria* & (b). *Oriya*.

iii) BINJHAL: - The *Binjhals* are the earliest inhabitants of the district. They are originally from Vindhyan range. Most of the *Binjhals* are cultivators and rests are field labourers.

iv) MIRDHA: - *Mirdha* is a small Dravidian tribe found in Sambalpur. The main occupation of the tribe is digging earth.

v) **GOUD:** - The *Gouds* are the herds-men of the district. Cattle rearing is the main occupation of the Gouds. A Goud is called Nariha who supplies drinking water.

vi) **GANDA:** - Economically *Gandas* are very backward. They work as professional Pipers and Drummers and are employed as Musicians in Marriage Ceremonies. They wear coarse cloth and generally work as village watchman. They belong to SC community.

vii) **TELI:** - The traditional occupation of this caste is Oil Pressing. Due to establishment of Oil Mills these people are engaged in petty business and cultivation.

viii) **KEUTA:** - The boatmen and the fishermen are called *Keuta*. A small proportion of this caste is engaged in cultivation. The women folk are engaged in preparation of *Murhi*, *Lia* and *Chura* etc.

ix) **BRAHMIN:** - The *Brahmins* are the most influential and leading community in the district. There are three main classes of Brahmins in Sambalpur. They are (a). *Jharua*, known as Aranyakas (b). Oriya, known as *Utkaliyas* and (c). *Raghunathias* or known as *Bhimgiras* or *Nathas*.

x) **KARAN:** - *Karans* are the writer caste of Orissa. They also constitute an influential class in the caste system.

xi) **DHOBA:** - They belong to washermen caste. Their services are indispensable on the occasions of childbirth and in mortuary rites.

xii) **KULI:** -The *Kulis* are weavers who are mainly distributed in the district. *Kulis* are divided into seven groups.

xiii) **BHANDARI:** - This is the Barbar caste of the district. The main occupation of this caste is shaving and serving the higher caste people on ceremonial occasions.

xiv) **KAMAR:** - *Kamaras* are the blacksmith of the district, popularly known as *Luhura*.

xv) **GUDIA:** - The occupation of the *Gudia* caste is to prepare sweets. They prepare special sweets on various ceremonial occasions.

xvi) **AGARIA:** - The *Agaria* caste people have mostly migrated to Sambalpur from outside the district. The Agarias are a class of industrious cultivators. They are found predominating in Kuchinda, Bamra and Jamankira blocks in the district.

xvii) **BHULIAS:** -The *Bhulias* are important caste of the district. They weave fine cotton cloth with colourful borders.

xviii) **SUNARI:** - The *Sunaris* work in both Gold and Silver ornaments used by the womenfolk.

2.8 Literacy Rate in Percentage:

		<u>2001</u>
<u>District Literacy Rate</u>	:	67.01
Male	:	78.87
Female:		54.79
<u>State Literacy Rate</u>		
Population	:	3,67,06,920
Literacy	:	63.61%
Male	:	75.95%
Female	:	50.97%

CHAPTER –III DISASTER PREPAREDNESS

3.1 Land Utilisation Pattern: (Area in Hect.)

Forest Area	Misc. Tree crops & Groves not included in net area shown	Permanent Pasture	Culturable waste	Land put to Non agri. use	Barren land	Current fallow	Other fallow	Net area shown
137498	3417	21540	21950	33963	7895	28458	18528	136539

3.2 Type of Workers:

Type of Workers							
Main Workers		Marginal Workers		Non Workers		Total Workers	
M	F	M	F	M	F	M	F
208460	71507	48188	91224	214907	294603	256648	162731

3.3 Livelihood details: (No. Of House Hold)

Sl. No	Name of the Tahasil	Cultivators	%	Agricultural laborers	%	Workers in Household industry	%	Other Workers	%
1	Kuchinda	37654	28.20	68,298	51.16	7869	5.89	19693	14.75
2	Redhakhhol	20387	35.87	19,920	35.05	5216	9.18	11314	19.90
3	Sambalpur	20595	12.79	29,907	18.58	22079	13.71	88407	54.92
4	Rengali	12460	18.31	15,818	23.25	22731	33.41	17301	25.03
	Urban								
1	Kuchinda (NAC)	547	12.67	916	21.21	95	2.20	2760	63.92
2	Redhakhhol (NAC)	496	10.09	783	15.93	131	2.66	3506	71.32
3	Sambalpur (M)	821	1.73	462	0.97	2869	6.03	43402	91.27
4	Dhankauda (O.G.)	25	1.95	94	7.33	368	28.68	796	62.04
5	Burla (NAC)	196	1.76	113	1.01	189	1.70	10634	95.53
6	Amsadakata pali (O.G.)	252	17.37	561	38.66	127	8.75	511	35.22
7	Hirakud (NAC)	198	2.46	266	3.31	588	7.32	6983	86.91

3.4 Tahasil-wise position of different lands in the district

Sl	Tahasil	Total area	Degraded waste land (in Ac.)	Forest land (in Ac.)	R.I. Circles	Homestead land available (in Ac.)	Agrl. Land available (in Ac.)
1	Sambalpur	1371.53 Sq.Km,	Nil	23246.03	14	2075.82	284452.63
2	Rengali	760.7 Sq.km	Nil	16466.71	07	694.50	80847.28
3	Kuchinda	2367.3 Sq.K.m	Nil	239053.17	11	2523.09	32339.32
4	Rairakhol	2157.47 Sq,km	9060.97	395919.43	08	79.60	88465.77

3.5 Cropping Pattern:

Type of Crops	Area Cultivated in Hect.	Yield Rate in Kg per Hect.	Production in Qtls.
Paddy	137041	10.89 Qntl/Hect. dry paddy with husk	1492598
Wheat	450	1538	6921
Maize	132	716	945
Ragi	42	269	113
Greengram	861	321	2760
Blackgram	1621	177	2873
Til	3639	141	5127
Groundnut	105	1001	1051
Mustard	659	166	1094
Potato	372	9318	3463
Sugarcane	54	57115	30842

Source: *District Statistical Hand Book-2001*

3.6 Drinking Water Sources/ Status:

Sl.No	Category	No.
1	No of tube wells required as per 250 norms (as on 1.04.05) a) T.N. (N.C.) habitation b) P.C. habitation c) No. of N.C.Habitation as per ARWSP norm (provisional)	101 133 412
2	No of tube wells and sanitary wells in operation as on 1.04.05	6210 / 126
3	Pipe water project completed	29
5	No of on going pipe water projects	06
6	Target for installation of TWs/SW (2005-06)	255
7	Ach. For sinking of TwS/SWs during the year 2005-06	64

3.7 Carrying Capacity of the Rivers:

Name of the River	Gauge Station	Zero Level (in Mts.)	Danger Level (in Mts.)
U/S Mahanadi	Ghorari	260.0	269.56
Sionath	Nandaghat	237.0	249.11
Mahanadi	Seori Narayan	213.66	226.20
Hansdeo	Champa	257.57	263.81
Mahanadi	Saradihi	195.5	206.27
Mond	Tarapur	202.2	206.06
Ib	Deogaon	193.0	200.55
D/S Tel	Belgaon	154.23	165.26
Mahanadi	Khairmal	98.3	
Mahanadi	Barmul	49.7	62.79
Mahanadi	Mundali	19.81	30.39

3.8 Availability of Irrigation Facility:

Irrigation potentiality:

(Area in Hect.)

Sources	Kharif
Major/Medium Irrgn. Projects	31517
M.I. Projects	14000
Lift Irrign. Projects	2555
Other sources (Dug well/Bore well/Kata / bundha)	615

3.9 Infrastructure (Nos.)

No. of PDS Outlets	No. of Post Offices	Police Station	Pucca buildings	CHC	PHC	PHC (New)	Ayurvedic Dispens.	Homeo Dispensary	Cyclone Shelters	Educational Institutions			Livestock centers	Cottage Industries	SSI Industries	Godown
										Pry Sch	UP Sch	Hi. Sch				
104	249	18 + 1 Women PS		7	3	26	13	13	-	889	289	161		290	92	148 GP + 2 SWC

3.10 Financial Institutions:

Sl. No	Type of Institution	No. of offices
1	Public Sector Banks	54
2	Regional Rural Banks	24
3	All Scheduled Commercial Banks	78

3.11 Communication Facilities:

VHF Station and Telecommunication Link

- All Police stations are connected with VHF/Telephone.
- All officials connected with Relief/Rescue operation are having telephone connection.
- One satellite telephone is available with District Collector.
- Besides the above VHF installations, 6 blocks of the district namely Rairakhol, Bamra, Dhankauda, Rengali, Jamankira, Naktideul have been provided with VHF communication system (VHF is not yet installed in Maneswar, Kuchinda and Jujomur blocks) and one at the District Control Room by OSDMA and UNDP.
- The District Control Room has also been provided with two mobile VHF sets and two walkie-talkie by OSDMA.

3.12 Distance of Sub-Divisional Headquarters/Block Headquarters from District Headquarter

Sl. No.	Name of the Sub Divisions/Blocks	Distance from District Headquarters (K.M)
Sub-Divisions		
1.	Sambalpur	0
2.	Redhakhol.	69
3.	Kuchinda.	85
Blocks		
1.	Bamra	115
2.	Dhankauda	5
3.	Jamankira	40
4.	Jujumura	32
5.	Kuchinda	85
6.	Maneswar	8
7.	Naktideul	115
8.	Redhakhol	69
9.	Rengali	30

3.13 Railways:

The district is well connected by rail route with direct trains to New Delhi, Chennai, Ahmedabad, Mumbai and Kolkata and is coming under East Coast Railways with 244 Km of rail route length. There are 20 railway stations in the district.

RAILWAY ENQUIRY:

Khetrajpur station – (131)

Fatak station – (131), 0663-2520194

3.14 Road network:

<i>Type of Road in the District</i>	<i>Road length (in km.)</i>
National Highway	209
State Highway	189
Major District Roads	62
Other District Roads	135
Classified Village Roads	43
Village Roads	870
GP Road	6499
Panchayat Samiti Roads	603
Forest Roads	731

3.15 Waterways:

Although there are some waterways to some panchayats, they are not conspicuously strewn all over the district.

3.16 Internet facilities:

Internet facilities are available in all block headquarters of the district through NIC site. But, only the NIC site is accessible through the VSAT installed in all the block headquarters.

3.17 HAM amateur radio stations:

There is no HAM radio station in the district. But there is a proposal to train villagers in HAM radio and later on install few HAM radios in selected places after the training is over under the Disaster Risk Management Programme supported by UNDP and OSDMA.

CHAPTER-IV

RESOURCE INVENTORY/ CAPACITY ANALYSIS

4.1 Public Distribution System

a) Storage Godown & Public Distribution System

SI No	Name of the Block	Number of GPs functioning as retailer
1	Dhankauda	-
2	Maneswar	2
3	Rengali	2
4	Jujumura	3
5	Kuchinda	17
6	Jamankira	17
7	Bamra	12
8	Rairakhol	12
9	Naktideul	13

b) Number of families/card holders under different schemes

SI No.	Block / ULB	A.P.L.	Total B.P.L. (97 Survey) Families	Annapurna	Antyodaya
Blocks					
1	Rairakhol	452	7094	100	1691
2	Naktideul	2986	6730	102	1527
3	Maneswar	13846	7916	160	2047
4	Dhankauda	14078	3605	151	1460
5	Rengali	7623	9202	140	2055
6	Jujumura	6846	8864	136	1986
7	Kuchinda	6250	8123	134	1895
8	Bamara	8717	13688	154	2787
9	Jamankira	70246	10841	151	2389
Total		131044	76063	1228	17837
1	Burla NAC	8500	2284	56	483
2	Hirakud NAC	6663	2623	60	550
3	Kuchinda NAC	1723	1757	24	343
4	Rairakhol NAC	4018	-	24	247
5	Sambalpur Municipality	43227	15321	264	3100
Total		64131	21985	428	4723
Grand Total		195175	98048	1656	22560

Year 2004-05

c) Market yard		<u>KHARIFF</u>	<u>RABI</u>
Market yard by RMC	:	05 Nos.	02 Nos
Purchase centres opened	:	35 Nos.	14 Nos.
Purchase centres opened by FCI	:	<u>05 Nos</u>	<u>05 Nos.</u>
Total	:	45 Nos.	21 Nos.
No. of Millers participated	:	59 Nos.	
Target of Procurement (Kharif-2004-05):		2,60,000 MT(in terms of rice)	
Storage agents (Private)	:	18 Nos	
Storage agent (Departmental)	:	01 No.	
Retail centers	:	G.P.	: 45
		Co-op.	: 11
		Private	: 895
K. Oil Whole Salers	:	11 Nos.	
K. Oil Sub-whole salers	:	27 Nos	

4.2 Health Institutions:**Block Wise Medical Institutions of Sambalpur**

Name of the Block	Sl. No.	Name of Medical Institution	Total beds	In-charge	Tel. Number
Dhankauda	1	Police Hospital	10	Dr. P. Tripathy	
	2	Hirakud Hospital	24	Dr. K. Rout	
	3	Debeipali PHC.	6	Dr. B.B. Sahu	
	4	Chaurpur PHC (N)	-	Dr. S. Supkar	
	5	Dhanupali PHC (N)	-	Dr. S. Debi	
Maneswar	6	Themera PHC.	6	Dr. B.K.Dora	
	7	Dhama PHC (N)	6	Dr.R.N.Sahu	
	8	Sagramal PHC (N)	-	Dr.S.Sahu	
	9	Parmanpur PHC (N)	-	Dr.A.K.Goswami	
	10	Maneswar PHC (N)	-	-	
Rengali	11	Laida CHC.	16	Dr.G.Meher	0663-2580280
	12	Rengali PHC (N).	10	Dr. Barik	
	13	Katarbaga PHC (N)	-	Dr.Panigrahi	
	14	Babukhinda PHC (N)	-	Dr.Pandit	
Kuchinda	15	S.D.Hospital, Kuchinda	35	Dr.S.M. Mahapatra	06642-220309 06642-227290
	16	Kuntara PHC.	6	Dr.L.K.Choudhuri	
	17	Gochhara PHC (N)	-	Dr.S.Bhoi	
	18	Tureiniktimal PHC (N)	-	Dr.P.Sahu	
	19	Kusmi PHC (N)	-	Dr.S.C.Naik	
	20	Kutrachuan PHC (N)	-	Dr.R.K.Sahu	
Jamankira	21	Up-graded PHC, Fashimal	30	Dr.S.C.Guntia	
	22	Jamakira PHC (N)		Dr.J.M.Patel	
	23	Banjari PHC (N)	-	Dr.S.K.Naik	
	24	Kenadhipa PHC (N)	-	Dr.B.Tandi	
	25	Bhojpur PHC (N)	-	Dr.K.M.Parida	
	26	Kulundi PHC (N)	-	Dr.S.Sahu	
Jujumura	27	Jujumura CHC.	16	Dr.V.K.Mishra	06681-257789
	28	Padiabahal PHC (N)	-	Dr.S.Supkar	
	29	Meghapal PHC (N)	-	Dr.B.K.Mishra	
	30	Hatibari Health Home	20	Dr.K.K.Barei	
Rairakhol	31	S.Dhospital, Rairakhol	35	Dr.S.S.Mahapatra	06644-253031 06644-252107
	32	Charmal PHC.	6	Dr.H.N.Padhi	
	33	Badmal PHC.	-	Dr.B.Mirdha	
Naktideul	34	Naktideul PHC.	6	Dr.J.S.Das	06648-246128
	35	Batagaon PHC (N)	-	Dr.B.A.Topo	
	36	Girishchandrapur PHC (N)	-	Dr.P.K.Sahu	

Bamra	37	Govindpur PHC.	30	Dr.S.B.Naik	
	38	Garposh PHC.	6	Dr.P.K.Das	
	39	Burbuda PHC.	-	Dr.A.K.Patel	
	40	Jarabaga PHC	-	-	
	41	Keseibahal PHC (N)	-	Dr.S.K.Padhi	
	42	Mahulpali PHC (N)	-	Dr.P.Minj	
	43	Babuniktimal PHC (N)	-	-	

4.2.1 List of the Sub-centers of Sambalpur

Name of the Block	Name of the PHC	Name of sub-centers
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1-Dhankauda

Debeipali

1-Debeipali
 2-Talab
 3-Sankarma
 4-Kainsir
 5-Dageimacha
 6-Sasan
 7- Padhanpali
 8-Balbaspur
 9-Jamadarpali
 10-Bishalkhinda-I
 11-Bishalkhinda-II
 12-Kalamati
 13-Chiplima
 14-Basantpur
 15-Chaurpur
 16-Kud-Gunderpur
 17-Berhampur
 18-A.Katapali

2-Maneswar

Themra

19-Themra
 20-Kulta-nuapali
 21-Sindurpank
 22-Batamura
 23-Talab
 24-Parmanpur
 25-Bhikampur
 26-Mura
 27-Mathpali
 28-Maneswar
 29-Gunderpur
 30-Matikhai
 31-Sahanspur
 32-Bargaon
 33-Panchput
 34-Deogaon
 35-Dhama

		36-Dakara 37-Bhoipali
3-Rengali	Laida	38-Laida 39-Kurla 40-Kinaloi 41-Jhankarpali 42-Tamperkela 43-Tabadabahal 44-Katabaga 45-Golemal 46-Rengali 47-Khuntulamal 48-Babukhinda 49-Bemaloi 50-Ghichamura 51-Lapanga
4-Jujumura	Jujumura CHC	52-Jujumura 53-Padaabahal 54-Badsahir 55-Kansar 56-Chamunda 57-Kulsar 58-Hatibari 59-Keshapali 60-Dangarpara 61-Tampargarh 62-Kukudapali 63-Lipinda 64-Birsingharh 65-Kabarapali
5-Rairakhol	Charmal PHC	66-Charmal Main 67-Taribanpur 68-Bad-Hindol 69-Podabalanda 70-Badamal 71-Badabahal 72-Banshajal 73-Lunhapank 74-Machibahal 75-Nuapada
6.Naktideul	Naktideol P.H.C.	76-Naktideol 77-Sarapali 78-Batgaon 79-Salebhata

7. Bamra

Gorposh P.H.C

80-Balam
81-Girishchandrapur
82-Kisinda
83-Phulkusum
84-Daincha
85-Ghosarmal
86-Similipara
87-Jamjori

88-Gorposh
89-Govindpur
90-Keseibahal
91-Nuadiha
92-Mahulpalli
93- Kabribahal
94-Sagara
95-Pindapathar
96-Tangermunda
97-Rangiatikira
98-Gurla
99-Gansara
100-Bamara
101-Kutharimal
102-Gardega
103-Betjharan
104-San-Dumermunda
105-Bariah-Gorposh
106-Kechupani
107-Mohapatra-Blanda
108-Kadlijharan
109-Loriapalli
110-Sargidihi
111-Nuapalli
112-Jarabaga
113-Kinabaga
114-Babuniktimal

8. Kuchinda

Kuntara P.H.C

115-Kuntara
116-Salebahadi
117-Kusumi
118-Rangiatikira
119-Telitleimal
120-Kuchinda
121-Boxma
122-Chandinimal
123-Poruabhadi
124-Kutrachuan
125-Pindra

126-Purnapani
127-Hadipalli
128-Bauriguda
129-Rautbahal
130-Gochhra
131-Banky
132-Turi-Niktimal
133-K.Jamankira

9.Jamankira

Fashimal U.G.P.H.C.

134-Fashimal Main Center
135-Kenadhipa
136-Chakoliabahal
137-Mahada
138-Bhoipalli
139-Dudhipalli
140-Bhojpur
141-Dimirimunda
142-Subanpalli
143-Gunduruchuan
144-Sirid
145-Jamankira
146-Tangarani
147-Katanpani
148-Jamumal
149-Titlipada
150-Kasada
151-Kumbkapalli
152-Barhanpalli
153-Mudhenpalli
154-Kadalipal
155-Badarama
156-Sarada
157-Kulundi

M.C.W.C SUB CENTERS

158-Sambalpur (Urban)
159-Rairakhol (Urban)
160-Batagarh
161-Kadaligarh
162-Kisapalli

4.2.2 Ambulance:

Sl. No.	Hospital	No. of Vehicle	Tel. Number
1	HQ. Hospital, Sambalpur	2	0663-2522222
2	S.D. Hospital, Rairakhol	1	06644-253031
3	CHC, Naktideul	1	06647-246128
4	S.D.Hospital, Kuchinda	1	0662-220309
5	Govindpur	1	
6	CHC, Jujomura	1	06681-257799

4.3 Details of Police Stations and Personnel:

There are 19 police stations in Sambalpur District including 1 Mahila P.S. and 3 I.I.C Posts and 3 Circles.

The detail list of Telephone Number of Police Stations and sub stations is given in **Annex-II**.

4.4 Fire Station Information:

Sl. No.	Name of the fire station	Disposition of Vehicle & Pumps	Disposition of Man Power.	In-charge	Tele. Number
1.	Sambalpur F.S.	<ul style="list-style-type: none"> • Motor Fire Engine-1 • Towing Tenders-2 • Water Tanker-1 • Trailer Pump-2 	Fire Officer-1 Fireman –10 Driver–2 L.F.M-2	B.N.Mahapatra, A.F.O	0663- 2520101
2	Redhakhol F.S.	<ul style="list-style-type: none"> • Motor Fire Engine-1 • Towing Tender-1 • Trailer Pump-1 	Station Officer-1 Fireman –8 Driver–2 LFM - 2		
3	Kuchinda F.S.	<ul style="list-style-type: none"> • Motor Fire Engine-1 • Towing Tender-1 Trailer Pump-1 	Station Officer-1 Fireman –8 Driver–2 LFM - 2	Bhagwan Sahu	06642- 220277
4	Rengali F.S.	<ul style="list-style-type: none"> • Towing Tender-1 • Trailer Pump-1 • Mini Motor Fire Engine 	Asst. Station Officer-1 Fireman –6 Driver–2 LFM - 1	Mitusial Sahu	0663- 2560142
5	Burla F.S.	<ul style="list-style-type: none"> • Motor Fire Engine-1 • Towing Tender-1 • Trailer Pump-1 	Asst. Station Officer-1 Fireman –8 Driver–1 LFM – 2	Sarbeswar Baral	0663- 2430333
6	Naktideul FS	<ul style="list-style-type: none"> • Towing Tender-1 • Trailer Pump-1 	Asst. Station Officer-1 Fireman –6 Driver–1 L.F.M – 1	Rabinarayan Samal	06647- 246180

The detail Telephone Number is given as **Annex-II**.

4.5 Earth moving & Road cleaning equipments.

RTO, Sambalpur will be responsible to deploy all earth moving and road clearing vehicles and equipments in times of disaster.

4.6 Specialised Equipments:

Type of sources	Contact Person and address	Tel. No.
Diesel Pump set	Municipality, Sambalpur	0663-2411012
Generator	District Control Room Sambalpur.	0663-2410011
	Collector (2 sets)	0663-2400001
	DRDA , Sambalpur.	0663-2410992
	PD, ATMA	
Nearest Power-Saw	EE, R&B (Mech. Divn.), Jharsuguda	06645-270070 Control Room

4.7 List of NGOs working in Sambalpur:

The list of leading NGOs working in Sambalpur with their telephone numbers is given in in **Annex-II**.

4.8 The detail Resource Inventory is given as Annex-VI.

CHAPTER- V

Risk / Hazard Analysis

5.1 History of Disaster in the district:

Sl. No	Type	Last severe Occurrence	Remarks
1	Heat wave	May 1998	204 casualty (188 + 16) 188 were paid ex-gratia.
2	Flood	July 1982	Balibandha bridge was broken. Now the brige with sluice gates is being maintained by EE, irrigation.
3	Flood	July 2001	4 casualty
4	Drought	2000	Occurs every alternate year.
5	Earthquake	1995	Possibly due to reservoir induced.
6	Earthquake	30 th June 2003	Tectonically active zone.
7	Flood	July 2003	
8	Flood	July 2005	No damage but impending of water in N. Guha Lane, Gopalmal,
9	Chlorine Gas Leakage	August 2005	Residents of Dasmati Colony, Thakurpada, Railway Station Colony affected but only 1 casualty

80 shops were gutted to fire at about 11 P.M. on 01.10.2004 in Golbazar of Sambalpur Town. The fire was brought under control by 12.30 PM with immediate intervention of Fire Brigade. There was no loss of life due to that fire accident. But the approximate loss of property was about Rs.4,11,000/- (Rupees Four lakhs, Eleven thousand) only. No residential houses of the area were affected by fire. The cause of fire accident was not known.

In view of the extra ordinary situation in the district, special weather and crop condition report was sent to the R.D.C. (ND), Sambalpur and the Govt. in Rev. Deptt and the S.R.C. and the Govt. after considering the situation have been pleased to declare 8 (eight) Blocks of the district, Drought affected in Rev. deptt. Notification No. IVF- (Crops)-65-2002-40537 / R dated 10.8.02. All Departmental Officers and the Banking Agencies have been intimated this Notification. 12 Sun Stroke deaths in the year 2002-03.

During the year 2004-05, 54 No. of fire accidents took place in the district of Sambalpur affecting 83 families in 52 villages. Properties worth Rs. 513850/- have been gutted in the fire accidents. A sum of Rs.11, 100/- has been paid to the fire affected families towards financial assistance besides assistance in kind in form of Saree, Dhoti, Dress materials and Polythene.

On 2.09.2005 at 9.30 PM, Chlorine gas leaked (valve of a Chlorine gas container of one ton capacity of Water Treatment Plant of SE Railway) near Khetrajpur Railway Station, Sambalpur. As a result, people of the locality started feeling uneasy with head reeling & vomiting. 204 persons of the nearby areas i.e. Thakurpada & Dasmati Colony were registered in the District Hqrs. Hospital Sambalpur with respiratory problems due to the gas leakage, out of which 51 persons were referred to V S S Medical College, Burla for treatment & the rest persons released safely after receiving first aid treatment, Out 51 persons referred to Burla, one person died on the way to V S S Medical College, Burla.

An amount of Rs.3000.00 (Rupees three thousand) only was provided to the legal heirs of the deceased out of Redcross fund for cremation of the dead body.

The following areas flooded due to heavy rain started from 29.7.2005 night and lasted for 2 days. But the flood in Sambalpur Municipality area was man made and due to the deposit of garbage, poor drainage system and growth of bushes / weeds in the watercourses.

1. Flood in the Thakurpada and Gurunanak Public School Area

Because of the construction of new Railway Road connecting Khetrajpur Rly. Station and Fatak Rly. Station. Construction materials left out in the construction area blocked the flow of water through the Railway Bridge causing flood in the Gurunanak School area and Thakurpada.

2. Farm Road Housing Board Colony-

The water coming in the Dhobijore Nalla from Central School was blocked in the Housing Board Colony due to large grown up weeds and bushes.

3. Flood in A.N.Guha Lane

The situation in the A.N.Guha Lane was due to unplanned construction of houses by blocking the watercourses.

**DROUGHT AND FLOOD DAMAGED VILLAGES OF SAMBALPUR DISTRICT in
the year 2000-01**

Sl No.	Name of the Block	Total No. of G.P. / NAC	No. of affected G.P./ NAC		Total No. of Villages	No. of Villages affected	
			Drought, 2000	Flood, 2001		Drought, 2000	Flood, 2001
1.	Dhankauda	16	12	10	107	32	26
2.	Maneswar	15	12	10	111	80	24
3.	Jujumura	16	16	10	125	111	21
4.	Rengali	12	12	12	67	66	20
5.	Rairakhol	14	14	14	233	224	25
6.	Naktideul	12	12	11	193	190	33
7.	Kuchinda	17	17	14	134	134	31
8.	Jamankira	19	19	08	233	233	26
9.	Bamra	16	16	08	135	135	22
TOTAL		137	129	97	1338	1205	228

**FLOOD DAMAGE in the year 2003
Area affected**

Block	Total population affected by flood in the urban areas	Villages	Total area affected in the urban areas	Villages/ Urban area	Total area affected by flood in the affected urban area	Village/ Location	Name of rivers/ nallahs/ streams. Etc. which caused damage
Maneswar		Putibandh	Partly	Sambalpur Municipality	850 Hect.	Durgapali	Mahanadi
		Khandual	Partly			Chandannagar	Haradjore
		Huma	Partly			Mandalia	Dhobijore
		Dhama	Partly			Baraabaazar	Maltijore
Dhankauda		Chiplima	Partly			Cheruapara	
		Kardola	Partly			Chamarpara	
		Bandhapali	Partly			Taunlapara	
		Marangola	Partly			Rajabakrri	
		Tulundi	Partly			Labour colony	
		Senhapali	Partly			Dhanupali	
		Tihikipali	Partly			Govindtola	
		Bakbira	Partly			Putibandh	
		Gunderpur	Partly			Kulatkani	
		Tabada	Partly			Charbati	
		Amlipali	Partly			Binakhandi	
		Mahada	Partly			Mining Colony	
		Patkhai	Partly		Hirakud NAC	20.0 Hect.	Brundabati para
	Jampali	Partly				Kalupara	
Kuchinda		Bandabahal	Partly				Bheden
Bamra		Turei	Partly				Kharla
		Dumuku	Partly				
	1285				870 Hect.		

5.2. Tips on Disaster:

5.2.1 Earthquake:

Earthquake is generally defined as any disruption in the crust of the earth. Earthquake is a natural phenomenon occurring on the earth's crust up to a depth of few kilometres with sudden and temporary vibrations for a few seconds, shaking the earth's crust feebly or violently.

Type of earthquake and scale:

Earthquakes can be grouped into two categories *depending on their mode of origin, viz;*

- i. Tectonic
- ii. Non-tectonic

Earthquake originating from tectonic causes like faulting, folding etc. are of generally high intensity.

Exp. – Himalayan earthquakes, Killari Earthquake (Latur and Osmanabad).

Earthquakes induced by non-tectonic reasons like impounding of reservoir water, collapse of underground roof and floor, volcanic eruption, underground nuclear explosion, solar rhythm etc. produce vibrations on the earth's crust and it is of low intensity.

Exp. – Koyna earthquake, Japanese earthquake, **Sambalpur earthquake** (1995) etc.

Earthquakes can also be grouped into three categories *depending on the depth at which earthquake originate (Focus):*

- i. Shallow focus earthquake- 70 Km from the surface of the earth.
- ii. Intermediate focus earthquake –70 – 300 Km from the surface.
- iii. Deep focus earthquake - > 300 Km from the surface.

Earthquake intensity is generally measured in a scale widely known as the Richter scale. This scale measures from 1 – 9 signifying the intensity of the earthquake.

Richter Magnitude	Effects	Estimated number per year (world wide).
< 2.5	Generally not felt, but recorded	9,00,000
2.5 – 5.4	Often felt, but much minor damage detected.	30,000
5.5 – 6.0	Slight damage to structures	500
6.1 – 6.9	Can be destructive in populated areas.	100
7.0 – 7.9	Major earthquake, Inflict serious damage.	20
> 8.0	Great earthquake and cause total destruction.	Once in every 5-10 years.

Prediction of earthquakes:

Prediction of earthquakes is not possible and the scientific development has yet to devise ways and means to predict earthquakes accurately. The possibility of occurrence of earthquakes with time can be indicated by studying the physical parameters of earth's crust along with behaviour of animals,

- i. Continuous monitoring of ground tilt and fault movement in quake prone areas.
- ii. Measurement of micro quakes caused by foreshocks.
- iii. Measurement of changes in physical properties of rocks such as electrical resistivity, magnetism, porosity, water-pressure etc. (Integrated geophysical surveys.)
- iv. Study of smoke and gases (particularly the Radon content) and unusual change in temperature of well water.
- v. Observing animal behaviour has always been relied upon from centuries. For example, animals of burrowing habitat leave their burrows and move in panic just before earthquakes. Birds fly in panic and dogs bark in a particular shrill note.

Preparedness for imminent earthquakes:

- i. Earthquakes don't kill but the buildings do. Mortality due to earthquake is largely due to collapse of houses and other structures. So it is necessary to design and construct structures, which can withstand the fury of earthquakes. Earthquake resistant buildings should be encouraged by the district administration and if possible regulate it with by giving permission to only earthquake resistant buildings through the town planning unit.
- ii. Multi-storeyed buildings should be discouraged in Sambalpur and if unavoidable, can be permitted with adequate earthquake resistant measures including due consideration of earthquake coefficient factor of 4.
- iii. Power supply line should be underground in earthquake prone areas.
- iv. Water supply pipes used by the PHD should have flexible joints.
- v. Mock drills and training sessions in schools and colleges to raise a general awareness for earthquake preparedness.
- vi. Constant touch of the district control room with the concerned agencies like the Directorate of Geology and the seismological observatories like the NGRI, Hyderabad with their telephone numbers and contact persons.
- vii. Massive awareness campaigns in coordination with the NGOs of the region.
- viii. Always keep flash light/torch (with working batteries) handy that can be traced even without light.
- ix. Battery powered transistors should be there with all households at all times and can be used to receive warnings of any sort.
- x. Everyone in the house and /or office should be aware of the position of the main switch and should know how to switch it off.

Action during earthquakes:

- i. All should try to be calm and think of the consequences of any action to be taken during earthquakes.
- ii. If inside the house, watch for falling plaster, bricks, light fixtures, book-cases and other furniture or photo frames etc. that might slide or get toppled.
- iii. Switch off the main switch of the house or office building.
- iv. Stay away from windows, mirrors and get under a table or a bed or in a corner away from windows. Encourage others to follow your ways.
- v. If in a high-risk office building, get under a desk. Don't go for exits since staircases might be broken or jammed with people, power for lifts may not be there.
- vi. If outside, avoid high buildings, watch power poles and other objects that could fall. Don't run through streets. Move to an open area away from all hazards.

Action after earthquakes:

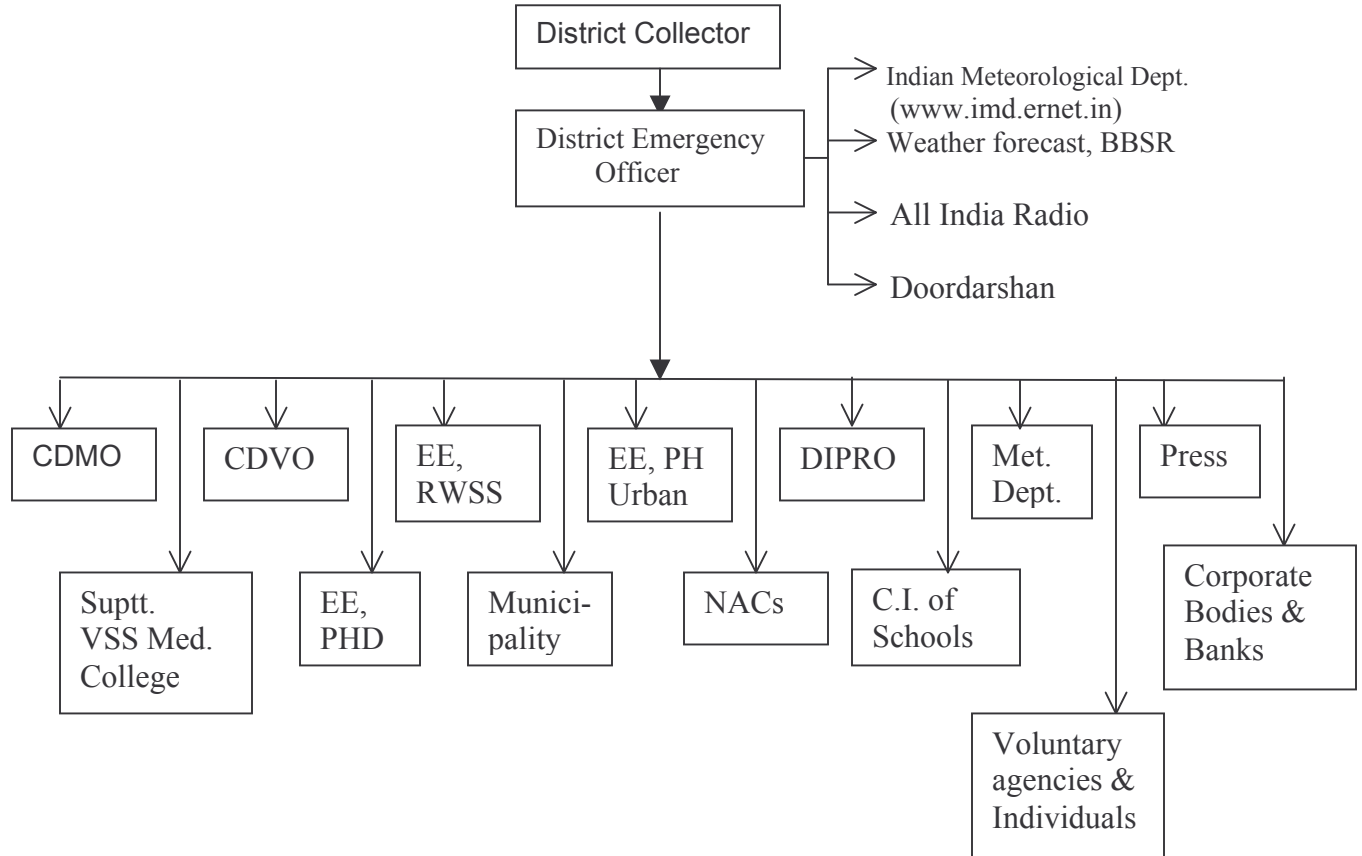
- i. Check for injuries in your family and others in the neighbourhood. Persons seriously injured are to be moved to nearest medical aid centres.
- ii. Shoes are to be worn in all areas near debris or broken glasses. Avoid power lines or objects touched by broken wires.
- iii. Turn on your radio, transistor, T.V. for damage report and information.
- iv. Be prepared for the additional after-shocks, although smaller in magnitude but some of it may be of appreciable intensity.
- v. Respond immediately to requests of help from the local police, fire fighters, administration and NGOs.

Possibility and extent of earthquake in Sambalpur district:

The landmass of Sambalpur district belongs to older metamorphics of age more than 3200 million years. The area is considered to be stable with respect to occurrence of earthquakes. But reservoir induced seismicity (RIS) is being reported in Sambalpur region during 1995 which may be attributed to the Hirakud reservoir. There is also possibility of minor earthquakes in coal mining belt.

5.2.2 Heatwave:

Organogram for Heatwave Mitigation



5.2.2.1 Role of District level Officials

District Collector:

Overall responsibility to coordinate the heat wave mitigation effort lies with the District Collector.

District Emergency Officer/ District Control Room:

- Collection and dissemination of information on heat wave warning.
- Prepare action plan and coordinate during pre and post heat wave conditions.

CDMO/Suptt. VSS Medical College:

- Separate wards should be opened in all the Hospitals / PHCs / Dispensaries to treat the sunstroke / heat-wave patients. Two rooms with A/C to be kept ready in the district and sub divisional hospitals for the purpose.

- Pure drinking water should be arranged in the hospital campus.
- Ice packs should be readily made available in all the hospitals/dispensaries.

- Water coolers, fans & standby generators to be arranged in all the hospitals.
- Sufficient stock of medicines for treatment of heat-wave patients will be ensured.

- ORS packets must be made sufficiently available in all the Anganwadi Centres / ANM units / PHCs / CHCs and in hospitals and dispensaries. Saline bottles must be made available in sufficient quantity in all the medical institutions, where facilities are available to administer it.

- Doctors, medical and para-medical staff should be deployed round the clock for treatment of heat wave patients and other illness normally occurring during summer. Ambulance must be kept ready round the clock with required medicines, staff, etc, to ensure prompt service in case of emergency.

- The *control room* opened in the district with telephone numbers is to be appraised regularly including all statutory authorities with support whatsoever needed, to meet exigency.

- Death due to heat wave is to be notified by the CDMO to the District Collector.

- Casualty register is to be maintained entering the type and extent of injury.

- Inform all external agencies and coordinate for agreed assistance.

CDVO:

- Emergency *outdoors* to be opened in the hospitals and dispensaries for treatment of domestic animals during summer.

- Anthrax vaccination to be provided to the domestic animals if necessary, during summer.

- Water storage facility near the tube wells and sanitary wells be provided for drinking water to the rural domestic animals.

- Adequate preventive measures to be taken to avoid an epidemic.

Executive Officers:

- The Ex. Officers of all NACs should make similar arrangement in their area in consultation with the Sub Collectors.

- The Ex. Officers of Sambalpur Municipality and all NACs to ensure temporary shed and supply of drinking water in the Bus-stand, Bus- stops and other vulnerable areas. The cooperation of the NGOs and other voluntary organisation can be sought for.

C.I. of Schools:

- Instructions to be issued well in advance to the CI / DIs for rescheduling of school time from mid March. The timings may be from 6.00 A.M. to 11.00 A.M.
- All examinations to be completed before April.
- Drinking water and First Aid be provided in all Examination Centres through the respective head of the institutions.
- Dissemination of information on precautions for heat wave in schools through teachers.

DIPRO:

- The *control room* opened in the district as well the control room of the district hospital with telephone numbers is to be widely publicised in the locality.
- The press note for the general awareness of people in the district for heat wave mitigation.

Transportation:

- The District Transport Manager in consultation with the Pvt. Bus Association to ensure arrangement of temporary sheds of drinking water in the bus-stand at Ainthapali, old bus stand and private bus stands.
- The DRM, Sambalpur be requested to make similar arrangement in the railway stations of the district.

Meteorological department:

- The meteorological department represented through the Meteorological Observer at Sambalpur is to provide daily report of the maximum and minimum temperature in Sambalpur to the District Control Room/Emergency Officer from April 1st to June 15th.

Corporate bodies & banks:

- Corporate bodies, banks etc. can be contacted by the District Emergency Officer to involve them in the heat wave mitigation activities.

Voluntary agencies & individuals:

- NGOs coordinated through M.C. DVCC of the district can set up temporary sheds of drinking water.
- Transportation of heat wave affected people to the nearest medical aid centre.
- Help the administration in widely disseminating the dos and don'ts of heat wave.

Press:

- Press has to take a proactive role in publishing information on heat wave and general precautions that common men can take.

5.3 Flood:**Vulnerable pockets for Flood in Sambalpur:**

The district of Sambalpur witnessed unprecedented flood in July 2001 and based on this experience the vulnerable areas and or pockets have been identified in the following manner.

Name of the block	Name of the GP	Area/Villages likely to be affected
Dhankauda	Chourpur	Chourpur vill, Patapali vill, Talipara
	Sehnapali	Tihikipali Bagbira
	Kardolla	Chiplima vill, Mahadev Mandirpara
		Tulundi- Keutpara
Maneswar	Huma	Huma
		Grindopali
	Dhama	Dhama Charpali
	Deogaon	Deogaon
	Bargaon	Bargaon
	Sahaspur	Khunti
	Batemura	Batemura
	M.Gunderpur	Golabandh
	Mathpali	Mathpali

Jujomura	Tampergarh	Tampergarh		
Rengali	Ghichamura	Kendmal		
	Laida	Dalpatpali Baijapali Deheripali		
	Khinda	Khinda		
	Salad	New Rampalli (Antapali)		
Kuchinda	Chandnimal	Chandinimal Lasa		
	Boxma	Charbhathi Lad Boxma		
		Teli Tileimal	Thelkobudi Gayamal NAC area Ghosa Saida	
			Bamra	Turei
	Turei			
	Rairakhol	Bhartapur	Bhartapur Chudapudung Bhatra	
Bhaliakata			Sagjhu Kusurda Budhikhamar	
			Bansajal	Helei Sarpal Musakata Bhatakapada Bhadidar
		Rengali		Patupal Kasanda Tutamunda Sunamudi Kantibahal Dimribahal
Naktideul				Naktideul
Batgaon				Hinjamura

		Kutasingha
		Panunali
		Kunjamura
	Salebhata	Kundeijori Kandal
	Sarapali	Sarapali
	Ballam	Ranja
		Ganjabahal
		Tiklipada
		Chasbardi
	G.C.Pur	G.C.Pur
Jamankira	Kenadhipa	Dumgaon
	Mahada00000	Ankadihi
		Fatamunda
		Gangadihi
	Dimrimunda	Khadiapali
		Babejuri
		Lepeikani
	Dhudipali	Ladanpali
		Ludhaposi
	Chakuliabahal	Kulunda
		Mendhabahal
		Kutrimal

Urban

Name of the Urban Area	Flood prone area	Ward No.
Sambalpur Municipality	Govindtola	II
	Charbhati	II
	Hirakud Colony	V
	Binakhandi	V
	Backside of Mining Office	V
	Commissioner's Colony	V
	Amripada	XIV
	Balibandha	XIV
	Tanlapara	XIV
	Samleswari Colony	
	Talbhata (Ramnarayan Mandir Pada)	XX
	Chandan Nagar	XXI
	Mandliamahan	XXI
	Durgapali	XXIV
Kusnabhata Para	XXIV	
NAC, Hirakud	Brundabatipara	II
	Neempali	III
	Christian Para	VIII

	Falsakata	XVI
	Kalupara	XVI
NAC, Kuchinda	Bandubas	III
	Ghosa	VIII
	Saida	X & XI
Burla NAC	Old Burla	11
	Gaudpali	11
	Kesarpada	13
	Kirba	13, 14

5.4 Risk Assessment

ROAD COMMUNICATION LIKELY TO GET CUT OFF DUE TO FLOOD:

(I) List of road cut off areas during the last flood: -

Sl.No.	Block	Name of the road/bridge	Present position
1	Kuchinda	Gochhra Bridge	Restored.
2		Kulundi Bridge	Restored.
3		Kulhapada Bridge	Restored.
4		Ulunda road	Restored.
5		Lad- Tihadi road	Restored.
6		Purnapani Saida road	Restored.
7		Jarbaga - Lapada road	Restored.
8		Badbahal – Gudguda road	Restored.
9		Turei road (Mahulpali)	Restored.
10		Kusumi – Banai road	Restored.
11		Brahmanidei – Bandabahal road	Restored.

(II) List of cut off villages/GPs: -

Sl. No.	Block	G.P.	Village	River
1	Kuchinda (4 vill.)	Teli Tileimal (2 vill.)	Thelkobudi	Kharla Nala
2			Gayamal	
3		Boxma	Thakurniktimal	
		Kuchinda NAC	Saida	Bheden River

4	Rairakhol (23 vill.)	Bhartapur (10 vill.)	Bhartapur Bhaluchuan Rangamatia Badakhol Biswanathpur Bhimamunda Kanchanpal Bhimunda Jhamkarai Chudapudug	Surubalijore
5		Bhaliakata (10 vill.)	Satsama Chalikhai Gopalpur Badapati Bhaliakata Budhikhamar Balbaspur Jhankarpali Kaudiapali Sagjori	Hariharjore
6		Rengali (3 vill.)	Kasanda Tutamunda Sunamudi	Harihar Dam Reservoir
7	Dhankauda (6 vill.)	Kudgunderpur (6 vill.)	Patkhai Mahada (Harijan Pada, Sahara Pada) Amlipali (Amlipali Dhihi) Kudgunderpur (Harijan Pada) Jampali Tabda (Harijan Pada, Talipada)	Mahanadi
8	Naktideul (43 vill.)	Sarapali	Khamanmunda	Champali River

9		Panimura (17 vill.)	Badbahal Balat Balikiari Balikutha Dimrikuda Gariakhaman Ghodadian Jaresingha Luhabir Panimura Phulkusum Pudamal Sodo Sankhabhanuni Sahajbahal Talab Tileimal	Luisingh Nala
10		Jamjori (9 vill.)	Jamjori Bahbar Anabira Chadchadi Bindpur Kudanali Lubri Talanali Tapulijharan	Khalabala Nala
11		Giripur (3 vill.)	Gaudpali Bhulki Goelmundi	Luisingh Nala
12		Ghosarmal (6 vill.)	Rail Landimal Dhatukimal Kamalanali Badbil Bahalijharan	Champali Nala
13		Balam (5 vill.)	Ranja Bethjharan Ganjabahal Tiklipada Tasbharadi	Tikira River
14		Batagaon (2 vill.)	Kutasinha Panunali	Tikira River
		Total 14 GPs	76 villages	

CHAPTER-VI

DISTRICT CONTINGENCY PLAN-2005

Contingency Plan for Flood:

6.1 FUNCTIONING OF CONTROL ROOM (Rule 47 of Orissa Relief Code)

As per para 10 of Orissa Relief Code, control rooms at following offices are functioning to receive urgent messages on Natural Calamities. A register for functioning of control room is maintained. Control Room is functioning in District Office for 24 hours with effect from 1.05.2005 and the same will continue till 30.11.2005.

Sl. No.	Office Officer-in-Charge	Telephone Number of the control room	Officer-in-Charge
1	District Control Room	1077, 2412087	O.I.C., Emergency Tel.No.2410011(O) 9437209698 (M)
2	Block Office, Bamra	06642-229207	B.D.O., Bamra
3	Block Office, Dhankauda	0663-2412721	B.D.O., Dhankauda
4	Block Office, Jamankira	06649-234201	B.D.O., Jamankira
5	Block Office, Jujumora	06681-257609	B.D.O., Jujumora
6	Block Office, Kuchinda	06642-220262	B.D.O., Kuchinda
7	Block Office, Maneswar	06681-235777	B.D.O., Maneswar
8	Block Office, Naktideul	06647-246002	B.D.O., Naktideul
9	Block Office, Redhakhol	06644-253015	B.D.O., Redhakhol
10	Block Office, Rengali	0663-2560543	B.D.O., Rengali
11	Sub Collector Office, Rairakhhol	06644-253003	Rev.Officer Rairakhhol
12	Sub Collector Office, Kuchinda.	06642-220023	Sub Collector. Kuchinda.
13	Municipality, Sambalpur	0663-2411012	ExecutiveOfficer,Sambalpur Municipality
14	NAC, Hirakud	0663-2481464	Ex. Officer, NAC, Hirakud
15	NAC, Burla	0663-2430508	Ex. Officer, NAC, Burla
16	Executive Engineer, RWSS	0663-2412825	Estimator, RWSS, SBP
17	Distt. Hqrs. Hospital, Sambalpur	0663-2520035	ADMP (Public Health)
18	Sub-Div. Hospital, Kuchinda	06642-220309	SDMO, Kuchinda
19	Sub-Div. Hospital, Rairakhhol	06644-253031	SDMO, Rairakhhol
20	C.D.V.O., Sambalpur	0663-2520471	CDVO, Sambalpur
21	Executive Engineer, Hirakud Main Dam, Burla	0663-2430292 0663-2432592	Executive Engineer, Hirakud Main Dam, Burla
22	Office of Superintending Officer, N.H. Circle, Sambalpur	0663-2412461	Sri Hiralal Agrawal, A.E.

6.2 ACTION PLAN FOR FLOOD MANAGEMENT:

As regards preventive measures for flood and relief works, the following places/locations which are likely to be affected by flood have been enlisted.

a) Rural

SI No	Name of the block	Name of the GP/Flood Zone	Area/Villages likely to be affected	Places selected as flood shelter	Personnel in charge of flood shelter
1	Dhankauda	Chourpur	Chourpur vill,	Sumati Behera High School	A.K. Bhoi, SIS
2			Patapali vill, Talipara	Patapali UP School	R. Singh, Sec., Chourpur GP
3		Sehnapali	Tihikipali	Tihikipali Pry. School	P.K.Sahu, VLW
4			Bagbira	Bagbira Pry. School	P.K.Sahu, VLW
5		Kardolla	Chiplima vill, Mahadev Mandirpara	Chiplima High School	J. Bhabasagar, VAW.
6			Tulundi-Keutpara	Tulundi Pry. School	S. Chhanda, Secy. Keodola GP
7	Maneswar	Huma	Huma	Huma Pry.Sch.	Nata Naik, VLW
8		Dhama	Dhama (Chamar Pada & Dam pada)	Dhama High School	Chulakanti Tajan, FEO
9			Charpali		
10		Deogaon	Deogaon	Deogaon High School.	Judhisthir Panigrahi, VLW
11		Bargaon	Bargaon	Bargaon High Sch	J.C. Churia, PA
12		Sahaspur	Shaspur	Sahaspur High Sch	K.C. Pradhan, VLW
13		Batemura	Batemura	Batemura High School.	Laba Naik, Biogas Technician
14		M.Gunderpur	Golabandh	Golabandh Pry. School	Gunabanta Pradhan, VLW
15	Mathpali	Mathpali	Mathpali Pry.Sch.	B.S. meher, GPEO	
16	Jujomura	Tampergarh	Tampergarh		
17	Rengali	Ghichamura	Kendmal	Ghichamura Sevashram	Gyananda Bhanja, E.O. Ghichamura GP
18		Laida	Dalpatpali Baijapali Deheripali	Laida College,	H.S.Bag, SIS
19					
20					
21		Khinda	Khinda (Chaltikra Dantamura	Babukhinda High School	M.K.Rath, MI
22					
23		Salad	New Rampella (Antapali)	Mangalpur Pry. School	K.C. Panda, VLW

24	Kuchinda	Chandnimal	Chandinimal	Chandinimal High Sch	U.P. Mahapatra, VLW	
25			Lasa	M.E. School, Lasa	P.K.Pradhan, WEO	
26		Boxma	Charbhathi	Charbhathi UP Sch	Santosh Ku. Patel, VLW	
27			Lad	Lad UGME Sch	-do-	
28			Boxma	Boxma ME& High School	R.K.Patel, PA	
29			Thakur Niktimal	Thakur Niktimal ME Sch	-do-	
30			Teli Tileimal	Thelkobudi (Ramjhali)	Mantrimunda UP Sch	N.M. Barik, VLW
31			Gayamal (Kendupada)	Gayamal Pry School	D.K.Darjee, VLW	
32			NACarea Ghosa Saida	Govt. High School, Kuchinda	Executive Officer, Kuchinda	
33		Bamra	Tuei	Turei	Turei Pry. School	L.N. Mohapatra, E.O.
34		Rairakhol	Bhartapur	Bhartapur	Bhartapur UGME School	M.P.Jena, E.O.
35				Chudapudung	Chudapudung UGME School	-do-
36	Bhatra			Bhatra Pri, School	-do-	
37	Bhaliakata		Sagjhudi	Sagjhudi Pri School	M.M. Behera, E.O.	
38			Kusurda	Kusurda Pri, School.	-do-	
39			Budhikhamar	Budhikhamar UGME school.	-do-	
40	Bansajal		Helei	Helei Pri School	S.K. Pradhan, E.O.	
41			Sarpal	Sarpal Pri School	-do-	
42			Musakata	Musakata Pri School	-do-	
43			Bhatakapada	Bhatakapada Pri School	-do-	
44			Bhadidar	Bhadidar Pri School	-do-	
45	Rengali		Patupal	Rengali Pri School	T.K. Badpanda, E.O.	
46			Kasanda	Rengali Pri School	-do-	
47			Tutamunda	Rengali Pri School	-do-	
48			Sunamudi	Rengali M.E. School	-do-	
49			Kantibahal	Rengali M.E. School	-do-	

			Dimribahal	Rengali M.E. School	-do-	
50						
51	Naktideul	Naktideul	Naktideul	Naktideul Girls' High Sch.	Naresh Ch. Behera, GPEO	
52		Batgaon	Hinjamura	Hinjamura UP School	Managobind Sahu, SIS	
53			Kutasingha	Kutasingha UP School	Upendra sahu, PEO	
54			Panunali	-do-	-do-	
55			Kunjamura	Kunjamura UP School	Debananda sahu, Sec. Batgaon, GP	
56			Salebhata	Kundeijori Kandal	Dhauragoth Non-formal School	Sesadev Behera, PA
57		Sarapali	Sarapali	Jurapali UP School	Dileswar Biswal, JE	
58		Ballam	Ranja	Ballam GP Office		
59			Ganjabahal	Balsingha Sevashram		
60			Tiklipada			
61			Chasbardi	Uparmunda UP school		
62			G.C.Pur	Kanchanpur	G.C.Pur GP Office	
63		Jamankira	Kenadhipa	Dumgaon	Sarbe Pry. School	T.C. Deb, E.O.
64			Mahada	Ankadihi	Fatamunda Pry. School	B.D. Chand, E.O.
65			Fatamunda	-do-	-do-	
66			Gangadihi	Gangadihi Pry. School	-do-	
67	Dimrimunda		Khadiapali	Khadiapali Pry. School	U.C. Biswal, E.O.	
68			Babjuri	Babjuri pry. School	-do-	
69			Lepeikani	Lepeikani Pry. School	-do-	
70	Dhudipali		Ladanpali	Ladanpali Pry. School	Sumanta Nayak, E.O.	
71			Ludhaposi	Ludhaposi Pry. School	-do-	
72	Chakuliabahal		Kulunda	Kulunda Pry. School	B.C. Marandi, N.O.	
73			Mendhabahal	Mendhabahal Pry. School	-do-	
74		Kutrimal	Kutrimal Pry. School	-do-		
75						

b) Urban

Name of the Urban Area	Flood prone area	Ward No.	Relief Centers	Officer in- charge
Sambalpur Municipality	Govindtola	II	Ranisatiji Mandir, Govindtola	Ex.Officer, SBP Municipality Manoj Ku.Patra, JE,
	Charbhati	II	Zilla School	Sub Collector, SBP Sambit Kumar Pradhan, JA, Rjesh Ku. Mihra,
	Hirakud Colony	V		
	Binakhandi	V		
	Backside of Mining Office	V		
	Commissioner's Colony	V		
	Amripada	XIV	Municipal Girls' High School	Tahasildar, Sambalpur, Giidhari Barik, CO, Harischandra Khatua
	Balibandha	XIV		
	Tanlapara	XIV		
	Raja Bakri			
	Labour Colony		Badbazar Boys High School	G. Biswal, Addl. Tahasildar, Sambalpur, Sanjib Ku. Pradhan, JE, Bhagyaban Pandey,TD
	Samleswari Colony			
	Talbhata (Ramnarayan Mandir Pada)	XX		
	Chandan Nagar	XXI		
	Mandliamahan	XXI		
	Durgapali	XXIV	Durgapali Pri. School	Spl.Certificate Officer, Swarup Ku. Patnaik,LI Ashok Ku. Baboo,
Kusnabhati Para	XXIV			
Thakurpada		Guru Nanak Public School	S. Samadhia, Addl.Tahasldar, Sambalpur Pradip Ku. Padhi	
Dasmati Colony				
	A. N. Guha Lane	Nuapada	Sindhi Dharamsala	
NAC, Hirakud	Brundabatipara	II	Hirakud ME School	Ex.Officer,Hirakud NAC
	Neempali	III		
	Christian Para	VIII		
	Falsakata	XVI		
	Kalupara	XVI		
NAC, Kuchinda	Bandubas	III	Kuchinda High School	Tahasildar, Kuchinda
	Ghosa	VIII		
	Saida	X & XI		
Burla NAC	Old Burla	11	Burla High School	Executive Officer, Burla.
	Gaudpali	11		
	Kesarpada	13		
	Kirba	13, 14		

6.3 LIST OF ROAD CUT OFF AREAS DURING LAST FLOOD :-

Sl.No.	Block	Name of the road/bridge	Present position
01	Kuchinda	Gochhra Bridge	Restored.
02		Kulundi Bridge	Restored.
03		Kulhapada Bridge	Restored.
04		Ulunda road	Restored.
05		Lad- Tihadi road	Restored.
06		Purnapani Saida road	Restored.
07		Jarbaga - Lapada road	Restored.
08		Badbahal – Gudguda road	Restored.
09		Turei road (Mahulpali)	Restored.
10		Kusumi – Banai road	Restored.
11		Brahmanidei –Bandabahal road	Restored.

6.4 LIST OF CUT OFF VILLAGES/GPs:-

Sl. No.	Block	G.P.	Village	River
1	Kuchinda (4 vill.)	Teli Tileimal (2 vill.)	Thelkobudi	Kharla Nala
2			Gayamal	
3		Boxma	Thakurniktimal	
		Kuchinda NAC	Saida	Bheden River
4	Rairakhol (23 vill.)	Bhartapur (10 vill.)	Bhartapur Bhaluchuan Rangamatia Badakhhol Biswanathpur Bhimamunda Kanchanpal Bhimunda Jhamkarai Chudapudug	Surubalijore
5			Bhaliakata (10 vill.)	

6		Rengali (3 vill.)	Kasanda Tutamunda Sunamudi	Harihar Dam Reservoir
7	Dhankauda (6 vill.)	Kudgunderpur (6 vill.)	Patkhai Mahada (Harijan Pada, Sahara Pada) Amlipali (Amlipali Dhihi) Kudgunderpur (Harijan Pada) Jampali Tabda (Harijan Pada, Talipada)	Mahanadi
8	Naktideul (43 vill.)	Sarapali	Khamanmunda	Champali River
9		Panimura (17 vill.)	Badbahal Balat Balikiari Balikutha Dimrikuda Gariakhaman Ghodadian Jaresingha Luhabir Panimura Phulkusum Pudamal Sodo Sankhabhanuni Sahajbahal Talab Tileimal	Luisingh Nala
10		Jamjori (9 vill.)	Jamjori Bahbar Anabira Chadchadi Bindpur Kudanali Lubri Talanali Tapulijharan	Khalabala Nala
11		Giripur (3 vill.)	Gaudpali Bhulki Goelmundi	Luisingh Nala

12		Ghosarmal (6 vill.)	Rail Landimal Dhatukimal Kamalanali Badbil Bahaliarahan	Champali Nala
13		Balam (5 vill.)	Ranja Bethjharan Ganjabahal Tiklipada Tasbharadi	Tikira River
14		Batagaon (2 vill.)	Kutasinha Panunali	Tikira River
		Total 14 GPs	76 villages	

6.5 CLOSURE OF PAST BREACHES IN RIVER AND CANAL EMBANKMENTS AND GUARDING OF WEAK POINTS (Rule 48 of Orissa Relief Code)

The weak/vulnerable points identified on the embankments of different rivers flowing in the District is restored. Besides, the M.I. Division has taken up 14 number flood damaged work out of S.R.C grant under F.F.P.W.

List of embankments and vulnerable points

Sl. No.	Name of the Block/ULB	River/Nala	Present Position	Villages likely to be affected
01	Burla	Burla Pond	Restored	Mahatab nagar
02	Kuchinda	Kharla Nala	Restored	Lad
03		Kharla Nala	Partly restored	Lasa
04		Bheden river	Restored	Saida
05		Bandabahal MIP	Restored.	Bandabahal
06	Bamra	Turei Nala	Restored	Baliturei
07		Bhagapada Nala	Restored	Pindapathar GP
08		Taladihi Nala	Restored	Gurla
09	Jujumura	Digjharan MIP	Desiltation required	Kesapali.
10		Maltijore	Proposal submitted under NFFWP	Badturing Baham
11			Construction of flood protection wall is going on	Kakutikra
12		Riaberna Nala	Construction of flood protection wall taken up under NFFWP	Thakurmali
13	Rairakhol	Badmal Nala	Restored	Badmal
14	Rengali	Bheden River	Restored. These villages are affected due to overflow of river	Baijapali Dalpatpali Dehripali Demanapada Taltikra

**6.6 Flood Damaged work M.I.Ps taken up out of S.R.C. Grant (F.F.P.W.)
of M.I. Division, Sambalpur**

Sl. No.	Name of the M.I.P.	Expenditure upto 31.3.05 (Rs. in lakhs)	Nature of work done
1	Karadijore	1.13	Breach closing in main canal
2	Kayakuda	0.95	Breach closing, desilting, canal lining of main canal
3	Mangalpur	0.95	Breach closing, desilting, canal lining of main canal
4	Sangramal kata No.3	0.96	Canal lining and repair of CD structure
5	Kharla	3.11	Breach closing, desilting and repair of main canal
6	Hafudera	1.08	Breach closing and canal lining
7	Badasahir kata No.7	1.54	Canal lining and repair of CD structure
8	Bichhnabahal	0.65	Canal lining and repair of CD structure
9	Longbahal	0.82	Canal lining and repair of CD structure
10	Perpetta	3.84	Repair of H/R, fixing of shutter in H/R and scouring sluice and breach closing in main canal
11	Banksal	3.57	Construction of damaged cutoff wall of second fall
12	Rengalbeda	3.36	Resectioning of earth dam repair of surplus escape and head regulator
13	Bandabahal	1.20	Repair of HR Gates

6.7 RAIN RECORDING AND SUBMISSION OF RAINFALL REPORTS (Rule 49 of O.R.C.)

Rain recording stations are available in all 9 blocks of the district. The Head Clerks of concerned Block office act as Rain Recording Officers under the supervision of Block Development Officers. The rainfall report from each rain recording station is transmitted to the District Control Room daily through V.H.F./Telephone/Messenger. The sub-collectors have inspected the rain gauge stations and submitted their reports.

Sl. No.	Name of Rain Recording Centre	Officer in charge for the Rain Recording Centers
1	Bamra	P.C. Arca, Head Clerk
2	Dhankauda	Head Clerk
3	Jamankira	S.K. Behera, Head Clerk
4	Jujumora	P.K. Sahu, Head Clerk
5	Kuchinda	B.K. Panigrahi, Head Clerk
6	Maneswar	Head Clerk
7	Naktideul	T.K. Biswal, Head Clerk
8	Redhakhoh	L. N. Dehury, Head Clerk
9	Rengali	B.M.Patra

6.8 GAUGE READINGS AND PREPARATION OF MAPS AND CHARTS (Rule 50 of O.R.C.)

1. The Ex. Engineer Hiraakud Dam Division, Burla will communicate the gauge readings of Hiraakud reservoir including the inflow and outflow of water from Hiraakud dam regularly to the District Control Room. Tel. No. 1077, 2410011
2. The Asst. Engineer of Sambalpur Municipality will keep close watch on the water flow near Binakhandi and Balibandha sluice gates and report regularly to the District Control Room.

6.9 ASSIGNING CHARGE OF FLOOD CIRCLES (Rule 51 of Orissa Relief Code)

A total of 10 Flood circles have been constituted in respect of 9 blocks of the District and placed under the charge of concerned Block Development Officers. Each flood circle has further been divided into Flood Zones comprising one or more numbers of Gram Panchayats as per suitability. P.As./Extension Officers/Junior Engineers/P.E.Os/VLWs of the Blocks have been kept in charge of different zones. The Circle/Zone officers will be responsible for successfully carrying out the pre-calamity arrangements and post-calamity relief measures as indicated below.

Sl No	Name of the block	Flood Circle	Name of the GP/Flood Zone	Name of Officer with designation in charge of the flood zone
1	Dhankauda	Flood Circle-I (P.K. Nanda, BDO, Dhankauda) 4 Flood Zones	Chourpur	A.K.Bhoi, SIS
			Sehnepali	P.K.Sahu, VLW
			Kardolla	S.C.Pati, WEO
			Kud-Gunderpur	N.Barik, VLW
2	Maneswar	Circle-I B.Roy, BDO, Maneswar 8 Flood Zones	Huma	Nata Naik, VLW
			Dhama	Chulakanti Tajan, FEO
			Deogaon	Judhisthir Panigrahi, VLW
			Bargaon	J.C.Chhuria, PA
			Sahaspur	K.C.Pradhan, VLW
			Batemura	Laba Naik, Bio-Gas Tech.
			M.Gunderpur	Gunabanta Pradhan, VLW
Mathpali	B.S.Meher, GPEO			
3	Jujomura	Circle-I B.B.Behera, BDO	Tampergarh	
4	Rengali	Circle-I R.N.Sahu, BDO, Rengali 3 Flood Zones	Ghichamura	Gyananada Bhanja, E.O. Ghhichamura GP
			Laida	H.S.Bag, SIS
			Khinda	M.K.Rath, MI
5	Kuchinda	Circle-I D.Bhoi, BDO, Kuchinda	Kuchinda	Tahasildar, Kuchinda
			Boxma	Addl. Tahasildar, Kuchinda
6	Bamra	Circle-I M.Tigga, BDO, Bamra	Turei GP	L.N. Mohapatra, E.O.
7	Rairakhol	Circle-I B.K.Kanhar, BDO, Rairakhol 4 Flood Zones	Bhartapur	M.P. Jena, E.O.
			Bhaliakata	M.M.Behera, E.O.
			Bansajal	S.K. Pradhan, E.O.
			Rengali	T.K.Badpanda, EO
8	Naktideul	Circle-I P.K.Pradhan, BDO, Naktideul 3 Flood Zones	Naktideul	N.C.Behera, GPEO
			Batgaon	M.sahu, SIS
			Salebhata	S.Behera, PA
		Circle-II P.K.Sahu, Addl.Tahasildar, Rairakhol 3 Flood Zones	Sarapali	D.Biswal, JE
			Ballam	S.C.Bir, SIS
			Panimura	A.Biswal, WEO
9	Jamankira	Circle-I P.Nayak, BDO, Jamankira 5 Zones	Kenadhipa	B.D. Sahu, SIS
			Mohada	-do-
			Dimrimunda	B.D. Mallick, CEO
			Dhudipali	-do-
			Chakuliabahal	B.C. Marandi, WEO

6.10 DISSEMINATION OF WEATHER REPORTS AND FLOOD BULLETIN (Rule 52 of O.R.C.)

Immediately on receipt of weather warnings and bulletin regarding high flood from the Metrological Deptt. Government of India 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 Officers who shall without loss of time disseminate the message and shall take up precautionary measures. The District information and Public Relation Officer will also be involved for the said purpose for faster dissemination of information through quickest possible means of communication.

(Action: O.I.C., Emergency/D.I.& P.R.O., Sambalpur)

6.11 DEPLOYMENT OF BOATS AT STRATEGIC POINTS (Rule 53 of O.R.C.)

Sl. No.	Name of Block	Name of Boat Owner	Address	Capacity of carrying people/materials
1	Kuchinda	Binod Seth	Satkama	15 persons/5.00 Qntl.
		Dhubeidhar Seth	Kirasasan	10 persons/4.50 Qntl.
		Chakradhar Dehury	Lad	15 persons/5.00 Qntl.
		Jayadratha Behera	Lasa	20 persons/7.50 Qntl.
		Jogendra Kalo	Gayamal	10 persons/5.00 Qntl.
2	Rairakhol	Jibardhan Kumbhar	Kasanda	5 persons/2.5 Qntl.
		Mohan Bhoi	Kasanda	-do-
		Dharamdhar Pradhan	Badmal	-do-
		Jatia Badhai	Rengali	-do-
		Siba Mirdha	Kasanda	-do-
		Ujala Rajhans	Chakamunda	-do-
		Duaru Mirdha	Kadalipali	-do-
3	Maneswar	Chandrasekhar Seth	Arda	5 persons
		Rameswar Seth	-do-	-do-
		Ujagar Seth	-do-	-do-
		Anant Beg	Chakuli	-do-
		Arun Behera	-do-	-do-
		Benita Behera	-do-	-do-
		Dilip Dandsena	Deogaon	-do-
		Gopinath Dandsena	-do-	-do-
		Prasanna Dandsena	-do-	-do-
		Kabi Seth	-do-	20 persons

	K.C. Dandsena	-do-	5 persons
	Sarat Jhankar	-do-	-do-
	Harihar Seth	-do-	-do-
	Prafulla Jhankar	-do-	-do-
	Arjun Barik	-do-	-do-
	Nabin Barik	-do-	-do-
	Dhabaleswar Naik	-do-	-do-
	Hadu Seth	Banpur	-do-
	Binod Naik	Larsara	-do-
	Lala Seth	Dhama	-do-
	Purandhar Bisi	-do-	-do-
	Kuber Seth	-do-	-do-
	Krushna Muduli	-do-	-do-
	Mangulu Naik	-do-	-do-
	Shyam Naik	-do-	-do-
	Sudam Badhai	Khandeul	-do-
	Kamal Lochan Seth	-do-	-do-

In Jamankira block no country boat is available. But there are 42 numbers of Motor Tubes for swimming aid and the tubes are in village Sudbalanda in Badmal GP. The Secretary and President of P.F.C.S, Banksal are kept in charge for those tubes. In addition, Kuchinda block has 9 nos. of Ferry Boats at the following locations:

Sl. No.	Name of GP	Name of Village	Number of Ferry Boats available
1	Boxma	Lad	1
		Bheluapali	1
		Kasunagar	1
2	Chandnimal	Lasa	1
		Chandnimal	1
3	Kuturachuan	Satkama	1
		Kirasasan	1
4	Kudapara	Gayamal	1
5	Teli Tileimal	Burodihi	1
		Total	9

Number of Boats available in Sambalpur Municipality:

Bad Bajar Keut Pada		
Sl. No.	Name of Boat Man	Number of Boat Possessed
1	Parbasi Bariha	1
2	Kanhaia Badhei	1
3	Pancha Seth	1
4	Sripati Dandsena	1
5	Sukdeba Naik	1
6	Thiba Naik	1

7	Abhi Seth	1
8	Akshya Tania	1
9	Lakshminarayan Tania	1
10	Giridhari Seth	1
11	Debananda Bariha	1
12	Sadananda Bariha	1
13	Mantu Seth	1
14	Bhim Bag	1
15	Nam Bag	1
16	Lala Bag	1
17	Jagdish Bag	1
18	Italu Bag	1
19	Lalit Bag	1
Kunjel Pada		
20	Ranjit Pandey	1
21	Biswajit Bag	1
22	Narain Beriha	1
23	Durga Beriha	1
24	Pradip Pandey	1
25	Pradip Bag	1
26	Madhab Pandey	1
27	Nabin Dandsena	1
28	Sushil Naik	1
Hat Pada		
29	Prafulla Sahu	2
Dalei Pada		
30	Bandhaba Barik	1
31	Siri Barik	1
32	Haribola Bag	1
33	Radheshyam Mahaling	1
34	Subala Badhei	1
35	Jarel Seth	1
36	Surubabu Seth	1
37	Sarju Seth	1
38	Niranjan Bariha	1
39	Khalil	1
	Total	40

6.12 USE OF POWER BOAT/ (Rule 54 of Orissa Relief code)

The powerboat received from SRC, Orissa, BBSR is under the custody of Assistant Fire Officer, Sambalpur, who shall keep ready along with boat crew staff to be utilized on rescue operation during flood.

(Action: O.I.C., Emergency/Asst. Fire Officer, Sambalpur)

6.13 VILLAGE LEVEL FLOOD ACTION PLAN:

The Block Dev. Officers have submitted village /GP /Block Action Plan of their respective Block affected by flood in the past or likely to be affected.

6.14 V.H.F.SYSTEM/INSTALLATION OF TEMPORARY POLICE WIRELESS STATIONS & TEMPORARY PHONES IN FLOOD PRONE AREAS (Rule 55 of Orissa Relief Code)

V.H.F. Stations at the following places are functioning round the clock to receive and transmit urgent messages in the event of any natural calamities.

1. Collectorate, Control Room, Sambalpur,
2. Sub Collector Office, Kuchinda
3. Tahasil Office, Rairakhol
4. Block Office, Naktideul,
5. Block Office, Rairakhol
6. Block Office, Rengali
7. Block Office, Dhankauda
8. Block Office, Jamankira
9. Block Office, Bamra

The operators of the above VHF stations are well acquainted with the operation of the VHF System. Two Mobile VHF sets, two walkie-talkie sets & One Satellite Phone have been provided to the district by OSDMA which are in working conditions & can be used during the time of emergency. Kud Gunderpur GP of Dhankauda Block is generally remain cut off from the outer world during heavy floods. Out of six villages of Kud Gunderpur GP, only in three villages i.e. Kud Gunderpur, Kud Amlipali and Kud Tabda have WLL telephone sets possessed by private persons and govt. personnel. The following are contact tel. Number of the above mentioned three villages.

Name of village	Tel. Number	Owner
Kud Gunderpur	0663-2000411	Bikram Behera
Kud Amlipali	0663-2000453	Sushil Purohit, Kud Gunderpur GP, Secretary
	0663-2000409	Siba Prasad Panda, HM, M.E. School
Kud Tabada	0663-2000457	Krushna Ch. Seth
	0663-2000408	Ashok Behera

6.15 ARRANGEMENTS FOR KEEPING TELEPHONES AND TELEGRAPH LINES IN ORDER (Rule 56 of Orissa Relief code)

The District Telecom Manager, Sambalpur has been requested to make advance arrangements for keeping telephone lines in order and keep their staff alert.

(Action: D.T.M., Sambalpur)

6.16 STORAGE OF FOOD STUFF IN STRATEGIC PLACES AND KEY POINTS (Rule 57 of Orissa Relief code)

To ensure that food grains/foodstuff are available in the interior pockets, which are likely to become inaccessible during flood, Civil Supplies Officer, Sambalpur has made arrangements to store rice & K.Oil at the following places:

Sl. No.	Name of Block	Name of GP	Storage of food stuff and k. Oil	
			Rice (in Qntl.)	K. Oil (in Ltrs.)
1	Rairakhola	Bhaliakata	50.00	400
		Bhartapur	50.00	400
2	Naktideul	Jamjori	50.00	400
		Panimora	50.00	400
3	Dhankauda	Kud Gunderpur	15.00	1000

Following are the list of traders dealing with foodstuff. They may be contacted if situation so demands, in contact numbers given in the table below:

List of Private Traders:

Sl. No.	Name of the item	Private stockist (s) with name and address	Telephone Number
1	Chuda	Mr Ramesh Kumar Tiberiwala, Khetrajpur	0663-2544905
		M/S Nabin Naik, Paradhiapalii (Samleswari Chuda Ind.)	0663-2540199
		M/S Moujiram Agarwal, Bareipali	0663-2544834
		Sushil Mittal, Bhoitikra (Samleswari Food Products)	0663-3090445
		Mahesh Mittal, Larpank (Mittal Chuda Mill)	0663-2481264
		M. Satyanarayanan, Jogipalli	0663-2540269
3	Gur	M/S Ganesh Store, Khetrajpur	0663-2544045
		M/S P.N.Sutaria, Khetrajpur	0663-2544811
		M/S Ramrashi Bhandar, Khetrajpur	0663-2544144

(Action: C.S.O., Sambalpur/D.P.O., Sambalpur/BDOs/DSWOs/CDPOs/VLWs/VAWs)
6.17 ARRANGEMENTS OF KEEPING DRAINAGE CLEAR (Rule 59 of Orissa Relief Code)

The Executive Officers of NAC, Burla/Hirakud/Kuchinda have intimated that all the drains of their respective ULB have been cleared. But no such complete report has been received from the E.O. of Sambalpur Municipality even after clear-cut direction issued in this regard with subsequent telephonic reminders.

(Action: E.E., Irrigation, E.O., of ULBs)

6.18 HEALTH MEASURES:

One Control Room is functioning in the ADMO (PH), Sambalpur with Tel. No.2520035. Similarly Control Rooms are also functioning in Kuchinda SDH & Rairakhhol SDH with Tel.No. 956642-220309 and 956644-253031 respectively.

The district has been divided into five following zones and Officers remaining in charge of each zone as reported by the C.D.M.O., Sambalpur for proper supervision and to regular help at the time of need during flood.

Sl. No.	Name of the Zone	Name of the Controlling Officer	Name of the institution under the zone	M.O./C
1		2	3	4
1	Kuchinda	SDMO, Kuchinda	SDH, Kuchinda	SDMO Kuchinda
			Garposh CHC	M.O. Garposh CHC
			Fashimal UGPHC	M.O Fashimal UGPHC
			CHC, Kantura	M.O., CHC, Kantura
2	Rairakhhol	SDMO,Rairakhhol	SDH, Rairakhhol	S.D.M.O.,Rairakhhol
			Naktideul, PHC,	MO, Naktideul
			Charmal, CHC	M.O., Charmal
3.	Sambalpur Sadar	ADMO (PH), Sambalpur	Laida, CHC,	M.O.Laida
			Themra, PHC,	M.O.Themra
			Debeipali, PHC	M.O.Debeipali
4	Jujumura	M.O. I/c Jujumura	Jujumura, CHC	M.O. I/c Jujumura
5	Sambalpur Municipality	Health Officer, Sambalpur Municipality.	Sambalpur Municipality.	Health Officer, Sambalpur Municipality

STEPS TO BE TAKEN

1. Prevention and control of epidemics
2. Active surveillance in vulnerable areas
3. Disinfections of drinking water sources
4. Curative measure and treatment M.A.T.
5. Improvement of personal hygiene and sanitation
6. Maintenance of hygiene
7. Health education on use of ORS, Tube Well Water and control of diarrhoea diseases
8. School health check up
9. Co-ordination with Revenue, Block and other Government officials
10. Maintenance of booklet for treatment of diarrhoeal causes daily in all institutions for proper monitoring.

Mobile Health Team:-

One Mobile team has been formed at Dist. Hqrs. Hospital, Sambalpur consisting of one Medical Officer, Para medical staff along with the one vehicle. Medical Officer and Para-medical personnel at PHC level have been kept in readiness and instructed to take proper action as and when required.

The Medical Officer in charge of PHCs of the District have been instructed to open Medical Relief Centre (MRC) in vulnerable areas and M.O. and Para-medical staff will remain in charge of M.R.C. which will be the well within the reach of people at that locality.

(Action: C.D.M.O., Sambalpur)

6.19 ADVANCE ARRANGEMENTS FOR ARMY ASSISTANCE (Rule 61 of Orissa Relief Code)

The District Administration has never sought for army Assistance during the time of flood. However their involvement in rescuing the flood victims cannot be ruled out in future. The district administration should take adequate measures to keep the Army Authorities informed about the programme.

(Action: O.I.C., Emergency)

6.20 TRAINING IN FLOOD RELIEF WORKS (Rule 62 of Orissa Relief Code)

The B.D.Os and Tahasildar have been directed to constitute flood relief Team in the flood-affected areas involving the local people, NGO, Jubaka Sangha, SHG etc. They must keep in contact with these organizations and discuss with them to control flood situation conducting meetings at their level.

The NGOs, Jubaka Sanghas, SHGs, Red Cross Society, have been requested to assist government officers at time of crisis. The database of all the Master Trainers trained in different aspects i.e., First Aid, Psychological First Aid, Search & Rescue Techniques under Disaster Risk Management Programme is maintained and their services will be utilized in time of need. The list of Master Trainer is given in the table as Annex-III.

6.21 ORGANISATION OF RELIEF PARTIES (Rule 63 of Orissa Relief Code):

All the Calamity Managers along with their party (Detailed list in Table no above) i.e., govt. officials/NGOs/ Volunteers for management of flood will attend Block headquarter immediately after getting information about flood situation and act as per the direction of Block Dev. Officer. No body should be allowed to go on leave during the flood situation.

(Action: BDOs)

6.22 OTHER PRECAUTIONARY MEASURES (Rule 64 of Orissa Relief Code)

Measures to be taken in flood Situation:

1. Regular contact will be made with flood control room Hirakud to keep track on discharge of water in River Mahanadi,
(Action: DEO, Control Room, Collectorate/SE/EE, Hirakud Dam Project)
2. Sufficient chemicals shall be kept ready for treatment of raw water as per requirement.
(Action: EE, PHED/EE, RWSS, Sambalpur)
3. All pumps, motors shall be kept in order including the stand-by units for any exigency.
(Action: E.O., Sambalpur Municipality/NAC, Burla/NAC, Hirakud)
4. All submerged tube wells and other water sources shall be dis-infected immediately upon recession of flood.
(Action: EE, PHED/EE, RWSS, Sambalpur/All BDOs/Sarpanches/Eos of GPs)

6.23 PREPARATION OF MAP (Rule 64 (2) of Orissa Relief code)

A map of the district showing river system, different flood circles, places where power boats are stationed, places where food stuffs are stocked, flood shelters, flood affected areas, telephone & wireless stations be prepared.

(Action: EO, Municipality/NACs/BDOs/OLIC/RWS&S)

REVIEW OF PRE FLOOD ARRANGEMENTS (Rule 65 of Orissa Relief Code)

The review of the pre flood arrangements shall be made in each month from July to October at regular intervals. The District Information and Public Relation Officer, Sambalpur shall be ready with his staff with Microphones to make wide publicity to make the public aware about the fury of flood.

During the month of July to October we all should prepare to face any situation once high alert of flood is declared. In case there is a flood, there will be review meeting everyday at 8.00 PM to review the flood situation on daily basis.

(Action: D.I.P.R.O/DEO)

6.24 AGRICULTURAL MEASURES

FLOOD SITUATION (As reported By district Agriculture Office)

Situation No:-I Early flood during July.

If damage is beyond 75 % then retransplant the area with available seedling or aged seedlings. In case seedling is not available, then seed bed may be raised with sprouted seed of shorter duration or in defog method for transplantation or resow the area after puddling, with sprouted seeds directly.

In partially damaged area, gap filling may be done to maintain plant population @ 40-50 hills/ sq.m.

Situation No.II:- Flood during Mid August to early September

If the damage is above 75 % then older seedling of 40-65 days may be used for transplanting. In case seedlings are not available the area may be covered by clonal-propagation from near by plot.

In lower tracts where there is possibility of further damage due to reoccurrence of flood, the area may be left fallow and sowing of pulses under muddy condition could be taken up after recession of flood.

In the up lands where no paddy crop is damaged by flood the area may be resown with pre-rabi pulses like Mung & Biri, Horsegram and oilseed like G.Nut and Til.

During late floods there may be occurrence of pests like swarming caterpillar and cutworm after recession of flood water. The field functionary may be advised to be vigilant to survey the pest attack. The area may be sprayed with pesticides and dusting may be done in the paddy bunds to avoid the migration of pest population.

(Action: Dy. Director (Agril.), Sambalpur)

6.25 VETERINARY MEASURES (As Reported by C.D.V.O., Sambalpur) :

Approximately 40,000 Live stock population are estimated to be affected in case of flood/draught in Sambalpur district in the following areas :

1. Sambalpur Municipality,
2. Kuchinda NAC,
3. Sambalpur Sub Division (9 GPs i.e. Dhama, Huma, Deogaon, Kudgunderpur, Talab, Kilasama, Baijamunda, Khinda & Laida),
4. Rairakhol Sub Division (4 GPs i.e. Badmal, Kukudabahali, Daincha & Naktideul),
5. Kuchinda Sub Division (4 GPs i.e. Boxma, Hadipali, Satakama & Chandinimal)

A **control room** is functioning in the office of CDVO, Sambalpur with Tel.No.2520471 which will remain open for 24 hours during natural calamity. Shri J.K. Dehury, CDVO will be the Nodal Officer & Dr.B. Mohanty, ADVO (AICD) & Dr. D.B. Mohapatra, ADVO (DC) will be in charge of control room at Sambalpur.

The District has been divided into **3 zones** i.e. Sambalpur (Tel.No.2520157) Rairakhol (Tel.No.06644-253053) & Kuchinda (Tel.No. 08842 – 220265)

There is no out-breaking of any type of epidemics in the district. However HS & BQ vaccines have been supplied to all SDVOs to conduct pre monsoon vaccination.

Feed & Fodder:

There is a State Cattle Breeding Farm at Chipilima, where fodder cultivation is being undertaken. In emergent situation the farm will be contacted to supply fodder during flood/draught.

Animal owners will be advised to bring their animals to shelter places away from flood prone areas or to keep their animals in high-level land for safety. Awareness will be created not to allow the animals to drink muddy water or infected water. Veterinary staff will be alerted to remain vigilant to treat the sick animal on emergency basis through out the day.

Contingency Plan for Drought

6.26 Drought

Drought is a much debated and less understood terminology. It has many definitions. Meteorologists, Agriculturists, Hydrologists and the Politicians also have their own definitions on drought, thereby making it a more complex phenomenon. But universally it is acknowledged as a situation associated with scarcity of water for a specified period of time. It is not a permanent feature of the climate, rather a situation due to temporary climatic aberration.

Unlike sudden disasters, where the physical intensity is enormous and structural damage is colossal, drought is a slow onset natural hazard having a wider geographical coverage, longer time duration and affecting a large group of population. Its impacts are non-structural, cumulative and very difficult to quantify and no single indicator can identify its onset, end and severity.

Types Of Drought:

There are basically three types of drought like, Meteorological, Agricultural, and Hydrological

A. Meteorological Drought: It is an event when the rainfall is less than 75 percent of its long-term average value received over an area. It is further classified as **moderate drought**, if the rainfall deficit is between 26-50 pc and **severe drought** when the deficits exceed 50 pc of the normal rainfall. Hence the meteorological drought is declared on the basis of amount of rainfall only.

B. Agricultural Drought: When the Soil system is unable to provide the amount of moisture required by the crop for its growth and development during its growth cycle. So simply it is a situation when rainfall and soil moisture are inadequate to meet the water requirement of the crops.

There are three categories of agricultural drought like

- *Early Season Drought:* It occurs due to delay in the onset of monsoon rain or long dry spell immediately after sowing. So the consequence is either widespread fallow of agricultural land or seedling drought.
- *Mid Season Drought:* It occurs due to breaks in the monsoon rain or dry spell during the critical growth stages of crop.
- *Late Season/Terminal Drought:* It occurs due to the early withdrawal of the monsoon resulting in severe water stress condition during the reproductive stage of the crops.

Hence, agricultural drought is taking into account both the amount and distribution of rainfall.

C. Hydrological Drought: When there is a drastic reduction in the Surface, Sub surface and Ground water resources below a specific level for a given period of time. It may be the

situation due to severe meteorological drought or over exploitation of ground water resources or some geological disturbances.

DROUGHT AFFECTED POCKETS OF SAMBALPUR DIST.

Sl. No.	Name of Block/ULB	Name of GPs affected in last drought	Name of villages/wards affected in last drought	
1	Kuchinda	Boxma	Katunagar	
2		Tileimal	Kaputikra	
3		Chandnimal	Chandnimal	
4		Kelda	Kelda	
5	Bamra	Kutarimal	Maharpada	
6		Lariapali	Nuadihi	
7	Jamankira	Kenadhipa	Kenadhipa	
8		Fasimal	Fasimal	
9			Tileimal	
10		Dhudipali	Ladampali	
11		Chakuliabahal	Chakuliabahal	
			Pandiabahal	
12		Gundurhuan	Cherengamal	
13		Kasarda	Badiangbahal	
14			Kasada	
15		Katangpani	Kundiachuan	
16		Tikiba	Tikiba	
17			Khairdihi	
18		Badmal	Jamumal	
19		Jamankira	Arjunpali	
20		Badrama	Biswalpali	
21			Udsung	
22			Amlang	
23		Kulundi	Sareipali	
24	Dhankauda	Kilasama	Saletikira	
25	Rengali	Rangloi	Rangloi	
26			Marhapatra	
27	Rairakhol	Luhapank	Hemamura	
28			Luhapank	
29		Kukudabahali	Kulmalia	
30			Kankanpada	
31		Burda	Gambariberni	
32		Bansajal	Bansajal	
33		Mochibahal	Mochibahal	
34			Chaarmal	Doliberni

6.27 ENSURING SUPPLY LINE OF FOOD (Rule 33 of O.R.C)

Sl.No.	Item	Availability in Qntl.
1	B.P.L Rice @ Rs. 6.30/kg	18896.18
2	B.P.L Rice @ Rs. 4.75/kg	5224.32
3	Annapurna Rice (free of cost)	165.60
4	Antyodaya Anna Yojana Rice @ Rs. 3/ Kg	7896.00
5	A.P.L Wheat	6250.00
6	Levy sugar (Only for B.P.L and AAY families) @ Rs. 13.50/Kg	2296.90
7	K.Oil	972 K.L.

Target and achievement of Social Security Scheme for the year 2005-06

Name of Block	O.D.P.		S.O.A.P		N.O.A.P	
	Target	Achv.	Target	Achv.	Target	Achv.
Kuchinda	290	290	1273	1273	1300	130
Jamankira	318	318	1339	1339	1408	1408
Bamra	320	320	1485	1485	1432	1432
Kuchinda NAC	58	58	255	255	102	102
Rairakhhol	215	215	1381	1381	841	841
Naktideul	186	186	1086	1086	1137	1137
Rairakhhol NAC	40	40	410	410	265	265
Jujumura	276	276	1884	1884	1221	1221
Maneswar	266	266	1372	1372	1064	1064
Rengali	238	238	1361	1361	1229	1229
Dhankauda	250	250	910	910	995	995
Sambalpur (M)	349	349	1528	1528	1450	1450
Hirakud, NAC	81	81	106	106	246	246
Burla, NAC	100	100	244	244	237	237
G. Total	2987	2987	14634	14634	12927	12927

Utilisation under Social Security Scheme up to May 2005

Name of Scheme	Target	Achv.	Total Allotment for 2005-06 in Rs.	Expenditure upto May 2005 in Rs.	Balance in Rs.
O.A.P	14634	14634	4110000	1277100	2832900
N.O.A.P	12927	12927	3878100	Nil	3878100
O.D.P	2987	2987	Not received	288900	
N.F.B.S			765000	Nil	765000
N.M.B.S			Nil	Nil	Nil
M.D.M	114486		2746000	Nil	2746000
B.S.Y.	1502	910	751000	751000	Nil

6.28 LABOUR INTENSIVE PROGRAMME (Rule 33 (2) of O.R.C)

Even if essential foodstuffs are available, the people may not have the necessary purchasing power due to distress. So employment oriented labour intensive works for the able bodied persons are required. Mandays for this purpose have been generated under different scheme.

FINANCIAL & PHYSICAL ACHIEVEMENTS UNDER SAMPOORNA GRAMIN ROJAGAR YOJANA DURING 2004-05

Month: March'2005

Name of Scheme	OB as on 1.4.04	Receipt in Lakhs				Total Expenditure	Balance	Mandays generation in Lakhs						Projects		
		Central share	State Share	Other	Total funds available			SC	ST	OC	Total	Landless	Women	Disabled	Taken up	Complete
SGRY	36.97	724	243.4	3.57	1007.5	986.77	20.69	2.9	4.58	2.14	9.65	3.01	2.95	0	1527	1274

FINANCIAL & PHYSICAL ACHIEVEMENTS UNDER SAMPOORNA GRAMIN ROJAGAR YOJANA DURING 2005-2006

**Month:
April'2005**

Sl. No.	Name of Scheme	OB as on 1.4.04	Receipt in Lakhs				Total Expenditure	Balance	Mandays generation in Lakhs						Projects		
			Central share	State Share	Other	Total funds available			SC	ST	OC	Total	Landless	Women	Disabled	Taken up	Complete
1	SGRY	20.69	381	0	0	402.12	2.51	399.61	0	0.02	0	0.02	3.01	0	0	253	0

BLOCK WISE PHYSICAL & FINANCIAL PROGRESS UNDER NFFW AS ON 30.4.05

Sl. No.	Name of Block	Under progress projects of 2004-05 taken up	No. of projects completed	No. of projects under progress	Fund available in lakhs	Food grain available in MT	Expenditure		
							Funds in Lakhs	Food grain in Qntl.	Total in lakhs
1	Dhankauda	46	3	43	19.54	93.93	0.3	2	0.41
2	Maneswar	30	0	30	40.94	43.9	0	0	0
3	Jujomura	48	0	48	20.63	239.45	0	0	0
4	Rengali	85	0	85	65.28	173.16	0	0	0
5	Kuchinda	43	14	29	31.83	97.17	2	0	2
6	Jamankira	38	0	38	51.13	26.37	0	0	0
7	Bamra	81	0	81	52.4	172.66	0	0	0
8	Rairakhol	26	0	26	31.33	293.59	0	0	0
9	Naktideul	99	0	99	31.85	327.02	0	8.5	0.48
	Sub Total	496	17	479	344.93	1467.26	2.3	10.5	2.89
	Contingency				0		0		0
	Interest				0				
	Total				344.93	1467.26	2.3	10.5	2.89

6.29 PROVISION OF DRINKING WATER (Rule 34 of O.R.C)**No. of Running Tube Well as on 1.4.05**

Name of Block/ULBs	Name of GP	Number of Running Tube Well
Dhankauda	A. Katapali	21
	Baijamunda	15
	Basantpur	49
	Bisalkhinda	55
	Chaurpur	34
	Garmunda	46
	Gunderpur	15
	Kalamati	46
	Kardola	33
	Kilasama	67
	Sankarma	39
	Sasan	51
	Talab	63
	Senhapali	32
Kainsar	35	
	Kankhinda	30
Sub Total		631
Maneswar	Bargaon	52
	Batemura	42
	Dakra	56
	Deogaon	42
	Dhama	32
	Gunderpur	49
	Huma	29
	Maneswar	69
	Mathpali	41
	Nuatihura	43
	Parmanpur	26
	Sahaspur	47
	Sindurpank	38
	Tabla	53
	Themra	26
	Bhikampur	23
	Baduapali	31
Sub Total		699
Kuchinda	Ardabahal	47
	Bankey	49
	Bauriguda	46
	Boxma	55
	Chandnimal	48
	Gochhra	55
	Hadipali	54
	K. Jamankira	49
	Kuleigada	45

	Kuntura	54
	Kusumi	49
	Kuturachuan	56
	Paruabhadi	53
	Salebhadi	45
	Tainsar	47
	Telitleimal	50
	Khandakata	48

Sub Total		850
Jamankira	Badmal	35
	Badrama	53
	Bhojpur	39
	Chakuliabahal	34
	Chudipali	47
	Dimrimunda	42
	Fasimal	44
	Gundruchua	42
	Jamankira	41
	Kasada	24
	Katangapani	25
	Kenadhipa	38
	Kharsanmal	38
	Kulundi	49
	Mundhenpali	41
	Sarda	22
	Subarnapali	37
	Tikiba	37
	Tiklipada	52
	Mahada	20
	Sirdi	20
Sub Total		780
Jujomura	Baham	51
	Birsingharh	44
	Chhamunda	36
	Dangarpada	44
	Gadloisingha	44
	Ghenupali	45
	Jayantpur	36
	Jhankarpali	55
	Jujomura	35
	Kansar	31
	Kayakud	41
	Kesapali	37
	Kukudapali	47
	Lipinda	42
	Nuabarangamal	44
	Tampargarh	30
	Meghpal	24
	Kabrapali	48
Sub Total		734
Rairakhhol	Badbahal	42
	Badmal	45
	Bansajal	58
	Bhartapur	20
	Burda	39
	Charmal	34
	Gargadbahal	43
	Kadligarh	53

	Kukudabahali	49
	Luhapank	64
	Mochibahal	32
	Rengali	28
	Tribanpur	45
	Bhaliakata	27
Sub Total		579
Bamra	Babunikimal	72
	Baunsalaga	49
	Garposh	45
	Govindpur	63
	Jarabaga	48
	Kabiribahal	39
	Keseibahal	65
	Kinabaga	51
	Kutarimal	32
	Lariapali	50
	Mahulpali	50
	Pindapathar	42
	Rabga	40
	Rangiatikra	49
	Sagara	35
	Uchakapat	44
	Turei	46
Sub Total		820
Naktideul	Balam	55
	Batgaon	60
	Daincha	74
	Ghusuramal	40
	G.C.pur	40
	Jamjori	24
	Kisinda	53
	Naktideul	52
	Panimora	42
	Salebhata	86
	Sarapali	45
	Simlipal	32
	Sahebi	28
Sub Total		639
Rengali	Bamalo	40
	Ghichamura	47
	Jhankarpali	52
	Katarbaga	68
	Khinda	53
	Kinaloi	63
	Kurla	42
	Laida	53
	Lapanga	34
	Rengali	59
	Tabadabahal	38

	Tamperkela	43
	Rangloi	25
	Nisanbhanga	46
	Jangala	44
Sub Total		680
G. Total		6412

6.30 PROVISION FOR IMMEDIATE IRRIGATION FACILITIES (Rule 36 of ORC).

Status of operation of lift Irrigation projects during Khariff Year, 2005

SL.No.	Unit	Project	Area
1	Total number of existing lift irrigation projects.	264 Nos.	
2	Numbers of lift irrigation projects where pani panchayats have been formed and assets handed over	148 Nos.	2525 Hect.
3	Balance number of projects left out for formation of Pani Panchayats (Sl.No.1- Sl.No.2)	116 Nos.	
4	Number of projects declared defunct (at the start of Khariff – 2005)	108 Nos.	
5	Number of operable projects at the start of Khariff , 2005 i.e. (Sl.No.1- Sl.NO. 4)	156 Nos.	

Supplementary contingent plan and status of lift irrigation projects during Khariff'2005 & involvement of F.D.R. Grant'2004-05 (amounting to Rs.50,000 for 10 projects)

RWS & S, Sambalpur (as furnished by RWS& S, Sambalpur).

Action Plan:

- A control room with Tel.No.2412825 is functioning in the Division office. The Estimator of the division is in charge of the control room,
- Complain register at Blook & at Section level is being maintained. The JE of the section has been instructed to contact the BDO and repair the defunct tube wells immediately,
- Mobile van in each block will be deployed
- 100 pcs of 32mm riser pipe has been issued to each block for repair of tube wells,
- The SEM has been instructed to keep a close eye for repair of tube well,
- The JEs have been instructed to contact to the sarpanches for spare parts for repair of tube wells,

Tankers are being kept ready to supply water to scarcity villages

6.31 AGRICULTURE**Programme for Kharif 2005
(Figs. in hect.)**

1. Paddy	106194
2. Total Millet	1587
3. Total Pulses	34172
4. Total Oilseed	28743
5. Total Fibres	1656
6. Total Vegetable	15303
7. Total Condiment	4604
8. Sugarcane	201
G. total	192460

Kharif Programme**(A) Coverage of Irrigation (in Ha)**

Sl. No.	Source of Irrigation	Irrigation coverage in Kharif 2005 in Ha.
1	Major Irrigation	31517
2	Medium Irrigation	
3	Minor Irrigation	14000
4	Lift Irrigation	2555
5	Other Sources	615

Irrigation coverage by L.I.P for another 260 ha. is likely to be enhanced by enhanced by 15th of July.

(B) Crop Coverage

Sl. No.	Crops	Area in Ha.
1	Paddy	106194
2	Millet	1587
3	Pulses	34172
4	Oilseed	28743
5	Fibres	1656
6	Vegetable	15303
7	Condiment	4604
8	Sugarcane	4604
	Total	192460

(C) Fertiliser Programme for kharif 2005 (fig. in MT)

Nutrient	Programme
Nitrogen	12100
Phosphorus	6740
Potash	2925
Total	21765

(D) Programme and supply of seeds for kharif 2005 (fig. in qtl.)

Sl. No.	Name of Seeds	Programme	Supply
1	Paddy	6020.00	2360.70
2	Dhanicha	7.10	0.80
3	Maize	8.40	-
4	Mung	34.60	-
5	Biri	23.38	-
6	Arhar	6.74	-
7	G. Nut	104.00	-

Crop Situation (Fig. in Hect.) as on 20.06.2005.

Sl. No.	Name of Block	Cultivated area	Programmed Under paddy for Kharif 2005			Programmed For broadcast ing	Programmed For transpl anting	Area covered under nursery bed	Area sown as on 2.6.2005
			Irrigated	Non-irrigated	Total				
1	Dhankauda	19477	14096	575	14671	1450	13221	60	30
2	Maneswar	21777	10656	4664	15320	4120	11200	25	40
3	Jujomura	23123	8670	6117	14787	5350	9437	-	-
4	Rengali	19324	1347	10768	12115	9085	3030	-	-
5	Redhakhhol	19247	3065	6977	10042	8540	1502	-	-
6	Naktideul	14340	2693	4486	7179	6190	989	-	-
7	Kuchinda	28164	4185	8215	12400	9302	3098	-	15
8	Jamankira	20782	4376	4569	8945	6805	2140	-	5
9	Bamra	27786	2759	9486	12245	9555	2690	-	15
	Total	194020	51847	55857	107704	60397	47307	85	105

Agricultural Credit (Co-operative)
Block wise Kharif Investment target for Kharif 2005

(Rs in Lakhs)

Sl. No.	Name of Block	Target for Kharif 2005	
		No.	Amount (in Lakhs)
1	Dhankauda	2500	245.00
2	Rengali	2200	125.00
3	Maneswar	2800	300.00
4	Jujomura	1300	100.00
5	Rairakhhol	3200	190.00
6	Naktideul	2000	120.00
7	Kuchinda	2500	300.00
8	Jamankira	2400	300.00
9	Bamra	2000	200.00
	Total	20900	1880.00

Programme on diversification of cropping pattern for Kharif' 2005 (Figs. in hect.)

Crop	Arhar	G. Nut	Vegetables	Sweet potato	Spices	Lirus	Cashew	Mango	Other fruits	Flowers	Total
D.A.O., sambalpur	300	400	470	40	70	140	220	270	150	200	2260
D.A.O., Kuchinda	200	200	200	10	60	150	120	150	80	80	1250
Total	500	600	670	50	130	290	340	420	230	280	3510

Programme on Mixed Cropping for Kharif' 2005 (Figs. in hect.)

Crop	G. Nut+Arhar	Mung+Arhar	Maize+Arhar	Ginger+ arhar	Paddy+Arhar	Biri+Arhar	Total
D.A.O., sambalpur	175	330	130	40	45	85	805
D.A.O., Kuchinda	95	115	30	-	1270	290	1800
Total	270	445	160	40	1315	375	2605

The intensity and extent of drought is highly variable with time and space. It is difficult to define rigid contingent measures well in advance of the cropping season. However, some general contingent measures have been suggested by taking into account the specific aberrant situation.

The Office of the Director of Agriculture & Food Production, Orissa has recommended the following situation wise contingent plan for combating drought.

Situation-I (Early on set and sudden stoppage of monsoon)

Upland:

- Under such situation, there is likelihood of mortality of rice. When there is more than 50% mortality, resow the crop in the month of July. Otherwise raise non-paddy crops like ragi (Surva, Bhairabi, Dibyasingh, Godavari) greengram (K-851,

PDM-11, PDM-54) blackgram (T-9, Pant-U-19, Pant-U-30 and Sarala) Sesame (Uma, Usha, Nirmala, Prachi), ricebean (RBL-6, BRB-1) niger (Deomali, Alasi-1) castor (Jyoti, Kranti, Arun, Bhagya)

- Cultivation of vegetables like cowpea, guar, radish, runner bean, okra, cauliflower, brinjal and tomato
- Applying a portion of FYM in the seed furrows at the time of sowing to conserve moisture for sustaining the seedlings from early drought
- Soaking the rice seeds in sodium phosphate solution (358 mg/ltr. Of water) for six hours and drying the seeds for better germination and growth of seedlings
- Spraying the crop with potassium silicate (10%) of 10 ppm cycocel for overcoming the drought affect on rice

Medium and low land:

- If rice population is more than 50%, carry out weeding and adjust the plant population by removing and redistributing the hills and clonal propagation.
- Sowing of seeds at 3-5 cm depth by punji method (10-15 seeds at one point), covering it with a mixture of FYM: SSP (10:1) to avoid seedling mortality due to moisture stress in low land
- Saline soil: using of FYM/ Greenleaf manure, sowing sprouted seeds and gap filling the by transplanting

Situation-II (Late onset, Upland areas not covered till July)

- Sowing of non-paddy drought tolerant crops like ragi, greengram, blackgram, horsegram, cowpea, guar, sesame, niger, castor in place of upland rice
- Growing of sweet potato varieties Gouri, shankar, Samrat in the ridges and allowing the furrows to conserve rainfall
- Utilizing of ponds, reservoirs and water bodies for growing tomato, cauliflower, radish, brinjal, runner bean in hilly areas

Situation-III (Mid-season drought)

- Complete hoeing and weeding in crop fields to provide dust mulch
- Spraying of 2% KCI + 0.1 ppm boron to blackgram for overcoming drought situations
- Foliar application of 2% urea at pre-flowering and flowering stages of greengram
- Spraying of 1% urea in brinjal
- Top dressing of crop after receipt of rain

Situation-IV (Beushaning operation delayed due to want of rain in medium and low land)

- Don't practise beushaning in rice if the crop is more than 45 days old
- Using of seedling of same age or clonal tillers for gap filling to have a uniform distribution of plant after rain
- Strengthening of field bunds and clog the holes to check seepage loss

Situation-V (Measures where the rice seedlings are over aged)

- Removing the weeds and following of plant protection measures against blast in the nursery

- About 45 and 60-70 days old seedlings can be transplanted in case of medium and late duration rice varieties
- Pulverize the main rice field in dry condition; if it is not ploughed earlier to save time in final puddling
- Following close transplanting using 5-7 seedlings/hill
- Applying of 50% recommended N at the time of transplanting

Pest Control

The following insects, pests and diseases appear more frequently under drought situations for which constant vigilance should be kept for taking timely measures.

Rice

- Stem borer attack starting from nursery to main field increases as the temperature (28-38 C) and humidity remains high
- Mealy bug attack on direct sown and upland rain fed rice increases
- Foilage damage by grasshoppers, leaf minor and grub of hispaa may increase
- Surti and other hairy caterpillars will increase and damage the crop

Sugarcane

- Termite and mealy bug attack increases. Early shoot borer attack continues.

Jute

- Damage due to jute mite increases. Hairy catter pillars and grew weevils may damage the leaf.

Cotton

- At the initial stage, sucking pests such as jassids, aphids, whiteflies and mealy bugs attack increases and reduce the plant growth. The bollworm larvae attacks the young twigs in the square and boll formation, American bollworm attack may increase.

Groundnut

- Soil dwelling insects such as white grub, earving, wireworm and termite damage the plants and pods

Vegetables

- Epilachna beetles (in gourds and brinjal) shoot and fruit borers and fruit flies would increase the damage. Damage due to ants also increases.

Disease

Rice

- Brown spot and blast diseases under the dry condition

Preventive Measures

1. Selection of efficient crops and cropping system
2. Choosing of short duration varieties, which possess faster growth rate, deep and penetrating root system
3. Adoption of intercropping/mixed cropping system in recurrent drought prone rainfed uplands.

Sl. No.	Intercropping	Row ratio	Set Specification (cm)	Row distance of intercrop (cm)
	Arhar based			
1	Arhar+ G. Nut	2:6	30-210-30	30
2	Arhar+sesame+niger	2:4	30-150-30	30
3	Arhaar+greengram/blackgram	2:3	30-120-30	30
4	Arhar+ragi	2:4	30-100-30	20
5	Arhar+rice	2:5	30-1220-30	20
6	Arhar+radish	2:2	30-90-30	30
7	Arhar+Okra	2:2	30-90-30	30
	Maize based			
8	Maize+Arhar	2:2	30-90-30	30
9	Maize+Cowpea	2:2	30-90-30	30
10	Maize+runner bean	2:2	30-120-30	40
	Rice Based			
11	Rice+greengram/black gram	5:2	30-90-30	30
12	Rice+ groundnut	4:1	Uniform row	15
13	Rice+Okra	4:2	30-75-30	30
14	Rice + radish	4:2	30-75-30	30

6.32 HEALTH

The following steps have been taken up in the district for combating drought and epidemic situation during 2005:

At District Level

- I. A Control Room is functioning in the office of the Asst. Dist. Medical officer (Public Health), Sambalpur bearing the Telephone No. 2520035 and other two Control Rooms are functioning at Kuchinda S.D. Hospital bearing Telephone No. 956642-220309 and Rairakhol S.D. Hospital Telephone No. 956644-253031.
- II. The Medical Health Team consisting of Medical Officer, para-medical staff, driver with vehicle will remain alert all the time to combat epidemic. The team will be having emergency medicine stock for immediate use.
- III. Shri Chandramani Patel, MPH(M) will monitor the activities of the cell and responsible for receiving information and onward transmission.
- IV. A copy of the epidemic situation is to be kept ready at the office of the Asst. Dist. Medical Officer (PH) and a second copy in the office of the Chief District medical Officer, Sambalpur for immediate reference.

- V. The report is to be submitted to the Director of Health Services, Bhubaneswar, Joint Director of Health Services (Northern Circle), Sambalpur and District Magistrate & Collector, Sambalpur for information.
- VI. The Public Health Medicines and disinfectants have also been supplied to all medical institutions as per their requirements. Adequate medicine and disinfectants are kept at central store.

Zonal Level:

The district has been divided into 5 zones for taking up immediate actions and better supervision.

Sl. No.	Name of Zone	Name of PHC under the Zone	Officer Incharge of the Zone
1	Kuchinda	Kuntura CHC, Garposh CHC and Fashimal UGPHC	SDMO, Kuchinda
2	Rairakhhol	Naktideul PHC & Charmal CHC	SDMO, Rairakhhol
3	Sambalpur Sadar	Laida CHC, Themera PHC and Debeipali PHC	ADMO (PH), Sambalpur
4	Jujomura	Jujomura CHC	M.O./C Jujomura
5	Sambalpur Municipality	Sambalpur Municipality	Health Officer, Sambalpur Municipality

The Zonal incharge will be made responsible for compilation of epidemic and drought report.

Block Level:

- I. The Medical Officers incharge of the PHC/CHC/UGPHC will visit the epidemic spot immediately after receiving information and take immediate steps.
- II. The Medical Officers will give instruction to disinfect all drinking water sources in the epidemic villages. The Medical Officers should give instruction to the field staff to disinfect all drinking water sources twice in a month in pre-monsoon and post-monsoon period.
- III. On receipt of information on epidemic, the incharge Medical officers of the PHC/CHC/UGPHC will handover first information to the district authority after on the spot inquiry.
- IV. The daily epidemic report in the prescribed proforma is to be submitted to the district authority till the subsidiary report receipt upto 10 days after last attack.

6.33 ANIMAL HUSBANDRY DEPARTMENT

6.34

A Control Room is functioning at C.D.V.O Office, Sambalpur with Tel. No. 0663-2520471 which is opened from 7 AM to 8 PM daily. Dr. J.K. Dehury, Chief Dist. Veterinary Officer, Sambalpur is the Nodal Officer and Dr. Brundaban Mohanty, A.D.V.O (A.I.C.D) and Dr. Debabrata Mahapatra, A.D.V.O (D.C.) are in charge of control room at Sambalpur and to assist the Nodal Officers.

Zonal Officers:

All the Sub Divisional Veterinary Officers are acting as Zonal Officers in their respective Sub-Division.

Sl. No.	Zonal officers	Tel. Number
1	Dr. J.K. Dehury, S.D.V.O, Sambalpur	0663-2520157
2	Dr. A.K. Das, S.D.V.O, Rairakhol	06644-253053
3	Dr. S.K. Patel, S.D.V.O, Kuchinda	06642-220265

Opening of Field Veterinary Institutions

All the Veterinary Dispensary/veterinary Hospital/L.O. Station/L.A.C/ICD are being opened from 7 AM to 8 PM to cater to the need of public for treating their ailing animals.

Sub-Division	Cases Treated	Castration done	A.I. done	Infertility Camp	Deworming Camp	Vaccination done
Rairakhol	2553	240	198	5	8	7700
Kuchinda	10622	826	536	10	10	16100
Sambalpur	8918	696	1602	19	10	18797
Total	22093	1762	2336	34	28	42597

Medicines

The total quantity of medicines received from Directorate have already been distributed to field institutions and most of the stocks are available in the field institutions. Besides, live saving drugs and anti-biotics have been available in the stock of C.D.V.O to meet emergent situations.

Feed & Fodder

There is a State Livestock Breeding Farm at Chiplima where Fodder cultivation is being taken up. At present 700 M.P. Cherry minikits (@2kg/minikit) and cow-pea 140 minikits (@ 1kg/minikit) have been received and will be distributed to 840 farmers to cultivate in 84.00 Ac. Of land.

Livestock Population

1. Sambalpur Sub-Division: 2,10,850
2. Kuchinda Sub-Division: 2,59,261
3. Rairakhol Sub-Division: 70,849

INFORMATION ON TUBE WELLS OUT OF SRC FUND FOR 2003

A total number of 20 tube wells have been sunk out of the SRC Fund. Out of which, 8 no. of tube wells in Kuchinda Sub-division, 4 no. of tube wells in Rairakhol Sub-Division and 8 no. of tube wells have been dug out in Sambalpur Sadar Sub-Division.

CHAPTER-VII

CRISIS RESPONSE STRUCTURE OF THE DISTRICT

7.1 Early Warning Dissemination and Response Plan

<i>Department</i>	<i>Response System</i>			
	<i>Preparedness</i>	<i>Pre (after Warning)</i>	<i>During Disaster</i>	<i>Post Disaster</i>
District Control Room	<ul style="list-style-type: none"> • Setting up of Control Room and ensuring round the clock functioning • Assignment of duties to the District Level officials and Subcollectors/Tahasildars/BDOs • Arrangement of vehicles and public announcement system with RTO & DIPRO for warning dissemination • NGO coordination and assignment of duty • Proper record keeping and transmission of information to all the levels • Early warning to fishermen • Holding of Natural Calamity meeting • Ensure proper maintenance and functioning of warning s & communication systems • Awareness generation among public on natural hazards • Ensure Mock drill 	<ul style="list-style-type: none"> • Monitor functioning of DCR round the clock • Coordination with District Level officials and Subcollectors/Tahasildars/BDOs • Coordination with RTO/DIPRO for vehicles and public announcement system for warning dissemination • NGO coordination and assignment of duty • Proper record keeping and transmission of information to all the levels • Holding of DDMC meeting • Ensure proper maintenance and functioning of warning s & communication systems 	<ul style="list-style-type: none"> • Dissemination of information regarding status of the disaster & submission of report to state govt. and media. • Try to check rumors.. 	<ul style="list-style-type: none"> • Providing information about the disaster and information about the relief and rehabilitation programme undertaken by the district administration.
Police	<ul style="list-style-type: none"> • Ensure functioning of the warning system. • Formation of team • Delegation of areas • Formation of zones/Sub-Zones 	<ul style="list-style-type: none"> • Keeping close contact with DEO • Deploy personnel to guard vulnerable embankment points • Alert Police officials to remain at the Head Quarter 	<ul style="list-style-type: none"> • Collection of vital information • Inform DEO after getting authentic message 	<ul style="list-style-type: none"> • Support District officials and volunteers during search and rescue operation • Assist fire brigade personnel in their efforts • Maintain law and order situation

<p>Revenue</p>	<ul style="list-style-type: none"> • Holding of natural calamity meeting in the month of May and October. • Joint inspection • Formation of Zones/Sub-Zones • Review progress • Arrangement of boats and transport, based on the risk assessment, for evacuation • Provision/arrangement of rescue kit at risk prone area. • Equipments to be ready • Formation of team • Delegation of areas 	<ul style="list-style-type: none"> • Close contact with EO • Informing all concerned /public through revenue field • Functionaries Alert revenue officials to remain at the Head Quarter 	<ul style="list-style-type: none"> • Collection of on the spot report from field functionaries • Dissemination of day to day position about the disaster at all levels • Liaison with block 	<ul style="list-style-type: none"> • Collection of on the spot report from field functionaries • Dissemination of day to day position about the disaster at all levels • Liaison with district, sub-division and down the line
<p>Health</p>	<ul style="list-style-type: none"> • List out the staff with contact address • Stock position of the sub-center and PHC/AWCs • Prepare the plan and indent for stock • Train Paragraphmedical staff/ ANMs / male health workers / volunteers/task forces/ Anganwadi workers for use and providing minimum health services to the community. • Arrange for mobile health unit for inaccessible areas • DDC at village level • Health awareness campaign • Re install telephone connection • Arrangement of vehicle for uninterrupted mobility • Repair of Sub Centers buildings • Registration of Birth /Death and other vital 	<ul style="list-style-type: none"> • Medical and Paragraphmedical staffs will be directed to join Head Quarter immediately • Settings of a Control Room and will be kept operational for 24 hours • Delegation of duties /Area distribution • Request CDMO and requisition of vehicle • Meeting of Sector MO/Supervisors Record keeping 	<ul style="list-style-type: none"> • Arrangement of medical help for the rescued. Inform to respective Para medical staff regarding evacuated people. 	<ul style="list-style-type: none"> • IEC activities regarding health and sanitation

	<p>events</p> <ul style="list-style-type: none"> Dis-infections of Drinking water Sources thrice before flood season at least, one month before 			
Irrigation	<ul style="list-style-type: none"> Holding of natural calamity meeting in the month of May and October Awareness generation Formation of Zones/Sub-zones Review progress Provision/arrangement of sand bags in risk prone area Equipments to be ready Formation of team Arrangement of vehicle Delegation of areas 	<ul style="list-style-type: none"> Suspension or cancellation of all leaves of instruction to the concerned person to join head quarter immediately. Arrangement of all-important telephone line and number in order Arrangement or requisition of Jeeps/ Trekkers/ Auto Rickshaw to disseminate received warning information to the population of vulnerable/ weak places. Maintenance of record for information generation and dissemination. Co-ordinate with District Administration Deployment of concerned staff to update information Rain recording and submission of report to District Control Room. Arrangement of sand bags 	<ul style="list-style-type: none"> Coordination of the information and keeping a strict vigil over the situation and act accordingly. Maintenance of record for information generation and dissemination. Co-ordinate with District Administration 	<ul style="list-style-type: none"> Damage assessment Identification of areas for clearance Delegation of team Monitoring of work Proposal to the government for repair and restoration
RD & R&B	<p>Identification of weak-points Repair of weak roads/structures/canals before hazard season Stockpiling of building material Arrangement of equipments for road clearance</p>	<ul style="list-style-type: none"> Suspension or cancellation of all leaves of instruction to the concerned persons to join head quarter immediately. Arrangement of all-important telephone line and number in order. Maintenance of record for information generation and dissemination 	<ul style="list-style-type: none"> Coordination of the information and keeping a strict vigil over the situation and act accordingly. Maintenance of record for information generation and dissemination. Co-ordinate with District Administration 	<ul style="list-style-type: none"> Damage assessment Identification of areas for clearance Delegation of team Monitoring of work Proposal to the government for repair and restoration

		<ul style="list-style-type: none"> • Co-ordinate with District Administration • Clearance of roadside dead trees posing threat to communication, life and electricity. 		
RWS&S	<ul style="list-style-type: none"> • Installation of tube-wells • Site visit and report • preParagraphption • Awareness generation for using bleaching • Helping BDO during emergency • Supply of drinking water during emergency • Site selection and water test • Collection and storing of K-018H2s test stripe, bottle, bleaching, halogen tablets, tube well accessories • Area wise deployment of staff, fitter, Mason, APD 	<ul style="list-style-type: none"> • To inform all its staff members to report their respective headquarters • Close contact with DEO • Arrangement of water tankers • Procurement collection of water purifiers • Stockpiling of accessories • Repairing the defunct tube-wells • Raising platforms/height of the tube wells in low lying areas. 	<ul style="list-style-type: none"> • Coordination of the information and keeping a strict vigil over the situation and act accordingly. • Maintenance of record for information generation and dissemination. • Co-ordinate with DistrictAdministration 	<ul style="list-style-type: none"> • Damage assessment • Identification of areas for clearance • Delegation of team • Monitoring of work • Proposal to the government for repair and restoration
AH Dep.	<ul style="list-style-type: none"> • List out staff members with contact address • Vaccination of cattle population • Provision of supply of yearly medicines • Arrangement of mobile health units in inaccessible areas • Health awareness campaign • Arrangement of vehicle for uninterrupted mobility • Repair of LI Centers and other necessary equipments 	<ul style="list-style-type: none"> • On receipt of warning ask all the staff to join duty immediately • Deployment of staff to the inaccessible areas • Regular maintenance of records • Co ordination with higher authorities 	<ul style="list-style-type: none"> • Record keeping • Information dissemination to concerned quarters (Sub-Divisional Vet. Officer) • Maintenance of regular flow of information 	<ul style="list-style-type: none"> • Damage assessment • Identification of areas for clearance • Delegation of team • Monitoring of work • Proposal to the government for repair and restoration
Electricity	<ul style="list-style-type: none"> • Regular identification of faults • Regular checking and repair of weak points/Transformers • Stockpiling of equipments/accessories • Skill development training/orientation • Precautions/protections near high voltage electric equipments installed • Stopping illegal consumption of electricity 	<ul style="list-style-type: none"> • Alert all staff to get back to their respective head quarters • Retrofitting of weak points if found • Disconnection of electricity in the event of an emergency • Arrangement of alternative energy sources such as generators and fuel for generators 	<ul style="list-style-type: none"> • Disconnection of electricity to the affected areas 	<ul style="list-style-type: none"> • Restoration of electricity

Fig.-1

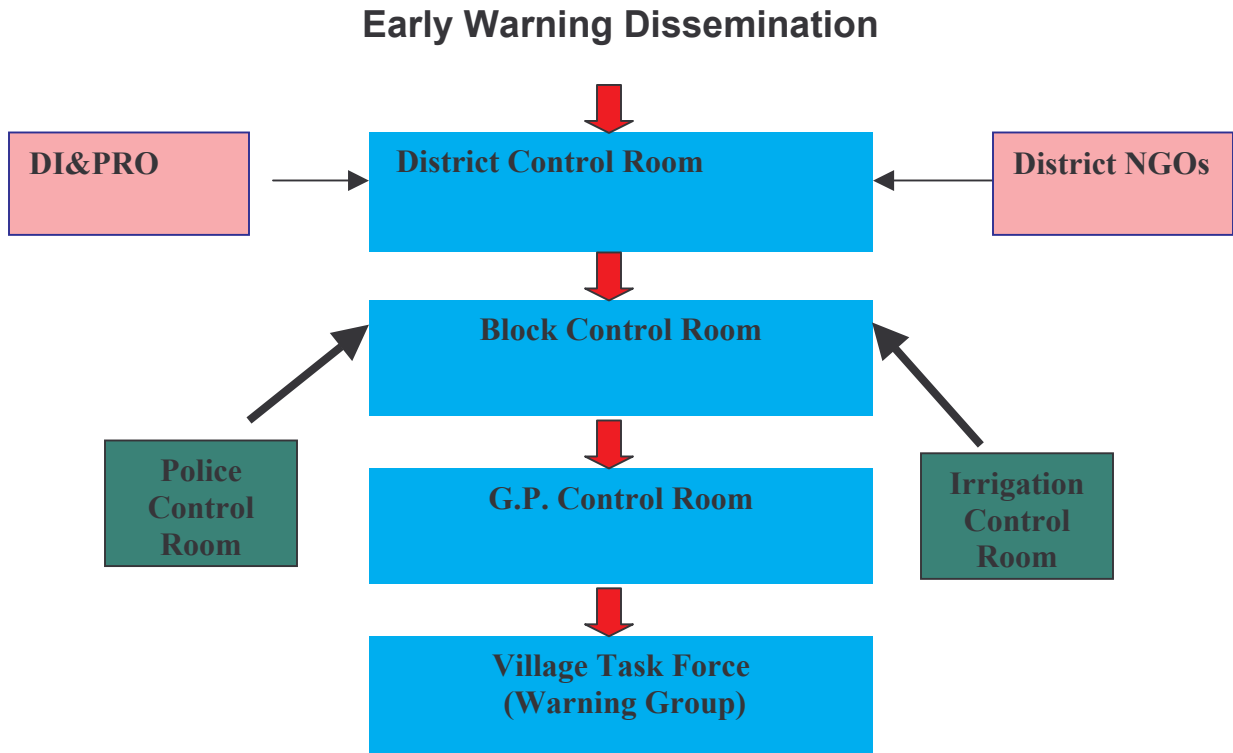
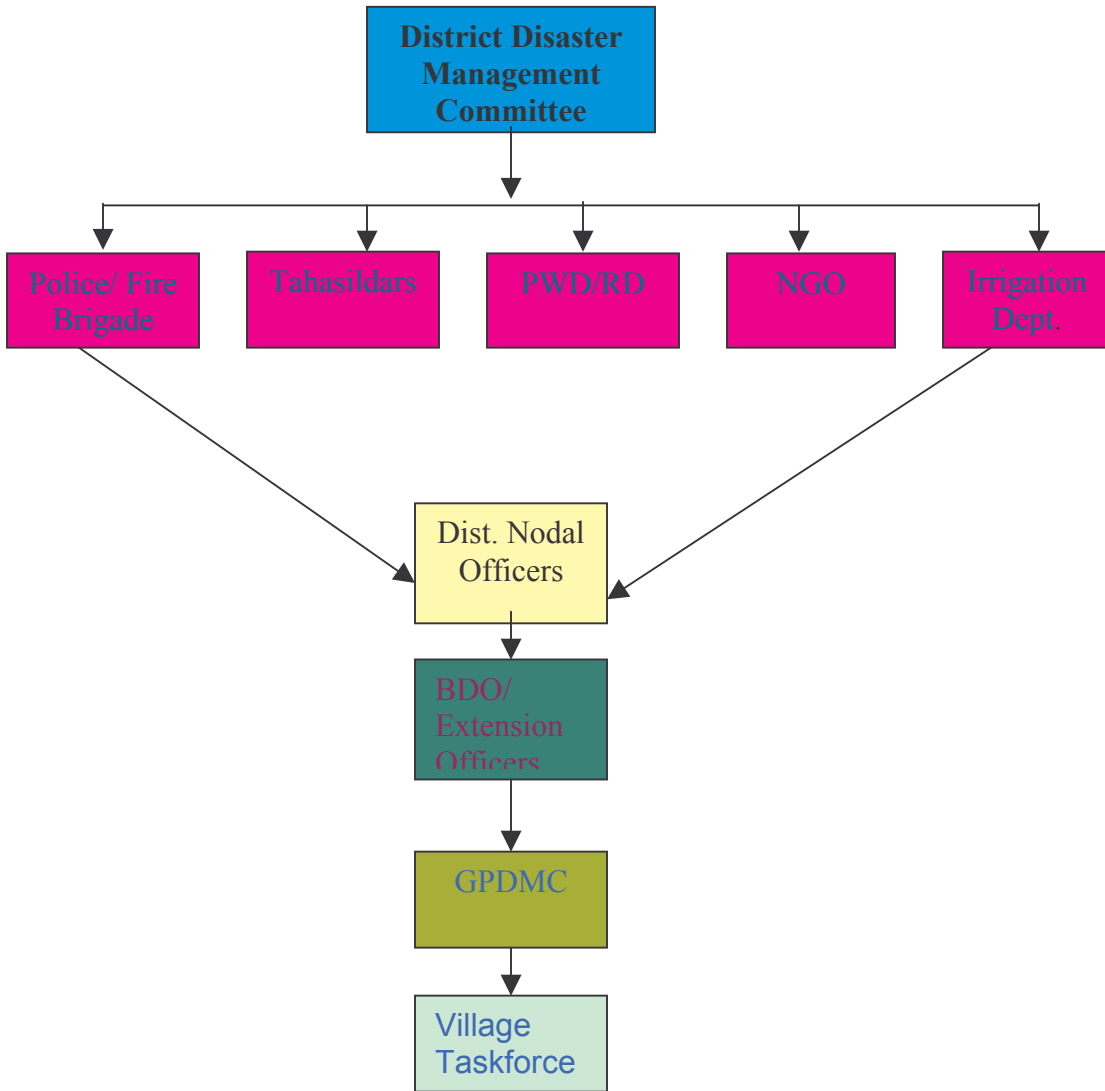


Fig.-2

A. Evacuation, Search and Rescue Response



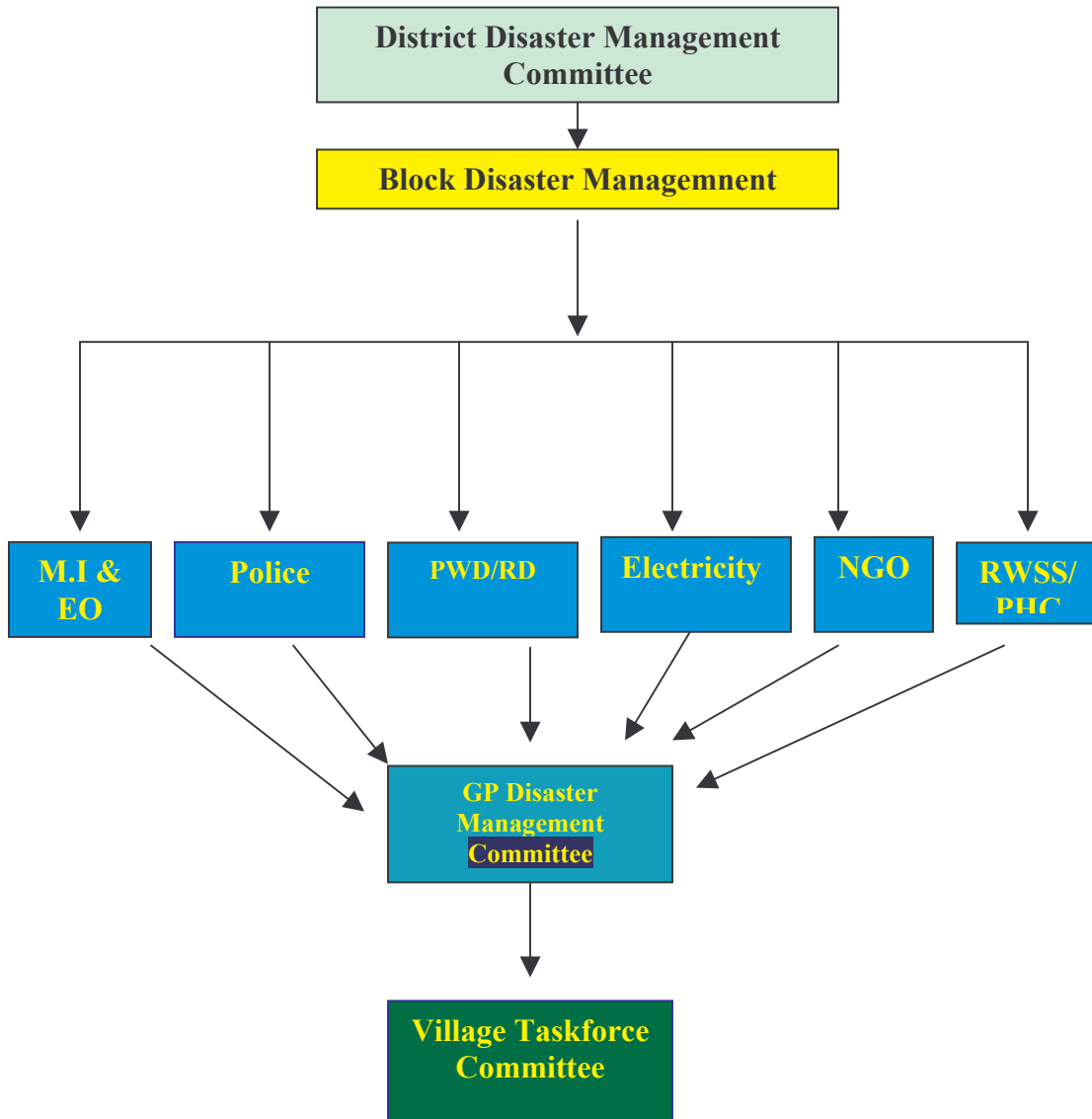
Department	Evacuation, Search and Rescue Response Structure and System			
	Preparedness	Pre (after Warning)	During Disaster	Post Disaster
District Control Room	<ul style="list-style-type: none"> • Deployment of Police/Fire Brigade for search and rescue. • Co-ordination with the NCC/NSS/Civil Defense/Rajya Sainik Board etc. for rescue operation. • Ensure availability of the rescue materials. • Prepare inventory of shelter places and map indicating the shelter Centers. • Provide & arrange Rescue kit at risk areas 	<ul style="list-style-type: none"> • Arrangement of Power Boats and Rescue Kits and equipments. • Deployment of Army / Fire Brigade / Police Personnel and Trained Volunteers in the strategic points. • Deployment of Senior officers of district to organize rescue operation. 	<ul style="list-style-type: none"> • Search group go around to search and rescue left over or trapped people on the affected areas. • Provision of shelters for the victims. • Provide medical help, if needed, and help them reach nearest hospital • Record keeping and information dissemination Control Room. 	<ul style="list-style-type: none"> • Help the people return to their original places / arrange temporary shelters.
Police	<ul style="list-style-type: none"> • Ensure functioning of the warning system. • Formation of team • Delegation of areas • Formation of zones/Sub-Zones 	<ul style="list-style-type: none"> • Deployment of police staff at risk point • Arrangement for the safety of property of the people. • Arrange rescue kits. • Support Block staff and volunteers during evacuation operation • Assist fire brigade personnel in their efforts • Maintain law and order situation 	<ul style="list-style-type: none"> • Deployment of police staff at risk point • Arrangement for the safety of property of the people. • Arrange rescue kits. • Support Block staff and volunteers during evacuation operation • Assist fire brigade personnel in their efforts • Maintain law and order situation 	<ul style="list-style-type: none"> • Support District/Block officials and volunteers during search and rescue operation • Assist fire brigade personnel in their efforts • Maintain law and order situation
MVI	Identify and take stock of the vehicles present with corresponding owners	Meeting with the owners of the vehicles	Provide required vehicles to the block functionaries	Provide vehicle

Fire Brigade	Take stock of all the equipments (boats, motors, life jackets, crane etc) needed during the disaster and prepare for a mock drill.	Divide into teams in coordination with the Dist. admn. along with police, CD(Home) vol. and get ready for	<ul style="list-style-type: none"> • Deployment of fire officials at risk point • Arrangement for the safety of property of the people. • Arrange rescue kits. • Support admn officials and volunteers during evacuation operation • Assist police , CD home personnel in their efforts 	<ul style="list-style-type: none"> • Support District/Block officials and volunteers during search and rescue operation • Assist police/ CD home vol. personnel in their efforts • Maintain law and order situation
Revenue	<ul style="list-style-type: none"> • Holding of natural calamity meeting in the month of May and October. • Joint inspection • Formation of Zones/Sub-Zones • Review progress 	<ul style="list-style-type: none"> • Deployment of Sub-collectors/ Tahasildars/ RIs and other supporting staffs to assist in rescue operation • Propagation for evacuation • Arrange rescue kits 	<ul style="list-style-type: none"> • Search group go around to rescue the left over people in the risk areas • Arrangement of boats and transports for the web are stranded in collaboration with block administration/ police/ fire brigade/ volunteers • Reporting casualties/ missing persons • Maintenance of law and order being local magistrate 	<ul style="list-style-type: none"> • Assist police/ CD home vol. personnel in their efforts • Maintain law and order situation
Medical	<ul style="list-style-type: none"> • List out the staff with contact address • Stock position of the sub-center and PHC/AWCs 	<ul style="list-style-type: none"> • Arrangement of medical help for the rescued /injured persons 	<ul style="list-style-type: none"> • Coordination with search & rescue team of medical help for the rescued /injured persons 	<ul style="list-style-type: none"> • Coordination with search & rescue team of medical help for the rescued /injured persons
Saline and Embankment/ PWD/ RD	<ul style="list-style-type: none"> • Holding of natural calamity meeting in the month of May and October • Awareness generation • Formation of Zones/Sub-zones 	<ul style="list-style-type: none"> • Coordination with Search & rescue team in for rescue & guarding of vulnerable pockets 	<ul style="list-style-type: none"> • Coordination with Search & rescue team in for rescue & guarding of vulnerable pockets 	<ul style="list-style-type: none"> • Coordination with Search & rescue team in for rescue & guarding of vulnerable pockets

<p>GO/ Volunteer</p>	<ul style="list-style-type: none"> • IEC activities on disaster management • Community mobilization • Ensure regular meeting of NGO co-ordination cell • Disseminate all government aided programme to the community • Ensure regular mock drill • Ensure regular bleaching / use of disinfectants in the drinking water sources • Organize workshops seminar meeting/training on community based disaster management 	<ul style="list-style-type: none"> • Assist District/Block Administration in arranging Power Boats, Country Boats and Rescue Kits and equipments. • Deployment of Trained Volunteers in the strategic points. • Assist District/Block Administration and field officials to organize rescue operation 	<ul style="list-style-type: none"> • Search group go around to search and rescue left over or trapped people on the affected areas. • Provision of shelters for the victims. • Provide medical help, if needed, transport to nearby health centres • Record keeping and information dissemination to district /Block Control Room. 	<ul style="list-style-type: none"> • Coordination with search & rescue team of medical help for the rescued /injured persons
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Departments	Medical Aid - Response System			
	Preparedness	Pre (after warning)	During	Post
CDMO	<ul style="list-style-type: none"> • Deployment of Medical staff • Stock pilling of Life saving drugs/ORS packets/Halogen tablets. • Treatment and Transportation of the injured • Public Awareness to stop the outbreak of epidemics. • Disease surveillence and transmission of reports to the higher authorities on a daily basis. • Vaccination • Constitute mobile teams and regular visit to the worst affected areas. • Dis-infection of Drinking water sources. • Identification of site operation camps. • To obtain/transmit information on natural calamities to District Control Room. • Advance inoculation programme in the flood/Cyclone prone areas. • Arrangement of fodder/medicines for the animals • Vaccination, Cite operation camps, Carcasses disposal 	<ul style="list-style-type: none"> • Deployment of staffs in their respective areas with medicines. • Check the stock and collect the required stock from district office • Arrange emergency room ready with all equipments and staff • Delegation of duty at PHC for 24 hours services • Meeting with the volunteers/ ANM/AWW and distribution of work as per the need 	<ul style="list-style-type: none"> • Deployment of staffs in the cut off areas with medicine. • Check the stock and collect the required stock from district office. • Delegation of duty at PHC for 24 hours services • Meeting with the volunteers and distribution of work as per the need 	<ul style="list-style-type: none"> • Co-ordination deployment of outside medical/ Paragraphmedical staff and members of NGOs/ INGOs charitable organizations • Check the stock and collect the required from district office. • Arrangement of medical help for the needy. • Treatment of emergency cases and provision will be made to transfer the acute cases to SCB medical college Cuttack if necessary

Fig.-3

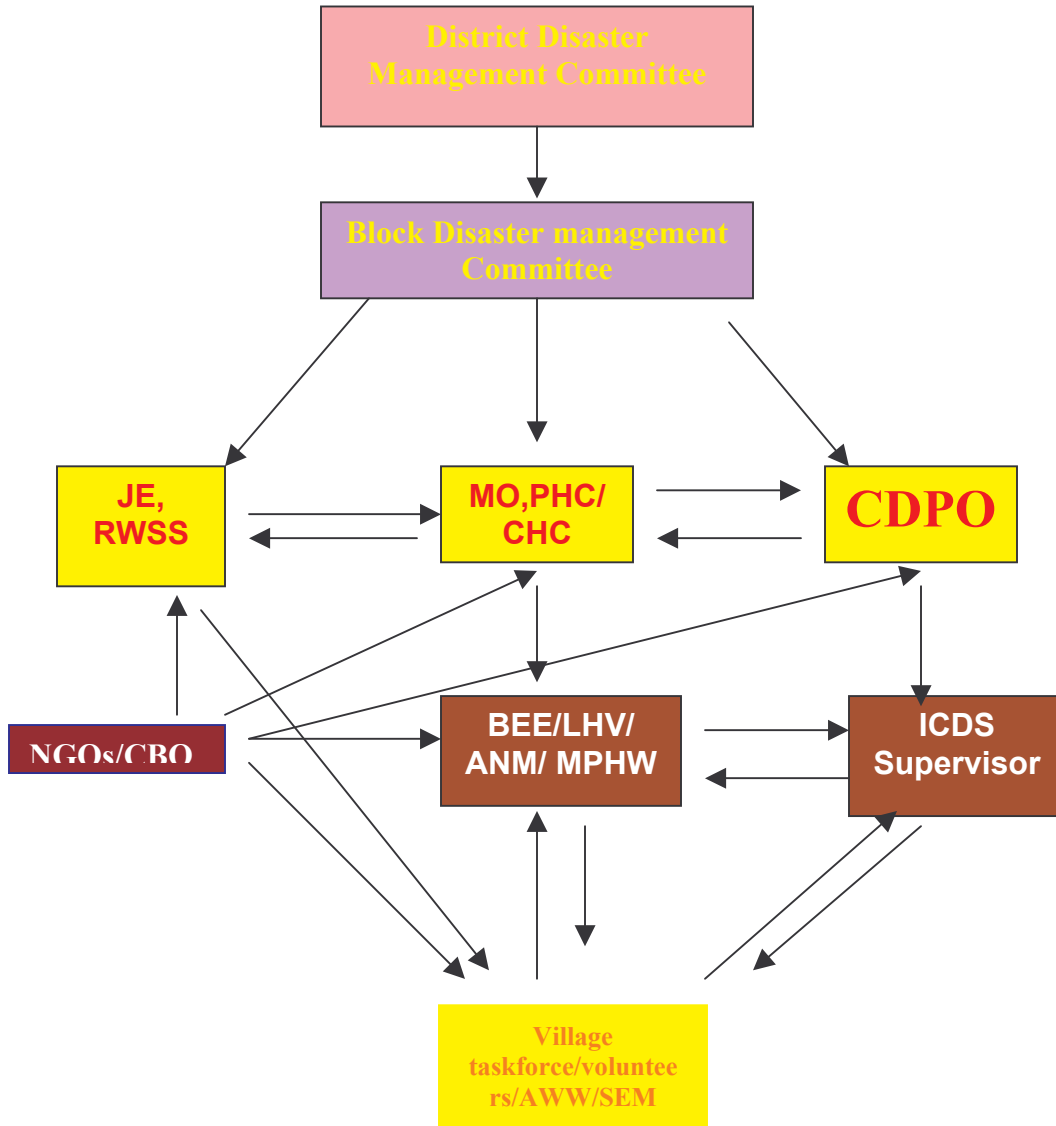


Sl. No	Departments	Shelter Management - Response System			
		Preparedness	Pre (after Warning)	During	Post
1.	Dist Admin.	<ul style="list-style-type: none"> • Identification of Shelter/Temporary shelter in elevated places and arrangement of tents etc. • Arrangement of Food/Drinking water/Medicine in the shelter places. • Person's allocation for each shelter. • Arrangement of transportation • Arrangement for safe shelter for animals • Provision of electricity to the identified shelters 	<ul style="list-style-type: none"> • Arrangement of Food/Drinking water/Medicine in the shelter places. • Person's allocation for each shelter. • Arrangement of transportation • Arrangement for safe shelter for animals • Provision of electricity to the identified shelters • Deployment of Police Personnel • Temporary supply of safe drinking water 	<ul style="list-style-type: none"> • Make arrangement not to allow any body to go outside • Maintain record of every activities • Sharing of information about the weather conditions • Supply of dry food & water • Keep environment clean • Provide fodder & water to the animals 	<ul style="list-style-type: none"> • Free kitchen for all • Distribute relief at the shelter and keep record • Replenish food as per the needs • Help evacuees to go to their houses • Clean safe place
2.	Police	<ul style="list-style-type: none"> • Ensure functioning of the warning system. • Formation of team • Delegation of areas • Formation of zones/Sub-Zones 	<ul style="list-style-type: none"> • Deployment of police staff at risk point • Arrangement for the safety of property of the people • Arrange rescue kits • Support staff and volunteers during evacuation operation • Assist fire brigade personnel in their efforts • Maintain law and order situation 	<ul style="list-style-type: none"> • Deploy Constables/Home Guards to different flood/cyclone shelters • Maintenance of law and order • Arrangement of police personnel for the safeguard of the shifted marooned families 	Arrangement of police personnel for safeguard of the members of the shifted family
3.	Electricity	<ul style="list-style-type: none"> • Regular identification of faults • Regular checking and repair of weak points/Transformers • Stockpiling of equipments/accessories 	<ul style="list-style-type: none"> • Arrangement of uninterrupted power supply at the temporary shelters 	<ul style="list-style-type: none"> • Arrangement of uninterrupted power supply at the temporary shelters 	Restoration of power supply at all the shelters
.	RWS&S	<ul style="list-style-type: none"> • Installation of tube-wells • Site visit and report • Awareness generation for using bleaching 	<ul style="list-style-type: none"> • Installation of emergency tube-well/tankers near the shelter sites • Bleaching/disinfections of drinking water sources • Supply of halogen 	<ul style="list-style-type: none"> • Supply of drinking water • Supply of poly pack containing safe drinking water • Distribution 	<ul style="list-style-type: none"> • Withdrawal of temporary tube-well installed near shelter sites Use of bleaching powder

		<ul style="list-style-type: none"> Helping BDO 	tablets	of halogen tablets	
5.	Medical	<ul style="list-style-type: none"> List out the staff with contact address Stock position of the sub-center and PHC/AWCs Prepare the plan and indent for stock Train Paragraphmedical staff/ ANMs / male health workers / volunteers/task forces/ Anganwadi workers for use and providing minimum health services to the community. 	<ul style="list-style-type: none"> Provision of medicine and deployment of Para medical staff Provision of medical help to the needy Provision of Halogen Tablets and use of Disinfectants for the temporary latrines 	<ul style="list-style-type: none"> Provision of medicine and deployment of Para medical staff Provision of medical help to the needy 	Take precautionary measures to avoid any outbreak of epidemic
6.	PWD&RD	<ul style="list-style-type: none"> Identification of weak-points Repair of weak roads/structures/canals before hazard season Stockpiling of building material Arrangement of equipments for road clearance 	<ul style="list-style-type: none"> Repair of approach roads/ structures/ canals leading to shelters Stalk piling of building materials 		<ul style="list-style-type: none"> Damage assessment and report preliminaryRepairing of affected/ damaged government building structure Clearance of debris to reinstall communication
8.	NGO/ Volunteers	<ul style="list-style-type: none"> IEC activities on disaster management Community mobilization Ensure regular meeting of NGO co-ordination cell Disseminate all government aided programme to the community Ensure regular mock drill Ensure regular bleaching / use of disinfectants 	<ul style="list-style-type: none"> Ensures opening of the identified flood shelters for the evacuees and hand over the shelter management charge DPC. Arrange for temporary shelters, if required Provision of temporary latrine and portable water source near the shelters. Check rumours by facilitating DPC/ Task Force to disseminate information regarding weather conditions 	<ul style="list-style-type: none"> Ensure proper management of flood shelters by DPC / Task Force Keep daily situational / status report Ensure registration of the evacuated people sheltered 	<ul style="list-style-type: none"> Ensure people are back to their home In case houses are fully collapsed/ swept away, arrange tents for temporary shelter for the victims

Fig.-4

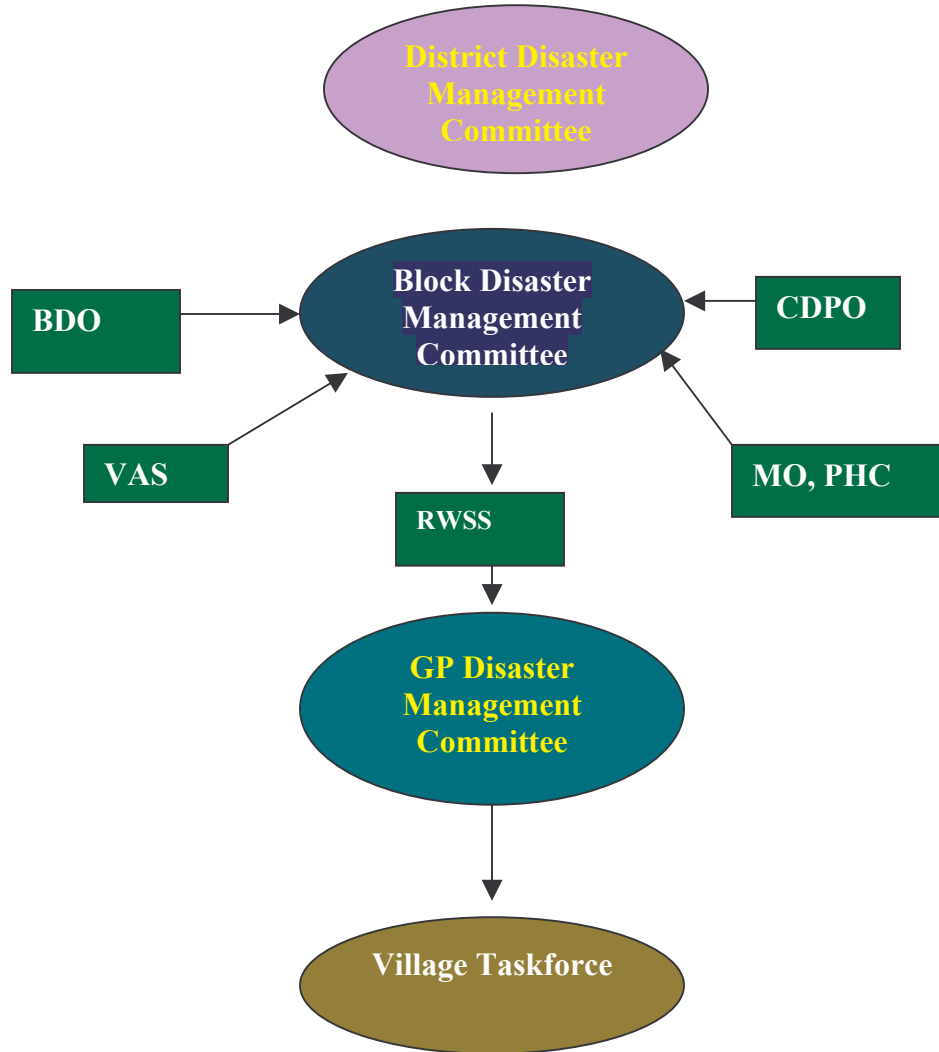
D. Water and Sanitation Response



Sl. No.	Departments	Health and Sanitation Response System			
		Preparedness	Pre (after Warning)	During	Post
1.	CDMO	<ul style="list-style-type: none"> List out the staff with contact address Stock position of the sub-center and PHC/AWCs Prepare the plan and indent for stock Train Para-medical staff/ ANMs / male health workers / volunteers/task forces/ Anganwadi workers for use and providing minimum health services to the community. Arrange for mobile health unit for inaccessible areas DDC at village level Health awareness campaign 	<ul style="list-style-type: none"> Disinfections of drinking water sources IEC activities regarding safe drinking water, disposal of human and animal wastes Check the stock and collect the required stock from district office Arrange emergency room ready with all equipments and Staff 	<ul style="list-style-type: none"> Deployment of medical & paramedical staff at the affected sites in the form of medical camps 	<ul style="list-style-type: none"> Disinfections of drinking water sources IEC activities regarding safe drinking water, disposal of human and animal wastes Check the stock and collect the required stock from district office Arrange emergency room ready with all equipments and Staff
2	Executive Engineer, RWS&S	<ul style="list-style-type: none"> Installation of tube-wells Site visit and report preparation Awareness generation for using bleaching Helping BDO during emergency Supply of drinking water during emergency Site selection and water test in Pallasuni (BBSR) 	<ul style="list-style-type: none"> Lab-testing of drinking water if necessary Bleaching of drinking water sources Aware community regarding to use safe drinking water 	<ul style="list-style-type: none"> Lab-testing of drinking water if necessary Sticking red and green stickers respectively for the polluted and safe drinking water sources especially tube wells Bleaching of drinking water sources 	<ul style="list-style-type: none"> Checking/washing/repairing of tube-wells to put it back to its normal condition

Fig.-5

E. Relief operation

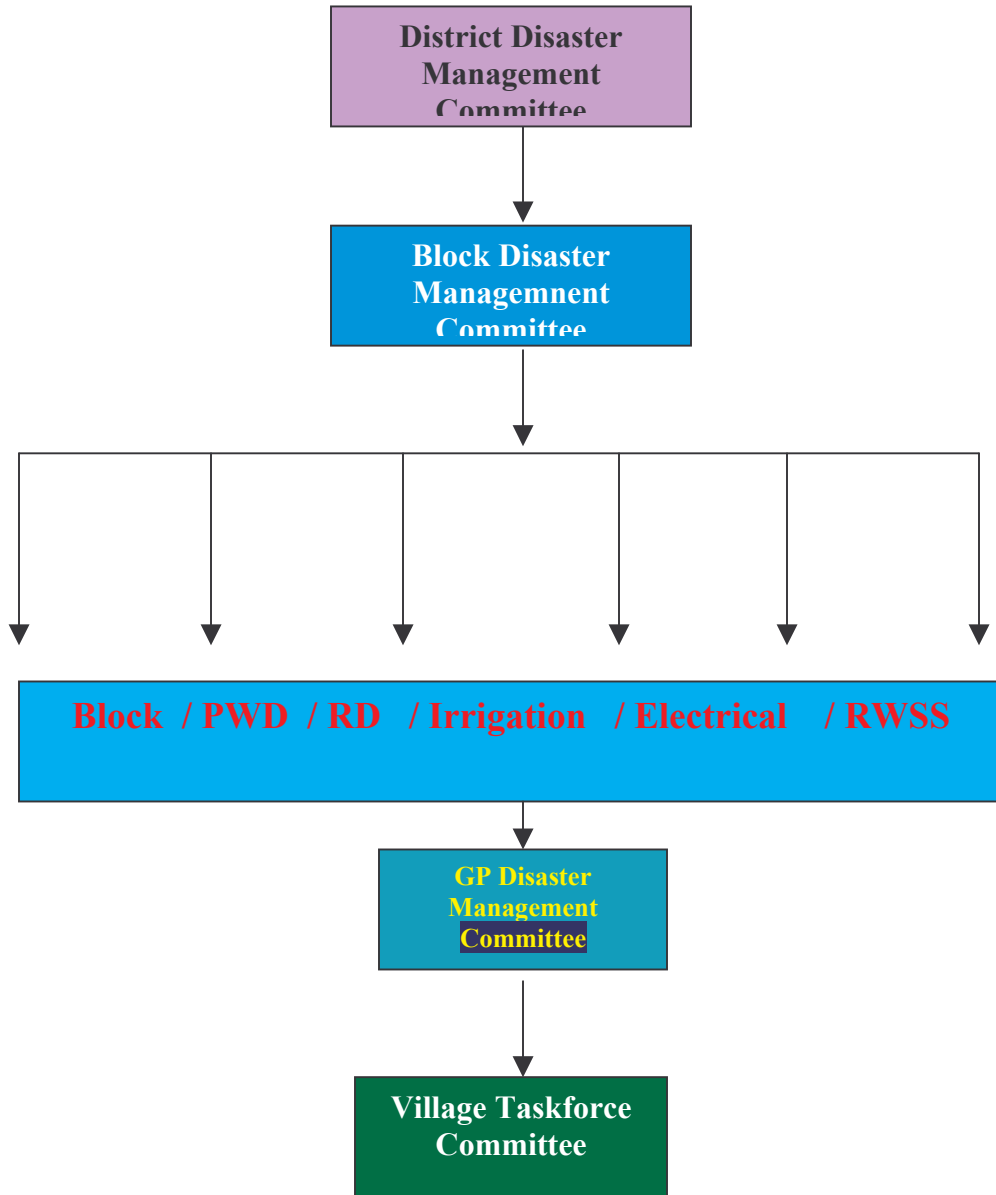


Sl. No	Departments	Relief Operation - Response			
		Preparedness	Pre (after Warning)	During	Post
1.	Dist. Admin.	<ul style="list-style-type: none"> ⇒ Deployment of vehicles ⇒ Procurement and transportation of Relief materials to affected pockets/areas/people ⇒ Arrangement of free kitchen in the shelter camps & affected areas. ⇒ Assigning of free kitchen in the shelter camps affected areas. ⇒ Assigning responsibilities to officials for distribution of emergent relief/running of free kitchen. ⇒ Coordinating with the civil society organizations/P SUs and UN agencies for continued relief operation ⇒ Monitoring 	<ul style="list-style-type: none"> • Assessment of Block wise/GP & village wise / requirement of emergent relief in view of population (adult / children) and parameters of ORC and block's requirement . • Identification of district level & block level officers to remain in charge of storage godowns / transportation and distribution of emergent relief . • Ceasing of foods stuff and other essential items available in Cuttack Malgodown • Make requisition of transport vehicles and county boats for supply of relief items. • Purchase, organize or mobilize emergent relief and stockpiling of emergent relief in the remote st areas to be co-ordinated with Tahsildars/Sub-collectors/BDOs • Stock piling of fodder in the risk prone areas to be coordinated with CDVO. • Ensure stock piling of tents, medicines, kerosene oil in the strategic points. • Collector will remain in charge of all relief operation 	<ul style="list-style-type: none"> • Arrangement / requisition of Police/ Para-military / Home guards / CRPF Jawans to protect and facilitate uninterrupted relief supply and distribution • Liaison with INGOs / NGOs/ OSDMA/SRC to mobilize relief items and enlisting of their relief measures. • Grant emergency relief to all the marooned people and organize relief camps . • Organize free kitchen centers in the distressed areas with the support of Sub-Collector, BDMC , GPDMC & NGOs for the marooned people . • Provision of basic amenities like drinking water , sanitation and public health care. • Sub-Collector/ Tahsildar/BDO to arrange for documentation / record of relief items received from various agencies / stockpiled / supplied remaining balance etc., and report to Dist admn 	<ul style="list-style-type: none"> • Declaration of the area affected by flood. • Closer of Govt. relief work , as per the ORC & SRC • Facilitate INGOs / NGOs and / or private individuals to continue relief operations of their own. • Daily situation rreport to Govt. . • Keeping record of damages done to home , individual person, dead and missing persons and assist Tahasildar to pay legitimate compensation • Opening of PDS outlets to start their normal activities and also ensure that no malpractice is done by the trades , taking advantage of the prevailing situation . • Facilitate food for work programme by GO and NGOs.
3.	CDMO	<ul style="list-style-type: none"> • List out the staff with contact address • Stock 	<ul style="list-style-type: none"> • Stock piling of medicines /disinfectants in the risk prone areas 	<ul style="list-style-type: none"> • Provision of temporary medical relief Centers • Distribution of 	Stop the relief activities & pla

		<p>position of the sub-center and PHC/AWCs</p> <ul style="list-style-type: none"> • Prepare the plan and indent for stock 	<p>prone areas</p> <ul style="list-style-type: none"> • Maintenance of Stock Register 	<p>medicines and halogen tablets</p> <ul style="list-style-type: none"> • Treatment of the victims and daily report to PHC control room 	
5.	RWS&S	<p>Installation of tube-wells Site visit and report preparation Awareness generation for using bleaching Helping BDO during emergency Supply of drinking water during emergency Site selection and water test in Pallasuni (BBSR) Collection and storing of K-018H2s test stripe, bottle, bleaching, halogen tablets, tube well accessories</p>	<ul style="list-style-type: none"> • Supply of drinking water • Supply of poly pack containing safe drinking water • Distribution of halogen tablets • Informing community particularly the evacuees regarding use of safe drinking water 	<ul style="list-style-type: none"> • Supply safe drinking water in the poly packs to people • Distribution of halogen tablets Informing community particularly the evacuees regarding use of safe drinking water 	<ul style="list-style-type: none"> • Supply safe drinking water to people • Distribution of halogen tablets
7.	NGO/ Volunteer	<ul style="list-style-type: none"> • IEC activities on disaster management • Community mobilization • Ensure regular meeting of NGO co-ordination cell • Disseminate all government aided programme to the community • Ensure regular mock drill 	<ul style="list-style-type: none"> • Assist government personnel in charge of storage Godowns / transportation and distribution of emergent relief. • Motivate communities to store food stuff and other essential items in safer places for the emergency period • Assist VAS in stock piling of fodder in the risk prone areas. • Ensure stock piling of tents, medicines, & kerosene oil 	<ul style="list-style-type: none"> • Assist government personnel in charge of storage Godowns / transportation and distribution of emergent relief. • Motivate communities to store food stuff and other essential items in safer places for the emergency period • Assist VAS in stock piling of fodder in the risk prone areas. • Ensure stock piling of tents, medicines, & kerosene oil 	<ul style="list-style-type: none"> • Organize or facilitate CBOs or private individuals to continue relief operations and/or free kitchen Centers. • Keeping record of damages done to home, individual person, dead and missing persons and assist Tahasildars to pay legitimate compensation. • Ensure that the traders, taking advantage of the prevailing situation, do no malpractice.

Fig.-6

F. Infrastructure Restoration



Infrastructure Restoration

Department	RD	Irrigation	Electrical	RWS&S
Preparedness	<ul style="list-style-type: none"> • Identification of weak-points • Repair of weak roads/structures/canals before hazard season • Stockpiling of building material • Arrangement of equipments for road clearance 	<ul style="list-style-type: none"> • Holding of natural calamity meeting in the month of May and October • Awareness generation • Formation of Zones/Sub-zones • Review progress • Provision/ arrangement of sand bags in risk prone area • Equipments to be ready • Formation of team • Arrangement of vehicle • Delegation of areas 	<ul style="list-style-type: none"> • Regular identification of faults • Regular checking and repair of weak points/Transformers • Stockpiling of equipments/accessories • Skill development training/orientation • Precautions/protection s near high voltage electric equipments installed • Stopping illegal consumption of electricity 	<ul style="list-style-type: none"> • Installation of tube-wells • Site visit and report preParagraphtion • Awareness generation for using bleaching • Helping BDO during emergency • Supply of drinking water during emergency • Site selection and water test in Pallasuni (BBSR)
Pre (after warning)	<ul style="list-style-type: none"> • Retrofitting and repairing of weak government buildings/structures • Repairing of road network 	<ul style="list-style-type: none"> • Guarding vulnerable roads and embankments • Repairing piping and seepages found in vulnerable points. Arrangement of materials for repair of roads and breaches in the embankment for post disaster operation 	<ul style="list-style-type: none"> • Replacement of weak electric poles/wires • Checking and correcting private connections • Stockpiling of necessary equipments and accessories 	<ul style="list-style-type: none"> • Checking, repairing and construction of tube-wells • Stock pilling of accessories
During		<ul style="list-style-type: none"> • Guarding vulnerable roads and embankments • Repairing piping and seepages found in vulnerable points. Arrangement of materials for repair of roads and breaches in the embankment for post disaster operation 		
Post	<ul style="list-style-type: none"> • Damage assessment and report preParagraphtion • Repairing of affected/ damaged government building structure • Clearance of debris to reinstall communication 		<ul style="list-style-type: none"> • Uninterrupted power supply to the Medical/Block Office and other Important institutes • Damage assessment and transmission of the same to higher authorities • Quick installation/repair of damaged infrastructures 	<ul style="list-style-type: none"> • Checking/was hing/repairing of tube-wells to put it back to its normal condition

**7.2 STANDARD OPERATIONS PROCEDURE (SOP)
FOR DISTRICT EMERGENCY CONTROL ROOM, SAMBALPUR**

TEL. NO: 0663 - 2412087/1077 (Toll free)

LOCATION: 1st FLOOR, COLLECTORATE, SAMBALPUR

**START IMMEDIATELY ON RECEIVING CYCLONE / FLOOD WARNING OR
INFORMATION ABOUT ANY OTHER EMERGENCY FROM ANY SOURCE**

1. Officer in charge of Control Room: The control room shall be in overall charge of the Collector. In the absence of Collector, ADM (Emergency), ADM (Revenue), PD DRDA, District Development Officer, Emergency officer or any other officer or staff on duty at that point of time shall remain in charge of Control Room. The person in charge of control room 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.
2. Assembly in Control Room: Following staff and officers shall assemble in the Control Room on getting any information from any source about emergency. Apart from these, any other officer or staff who gets the information from any source will reach the Control room.
 - 2.1. Collector, Both ADMs, PD DRDA, District Development Officer, Emergency Officer, Sub-Collector Sambalpur Sadar, Excise Superintendent, GM DIC, Tehsildar, Sambalpur, CE CMC, CSO, DIPRO and RTO.
 - 2.2. All staffs of emergency section, development section, Steno to Collector & ADMs.
3. Getting the Control Room ready: Following preparatory measures will be taken for keeping the control room functional during emergency.
 - 3.1. two phone lines to control room.
 - 3.2. Keeping the VHF functional.
 - 3.3. Keeping a radio with new batteries ready.
 - 3.4. Hiring extra generator sets.
 - 3.5. Stocking of Kerosene and Diesel for running the generator sets.
 - 3.6. Charging of battery of VHF set of control room
 - 3.7. Charging the battery of inverter.

3.8. Charging the satellite phone and testing it.

4. Alert all field officers: BDOs, Tahasildars, MOs, VAS, Police, Industries, Telephone, Agriculture, RWSS, RD, R&B, ICDS, Irrigation, WESCO, NH, PHD, Municipality, MLAs, MPs, MIs, CI/DI/Sis, Station Director, All India Radio. DIPRO shall inform the media. Warning shall be issued in the following format:

Emergency Warning Message No.	Dt.
To: SP/ All OICs/ BDOs/ Tehsildars/ Sub Collectors/ Medical Officers/ EE R&B/ EE RD/ GM DIC/ DIPRO/ EE WESCO / SE WESCO/ DDA/ EOs of Sambalpur Municipality, Hirakud, Burla, Kuchinda & Rairakhol NACs/ CI of Schools/ DI of Schools/ DSWO/ EE RWSS / EE NH/ EE PHD / Station Director All India Radio	
(Space for message)	
Collector, Sambalpur	

5. Call up the officers and ensure that they remain in headquarters.
6. Prepare a logbook for recording chronological sequence of events.
7. Food and Kerosene:
- 7.1. Check up availability of food (rice, chuda and *Gur*) and kerosene at block headquarters, with storage agents and other inaccessible pockets. BDOs shall contact all Storage Agents. They shall personally visit the godowns and verify the stocks. The Agents shall remain present at the store round the clock. BDOs shall immediately depute one officer to the place where the storage godowns are located.

- 7.2. Seize the Malgodown. ACSO, MI and one ADM shall remain in charge of Malgodown. President of Malgodown shall be actively involved.
- 7.3. Direct the Malgodown and FCI to remain open on all days, including Sundays and holidays, till situation gets back to normal.
- 7.4. Start movement of food stock and Kerosene Oil from block headquarters to areas that are likely to be cut-off.
- 7.5. Start movement of food stock and K. Oil from district headquarters to block headquarters.
8. Check availability of sand bags
Get sandbags ready
9. Health sector: Make a rapid assessment of the following.
 - 9.1. Check up the stock of medicines, bleaching powder and halogen tablets. If necessary, send immediate requisition.
 - 9.2. Start movement of medicines, bleaching powder, etc. to PHCs/CHCs.
 - 9.3. Ensure that medical officers are in place at the PHCs and CHCs through police stations, blocks and Tahasildars.
 - 9.4. CDMO shall decide the locations of camps.
 - 9.5. All CDPOs shall be teamed up with the MO of PHC/ CHC with their vehicles and supervisors.
10. Vehicles: Requisition of vehicles as per need.
11. Empower field officials to requisition vehicles. Send requisition forms to each Tehsildar, BDO and Police station.
12. Boats: Requisition of boats within district. Requisition boats from out side if situation so arises
13. Close educational institutions after making an assessment of the seriousness of the emergency.
14. Veterinary measures: Immediately contact MD, OMFED and tie up the supply of cattle feed. CDVO shall make assessment of vaccines and fodder availability.
15. Air dropping zones: Use the lat-long book for identifying the air dropping zones. Make an advance list of villages where air dropping may be needed.

16. Requisition the services of officers who have been effective in the past. Allot areas to them with full powers of decision making on the spot.
17. Make a thorough assessment of relief items available in stock at different places.
18. 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
- 18.1. Transportation team
- 18.2. Stock and store team
- 18.3. Finance team
- 18.4. Information and office documentation team
- 18.5. Food and other relief items team
- 18.6. Civil Society and International Organizations co-ordination team
19. Civil Society organizations: Get in touch with civil society organizations. 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.
20. Press briefings: Press briefings play a very important role in disaster management. Daily press briefs will be issued at 1600 hours. Written information will be issued. Following format will be used.

Sambalpur District Press Note No.		Dated:		
		Total	Affected	Remarks
1	Blocks/ towns			
2	Villages			
3	Population			
4	Severely affected areas			
5	Rescue measures			
	Boats deployed			
	Army/ Navy/ Coast Guard			
	Police/ Fire brigade			
	Other agencies			
	Exemplary events			
6	Relief measures	Qty	Villages	Days covered

			covered	
	Rice			
	Chuda			
	Other dry food			
	Kerosene Oil			
	Polythene sheets			
	Tents			
	Cattle feed			
	Halogen tablets			
	Medicines			
	Air dropping sorties			
7	Casualties			
8	Missing reports			
9	Cattle death			
10	Civil Society Organisations			
11	Damage to property	Number	Approx Value	
	Roads			
	Embankment breaches			
	Schools			
	Other public buildings			
	House damage			
	Electrical installations			
	Others			
12	Prospects in next 24 hours			
13	Message for people			
14	Other details			

20.1. Message to public over All India Radio should be specific.

21. Regularly contact with R.D.C., S.R.C., Home Secretary, Revenue Secretary, PS / Secretary/ Additional Secretary to Chief Minister, Chief Secretary and Health Secretary.

22. Give written orders for identifying places for starting free kitchens. Issue clearance for 3 days.
23. Regular check up of <http://www.npmoc.navy.mil/jtwc.html> and www.imd.ernet.in and other web sites.
24. Keep spare copies of district maps. Jurisdiction maps of all irrigation divisions shall be kept ready in good numbers.
25. Contact State Bank of India for making available VSAT network in case of failure of all communication channels.
26. Contact Flood Cell, CWC, Hiraakud and EIC.
27. Requisition all IB/ Rest sheds.
28. Requisition School/ College for army/ police forces.
29. Direct all field officers to hire generators and keep sufficient oil for running them.
30. Direct all police stations to keep spare batteries for VHF.
31. Looking at the onset of emergency and after making quick preParagraphtions, convene Emergency meeting of important official and non-official agencies. Give them clear instructions.
32. Make a duty roster.

CHAPTER-VIII

8.1 Role of district level officials:

With increasing importance on the preparedness and preventive measures for disaster mitigation, immense initiatives have been taken by appropriate authorities at various levels. A paradigm shift from relief & rehabilitation and post disaster assistance to pre disaster mitigation efforts has not gone unnoticed.

8.1.1 Role of District Collector:

Districts, headed by the District Collector (also known as the District Magistrate or Deputy Commissioner), is the focal point at the district level for directing, supervising and monitoring relief measures for disaster and for preparation of district level plans. The Collector exercises coordinating and supervisory powers over functionaries of all the departments at the District level. The District Disaster Management Committee consisting of official and non-official members, including elected representatives, reviews the disaster mitigation measures in the district before, during and after any disaster. The District collector is the Chairman of this committee. In the wake of any disasters, a Control Room is set up in the District for day-to-day monitoring of the rescue and relief operations on a continuous basis.

The Collector maintains close liaison with the Central Government authorities in the districts, namely, Army, Air Force and Navy, Ministry of Water Resources, etc., who supplement the effort of the District Administration in the rescue and relief operation.

The armed forces of the country have played a vital role during disaster emergencies providing prompt relief to the victims even in the most inaccessible and remote areas of the country. The organisational strength of the armed forces with their disciplined and systematised approach, and with their skills in technical and human resource management make them indispensable for such emergency situations. India having a federal structure the integrated disaster management mechanism exists within the government framework. The District Collector is responsible for providing all logistics and local support to the personnels of armed forces. He also co-ordinates all voluntary efforts by mobilising the non-government organisations capable of working in such situations.

POWERS AND FUNCTIONS OF THE COLLECTOR

1. During the period an area is an affected area the Collector may issue directions to the officers of the departments of the Government and the local authority in the affected area, to provide emergency relief in accordance with the disaster management plans.

2. The Collector may-

- (i) Make arrangements for release and use of available resources;
- (ii) Control and restrict traffic to, from and within the area affected by a disaster;
- (iii) Control and restrict the entry into, movement within and departure from any disaster area or part of it ;
- (iv) Make arrangements for removing debris;
- (v) Conduct search and rescue operations;
- (vi) Make arrangements for the disposal of the unclaimed dead body, by appropriate means;
- (vii) Provide alternative shelter;
- (viii) Provide food, medicines and other essentials;
- (ix) Require experts and consultants in the matters relevant to the disaster to provide relief under his direction and supervision;
- (x) To take possession and make use of any property, vehicles, equipment, buildings and means of communication on such terms and conditions as may be prescribed.
- (xi) Procure exclusive or preferential use of amenities as and when required;
- (xii) Order for construction of temporary bridges or other structures;
- (xiii) Demolish unsafe structures, which may endanger the public;
- (xiv) Coordinate with non-governmental organizations and ensure that such entities carry out their activities in an equitable manner;
- (xv) Disseminate information to the public to deal with the disaster;
- (xvi) Direct and compel evacuation, of all or part of the population from any affected area for the purpose of preservation of life and for such evacuation, and for such evacuation use such force as may be necessary;
- (xvii) Authorize any person, to make any entry into any place, to open or cause to be opened, any door, gate or other barrier, if he considers such an action is necessary for preservation of life and property, if the owner or occupier is absent, or being present, refuses to open such door, gate or barrier;

3. The Collector may exercise the powers to the extent only that this is necessary for the purpose of -

- (a) Assisting and protecting the community;
- (b) Providing relief to the community;
- (c) Preventing or combating disruption; or
- (d) Dealing with the destructive and other effects of the disaster.

4. The Collector may issue such directions to any person or government agency and take such other steps, as may be necessary to curtail the escalation of the disaster or to alleviate, contain or minimize the effects of disaster.

Collector shall, -

- (a) Ensure that actions for prevention of a disaster or mitigation of its effects or preparedness to cope up with such effects are carried out in accordance with guidelines as may be prescribed;
- (b) Provide inputs to Authority relating to various aspects of disaster management, such as early warnings and status of preparedness;.
- (c) Ensure that officials in the district acquire the knowledge to deal with disaster management ;
- (d) Ensure that district disaster management plans are prepared, revised and updated;
- (e) Facilitate and, coordinate with, local Government bodies to ensure that pre-disaster and disaster management activities in the district are carried out ;
- (f) Facilitate community training, awareness programmes and the installation of emergency facilities with the support of local administration, non-governmental organizations, and the private sector;
- (g) Establish inter-department coordination on matters related to disaster management;
- (h) Review emergency plans, contingency plans and guidelines;

Other powers and functions :

- (i) Ensure that local authorities in the district are involved in developing their own mitigation strategies;
- (j) Ensure linkage between disaster management activities and planning;
- (k) Ensure that communication systems are in order;
- (l) Ensure that fire fighting equipments and other equipments related to disaster management are so maintained as to be ready for use;
- (m) Coordinate the activities of reconstruction and rehabilitation in the district ;
- (n) Ensure that disaster management drills are carried out periodically;
- (o) Assist the Authority in monitoring the progress and outcome of efforts for reconstruction and rehabilitation ;
- (p) Exercise such powers and perform such functions as may be delegated by the State Government, the Authority and the Commissioner;
- (q) Exercise such other powers and perform such other functions as may be prescribed.

8.1.2 FUNCTIONS OF LOCAL AUTHORITIES:

1. For the purpose of disaster management, local authority shall, subject to such directions as the Authority may give and under the supervision of the Collector-

- (a) Assist the Authority, the Commissioner and the Collector;
- (b) Ensure that the staff of the local authority is trained;
- (c) Ensure that all resources related to disaster management are so maintained as to be ready for use;
- (d) Ensure that all buildings and other structures in the local area comply with the specifications laid down in this behalf by the departments of Government and the Authority;

- (e) Carry out relief operations in the affected area subject to directions of the Commissioner;
- (f) Carry out reconstruction and rehabilitation activities in accordance with the guidelines framed by the Authority;
- (g) Prepare a disaster management plan setting out the following, namely:-
 - (i) The manner in which the concept and principles of disaster management are to be applied in local area;
 - (ii) Role and responsibilities of the local authority in the terms of the disaster management plan of the State;
 - (iii) Capacity of the local authority to fulfill its role and responsibilities;
 - (iv) Particulars of disaster management strategies; and
 - (v) Contingency strategies and emergency procedures in the event of a disaster, including measures to finance the strategies.
- (h) Coordinate the preparation and the implementation of plan with those of the organizations of the State and stake holders;
- (i) Regularly review and update the plan.
- (j) Conduct disaster management drills periodically; and
- (k) Provide such assistance to the Authority, the Commissioner and the Collector and take such other steps as may be necessary for disaster management.

2. Each local authority shall submit to the Authority and the Commissioner a copy of its disaster management plan proposed and any amendment thereto.

- (1) Each department of the Government in a district shall prepare a disaster management plan for the district and the Collector shall ensure that such plans are integrated into the disaster management plan for the whole of the district.
- (2) The department of Government while preparing a plan -
 - (a) Anticipate the types of disaster that may occur in the district and their possible effects;
 - (b) Identify the communities and property at risk;
 - (c) Provide for appropriate prevention and mitigation strategies;

8.1.3 Sub Collectors / Block Development Officers:

- i. Rain Recording Stations are to be made in good working Condition. Replacement of parts, repairs if any, is to be completed by Ist June, 2002.
- ii. Daily Rain Fall report from Ist June, 2002 to be ensured by the Block Dev. Officers either through VHF or over Telephone to the Dist. Emergency Officer in his Tel No. 410011.
- iii. Control Room will function in every Block / Sub divisional Offices from Ist June, 2002 round the clock. A responsible Officer must be kept in charge of the Control Room for efficient monitoring. The staff/ Officers required may be requisitioned from different Offices by the Sub Collectors for Sub Divisions of Kuchinda and Rairakhola and for Sambalpur the Control Room will function in the Dist. Control Room with Officers and staff requisitioned by the Collector.

- iv. For the Blocks in the Sub Divisional / Dist. Hdqrs., only one Control Room either in the Office of the Sub Collector or the BDO will do.
- v. Vulnerable points in the villages / GPs be identified and repairs, etc. be ensured through the departments concerned with the funds available with them before the ensuing Monsoon.
- vi. All the water bodies (small & large) in the Villages be got verified and if necessary, the deepening, maintenance, etc. be ensured through the G.Ps before the Monsoon.
- vii. Flood shelters will be identified by the BDOs in the vulnerable locations keeping in view of last flood, Drought or any other calamities that may occur in the coming days. Storage buildings near to such shelters be earmarked for storage of food stuff for calamity relief, when necessary.
- viii. Essential Commodities may be preserved with the storage agents and in the locations identified in the remote / cut off areas before 15th June, 2002.
- ix. Distress persons in the villages as per the criteria given in the Orissa Relief Code may be identified and the G.R. Cards in the revised format may be issued to them.
- x. N.G.Os operating in the field be involved in identification of locations / distress persons and particulars of such NGOs be reported to the Collector for reference and record.
- xi. Wherever there is scarcity of water, cross bunds be erected through the G.Ps and during Monsoon such cross bunds may be removed to prevent flood. Such removal be considered taking in to account of the rain and flow of water.

8.1.4 Sub Collectors & Tahasildars:

- i. Irrigation programme for Khariff and agricultural prospect as per Khariff programme be closely watched and deviation if any be reported with reasons and suggestions.
- ii. The performance of the agricultural workers at field level be closely monitored and for the purpose, the cooperation of the Supervisory staff of Agricultural Deptt. may be sought for.
- iii. To take stock of monthly progress of agricultural operation, supply and use of implements, chemicals, plant protection chemicals and other inputs to ensure preventive action in time to avert loss / damage of crops.
- iv. Death due to lightening or other Natural Calamities when published in the media or such other information received from different other sources be enquired jointly with local Medical Officer within 24 Hrs. without waiting for further orders from the CDMO / SDMO / Sub Collector and report submitted to the Collector immediately for sanction and payment of Ex-gratia. The enquiry at the level of Revenue officers must be

conducted by the Tehsildar or Addl.Tehsildars and not by the Rev. Inspectors or Supervisors. Similarly the report of enquiry on different matters must be the opinion of the Tehsildars or Addl. Tehsildars instead of simply forwarding the report of the Rev. Inspectors.

v. Crop Cutting Experiments for the Khariff Crops be conducted as per the guide lines in the Orissa Relief Code and report submitted to the Collector in the prescribed format. This should be taken up suo-moto without waiting for further instructions from the Collector or ADM.

vi. Location of flood relief camps be identified and relief materials required be assessed and requisitioned. Such assessment be made taking in to account of the materials already available with the BDOs and Tahasildars as Tents, Tarpaulin, etc were supplied to them during last flood, 2001. The above preparedness to be completed by 1st June 2002.

vii. Evacuation of people / encroachers from the low lying area of river banks and other flood prone area to be ensured by 1st week of June, 2002 to prevent loss of human life and property.

viii. Local NGOs, Voluntary Organizations, whose services can be utilized in relief work, should be identified and they may be kept alert. Such Organizations, who have contributed the services during the flood relief work in the year, 2001 be preferred as they have gained better experience in the field.

8.1.5 Sub Collectors & Civil Supply Officer:

i. Public Distribution System may be kept actively working. Fair Price Shops should function well and allotment of Commodities and its lifting in time be ensured.

ii. Functioning of Storage Agents should be closely watched and the stocks in the stores should be verified through Officers very often to ensure transparency.

iii. Essential Commodities must be preserved in all the remote and inaccessible areas as well as the locations, which were cut off during the last flood by 15th June, 2002 in consultation with the BDOs and Tehsildars.

iv. Rice Millers / Storage agents for procurement of Chuda / Gur and other essential items be identified and they may be informed to supply the requirements at any time when requisitioned.

8.1.6 Sub Collectors / Dist. Social Welfare Officer / C.D.P.Os:

i. Present vacancies against the schemes like OAP / ODP / NOAP /BSY, etc. be filled up immediately. As against the target of 1644 BSY, achievement is only 967. The remaining cases are pending with the CDPOs and G.Ps as reported by the DSWO. The Sub Collectors should ensure achievement of target by end of June, 2002. There are also 13 vacancy under NOAP. This vacancy should also be filled up by end of June, 2002.

ii. Midday meal in the form of cooked hot meal in the Tribal Blocks and dry ration in the remaining Blocks should be kept running uninterrupted.

iii. Beneficiaries targeted for supplementary Nutrition Programme is 57,000. Only 50,000 have so far been covered. The remaining 7,000 sanctioned for the Sambalpur Urban ICDS should be immediately covered.

iv. Performance of Anganwadi Centres, house to house visit to by the A.W. workers, generation of report on the health and other socio economic condition of the people should be closely monitored. The performance of 171 centers functioning in inaccessible areas of the following Blocks namely Dhankauda (14), Jujumura (33), Rairakhol (15), Naktideul (47) Kuchinda (12) & Bamra (5) should be closely watched and their requirement during Monsoon be provided by 1st week of June, 2002.

v. No Anganwadi workers or the Supervisors shall leave headquarters or avail leave during the period from 15th June till the harvesting of Khariff Crop is over.

vi. Cases of unnatural death and incidence of natural calamities, like deaths due to Lightning death, etc, should be promptly reported to the Supervisors and other Govt agencies available within the immediate reach, who in their turn shall give feedback to the BDOs or Tehasildars concerned.

vii. All Social Security Schemes be kept vigorously functioning and in case of lapses, personal liability will be fixed.

8.1.7 Superintendent of Police, Sambalpur:

i. Instructions to VHF Grids to pass on messages of Flood and other natural calamities on top priority may be issued.

ii. Installation of One VHF Set in the Dist. Control Room may be taken up by 15.6.02.

iii. Communication infrastructure to ensure smooth information flow from the inaccessible areas like Kud Gunderpur (Dhankauda Block), Meghpal (Jujumura Block), Khinda & Kisinda (Naktideul Block) need be ensured.

iv. The Power Boat may be got repaired and kept in serviceable condition so that during monsoon, it can be set in to action during the Flood.

v. To keep the Police Force alert to move into action at short notice in case of flood or other natural calamities.

8.1.8 Chief District Medical Officer:

i. To take stock of availability and requirement of all medicines in the ANM Centres, CHCs, P.H.Cs, Subdivisional Hospitals and Dist. Hdqrs. Hospitals and in case of anticipated further requirement, the same should be procured by 15th June. Life saving medicines, Snake biting medicines, medicines for Flood / drought victims, Sunstroke and Lightening victims and medicines under Pancha Vyadhi treatment should be in the priority list. ORS Packets and I V Fluids should also be sufficiently provided in all the health institutions and the ORS packets in all the Anganwadi Centres.

ii. During monsoon all the wells / ponds and other water bodies in the villages to be disinfected. Wells are to be treated with Halogen tablets are to be provided to all.

iii. Emergency Control Rooms be kept working with telephone numbers and a responsible person in charge round the clock. The Control Room now functioning in the Dist. Hdqrs. Hospital should be revitalized as no response is getting many a time when required.

iv. The arrangement made for mitigation of heat-wave must continue in addition to the flood / drought action plan to be prepared by the CDMO.

v. A team of Doctors be kept always in alert to move in to action as and when emergency situation arise and the health measures taken during pre / post flood situation be reported to the collector daily / weekly.

vii. Vacancies of medical / paramedical staff at the grass root level be filled up subject to the clearance of the appropriate authorities to ensure health care to the people at the village level.

viii. Cases of death due to Lightening and other calamities be enquired jointly by the local Med. Officer and Rev. Officers and report submitted to the Collector immediately. The Med. Officers should be instructed not to wait for further orders of the CDMO or SDMO for such enquiry.

8.1.9 Chief Dist. Veterinary Officer:

i. Health care of the Cattle be ensured including arrangement for their drinking water.

ii. Ghosalas be identified for giving shelter to the cattle in case of emergency.

iii. Arrangement of fodder and cattle feed be ensured.

iv. Action plan for growing fodder be prepared and submitted. No. of such cultivators / No. of persons availed land under lease and the guide lines of the Govt. in the matter be reported to the Collector for follow up action with the Relief Branch of the Govt. One person from every Block be identified and motivated for the purpose.

8.1.10 DFO (Wild Life):

i. The Power Boat available with him be kept in good condition for use at the time flood (for rescue and relief purpose).

8.1.11 Executive Engineer, WESCO, Sambalpur & Jharsauguda:

i. Trimming of trees above the electrical lines be ensured by June
 ii. Repair of joints of the electrical lines need be ensured by 1st week June. There are several incidents of accidents and death due electrical shocks from the broken lines.

8.1.12 Supndt. Engineer, Hirakud Dam Circle, Burla / Exe. Engineer, Burla:

i. Repair of all the Irrigation canals in the district be ensured before the ensuing Monsoon.
 ii. Irrigation of all the lands under the ayacut area as per approved Khariff programme be ensured.
 iii. Repair of all the vulnerable areas in the embankments and breeches of last flood to be repaired. They should also ensure proper maintenance of the Ring road, particularly the portions cut off during last flood.
 iv. Opening and closure of the Gates of the Hirakud Dam need be discussed with Dist. Administration and finalized. In case, more than 8 gates are to be opened, the intimation be given giving minimum 48 Hrs to ensure wide publicity in the habitation along the down stream.
 v. Inflow & outflow to the reservoir of Hirakud Dam from Mahanadi, Ib and other tributaries be informed to the Collector daily in writing from 15th June.
 vi. All the Power Boats may be repaired and the number of such Boats functioning be reported to the Collector.
 vii. Control Room be activated and the number. of the Control Room be intimated to the Collector and widely published in the local new papers for public information. An Officer in the rank of Asst. Engineer be kept in charge of the Control Room round the clock in addition to other supporting staff.

8.1.13 Dy. Director, Agriculture / Project Manager, OAIC/ Ex. Engineer, OLIC:

i. The agricultural activities be limited to the programme approved. The farmers be strictly asked not to take up agricultural operation out side the programme approved. Advance / timely sowing operation and early raising of seedling is to be ensured. Alternative arrangement for seedling be made to supplant damage, etc. due to flood or other calamities preferably near to the Katas, Dug Wells, etc.
 ii. Farmers be educated / motivated to adopt crash crops instead of paddy, particularly in the high land. Different Govt. schemes meant for farmers be informed to the farmers through the VAWs.
 iii. Distribution of sufficient stock of seeds and fertilizers and other agricultural implements to the sale centers be ensured. There should not be complaints from the farmers about non-availability of seeds or fertilizers.

iv. Fortnightly weather and crop situation report indicating program / progress of agricultural activities, condition of crops, use of fertilizers etc. in low land, medium land and high land and all other relevant information in connection with be submitted to the Collector by 3rd and 17th of each month.

v. Electric connection to all the pump sets now not functioning in Kud Gunderpur is to be ensured for agricultural operation through the Lift Points.

8.1.14 Dy. Registrar of Co-operative Societies:

i. Different schemes sanctioned by the Govt. for Khariff activities be implemented immediately.

ii. Conversion proposal in favor of Small / Marginal and poor loaners be taken up and progress reported every fortnightly.

iii. E.P. Cases to be instituted against the defaulters/ big farmers and the progress reported along with the Fortnightly report.

8.1.15 Ex. Engineer, RWSS:

i. In case of damage of Tube Wells or Piped Water Schemes, arrangement for provision for drinking water in the area through tankers be ensured. Syntax tanks in such cases are to be supplied in the vulnerable areas.

ii. Sufficient quantity of riser pipes, handles, etc. be procured and kept in stock.

iii. Arrangement made for the heat wave situation should be kept going on during the monsoon also.

8.1.16 Ex. Engineer, PHD:

i. To complete survey of the Tube Wells situated in the flood prone areas and likely to be submerged during the flood and necessary arrangement for supply of drinking water in such locality may be made by 1st June and a copy of the action plan be submitted to the Collector.

ii. List of defunct MCL Tube Wells be prepared and submitted to the Collector for its replacement as and when further allotment from the Govt. receives.

iii. The action plan prepared for the Heat wave mitigation should continue till the Monsoon is over.

8.1.17 Executive Officer, Sambalpur Municipality / all NACs:

i. Repair of roads where path holes exist be repaired to avoid accident during heavy rain.

ii. Trimming of tress and felling of dry / hanging tress are to be ensured by Ist week of June.

iii. Cleaning of drains, large water bodies before the monsoon is to be ensured.

iv. All embankments in the Vulnerable areas be repaired / maintained.

v. Executive Officer, Sambalpur Municipality to contact the Ex. Engineer, Irrigation, Burla and take advance step to get the breached points in the last flood is well maintained to avoid further breach.

8.1.18 District Fire Officer:

i. He shall be in alert during monsoon and his team be ready for action at short call. The drivers and the staff engaged with the Fire Brigade should not be allowed leave during the period of monsoon.

8.1.19 DIPRO:

i. He must make arrangement for release of news bulletin to the press and media regarding rain fall, flood, release of flood water from the Hirakud Dam, preventive measures taken and all other activities, the district administration is taking to mitigate the distress of the people.

ii. He must keep close liaison with Dist. Emergency Officer / Addl. Dist. Magistrate and the Collector for the purpose.

8.1.20 All District Level Officers:

i. Under the provisions of the Orissa Relief Code and instruction of the Govt., The RDC & the Collector are competent to requisition the service any Officers in the District irrespective departments for relief duty at the time calamity. Therefore, as a matter of preparedness, no Officer shall leave their Hdqrs. Without the knowledge of the RDC & Collector even when they are allowed to do so by their competent authorities. This instruction be strictly be carried out from the month of June as their services will be required at any time during the Monsoon.

ii. In case an Officer is allowed to leave headquarters, it should be the responsibility of the Officer leaving the headquarters to keep a responsible person in charge of him to answer / explain the activities of the department as and when required.

iii. The departmental Officers must be always in readiness to move to the field for relief duties.

8.2 CHECK LIST**Check List for Control Room**

Activities	Pre Disaster	During Disaster	Post Disaster
Assignment of Duty	√	√	√
Maintain inventory of resources	√		
Identification of Weak and vulnerable points	√		
Proper setting up of the control room	√		

Provide information who need it	√	√	
Service division and assign duties	√	√	√
Receive information on a routine basis and record	√	√	√
Receive preparedness report from various relevant dept.	√		√
Basing on the reports feedback to the state authority and others	√	√	√
Vulnerable area map displayed	√	√	
Imp. Phone numbers	√		

8.3 CHECKLIST FOR VARIOUS DEPARTMENTS

District Magistrate & Collector

Activities	Pre Disaster	During Disaster	Post Disaster
Vulnerable and risk assessment map	√		
Cut off areas with safe route map	√		
Storing facilities	√		
List of dealers for food	√		
List of volunteers	√		
Control room set up	√		
Boat and transportation for rescue	√		
Transportation for food supply	√		
Pre-positioning of staff	√		
Evacuation and rescue of people		√	
Coordination and linkage		√	
Damage assessment			√
Alternative communication system	√	√	√
Pulling resources from out side if required	√	√	
Having network with neighboring districts	√	√	

8.3.1 CDMO

Activities	Pre Disaster	During Disaster	Post Disaster
Stock position of life saving drugs, ORS, IV fluids and other equipment	√		
Distribution of ORS, Halogen to field areas	√	√	
List of contact address of field staff	√		
List of volunteers	√		
List of DDC/ AWW	√		
List of epidemic/risk prone areas	√		
List of site operation areas	√		
Mobile health unit	√		
List of Dist./ health control rooms	√		
List of private and local doctor	√		
Awareness through propagation of healthy practices	√	√	
Trained the District/Block/GP/village taskforces on use of medicine and first aid	√		
Daily disease report collection and analysis		√	√
Preventive measures	√		

8.3.2 Executive Engineer Irrigation

Activities	Pre Disaster	During Disaster	Post Disaster
Stock piling of repair materials like sand, bags, bamboo at vulnerable points [Place name] etc.	√		
Provision of guarding of weak points	√	√	
Taking help of community for maintenance of the embankments	√	√	
Taking proper measures for protecting the weak points	√		
Co-ordinating with others	√	√	√

8.3.3 Deputy Director, Agriculture

Activities	Pre Disaster	During Disaster	Post Disaster
List of different areas to be affected by different hazards	√		
Crop pattern with land holding	√		
List of irrigation points with status	√		
Alternative crop	√	√	
Assessment of damage			√
Provision of seeds and others	√	√	
Helping in raising of community nursery for seedling/sapling			
Crop insurance	√		
Generate seed bank/grain bank at village level	√		
Coordinating with others		√	√

8.3.4 CDVO

Activities	Pre Disaster	During Disaster	Post Disaster
Data base on animal population with categories	√		
Listing out possible problems on account of different hazards	√		
List of dealer of feeds/fodder	√		
List of cow sheds	√		
Programme for mass vaccination	√	√	
Trained the taskforce to use of medicine	√		
Coordinating with others		√	

8.3.5 Executive Engineer (RD/PWD)

Activities	Pre Disaster	During Disaster	Post Disaster
Identification of weak points	√		
Repair the weak points before hazards season	√		
Stockpiling of building materials	√		
List of dealers for building materials	√		
Promotion/training of people on retrofitting/ resistance building	√		√
Arrangement of equipment for road clearance	√		

Mock Drills Plans:

Time	Process	Responsible Person
½ Yearly (May & Oct.)	From District to Block followed by Gp and Village	Collector, DEO, ADM, PD-DRDA, Sub-Collector, Tahsildars, BDOs

Schedule for updating plans:

Plans	Updating Time
District Disasters Management Plan	½ Yearly (April & Sep)
Line Departments Disasters Management Plan	½ Yearly (April & Sep)

CHAPTER-

MITIGATION PLAN

Sector wise Vulnerability Reduction Measures:

Type of Sector	Sub-Sector	Mitigation Measures	Responsible Department/ Personnel	Time Frame
Infrastructure Development	IEC Activities	<ul style="list-style-type: none"> • Distribution of leaflets , posters & wall painting . • Awareness generation programme in schools and colleges, conducting padayatras. • Organising staff development and refresher training for concerned dept. and task force • Conducting of regular Mock Drill . • Plantation Programme. 	DIPRO & NGO Co-ordination Cell.	Through out the year (With regular intervals)
	Road	<ul style="list-style-type: none"> • Identification/ repair of main and alternative routs • Repair of identified vulnerable points . • Encouraging water way ferry 	PWD, RD and Block	During normal Time & Immediately after disaster
	Embankment	<ul style="list-style-type: none"> • Strengthening and raising the height of weak embankments, points • Storage of flood fighting materials like sandbags, bamboo's mats etc. 	• Irrigation Deptt.	During pre-flood season
	Bridges	<ul style="list-style-type: none"> • Regular maintenance of Bridges. 	R & B & RD deptt.	During normal period
	Safe Shelters	<ul style="list-style-type: none"> • Ensuring maintenance of Flood shelters • Identification of places for preparation of mounds and cattle shelters. • Ensuring multipurpose use of shelters by community, schools, NGOs, CBOs . 	Sub-Collectors, BDOs & NGOs	During normal period

Type of Sector	Sub-Sector	Mitigation Measures	Responsible Department / Personnel	Time Frame
Infrastructure Development	Communication	<ul style="list-style-type: none"> Ensuring proper maintenance of Telephone, FAX, WLL Phones ,Wireless & VHF sets . Ensuring timely setting of Wireless Stations in District/ Block Office. Installation of VHF / HAM Radio in all the Block Headquarters 	BSNL, OSDMA, SP Signal	April-May
	Drinking Water & Sanitation	<ul style="list-style-type: none"> Assessment of running /defunct Tube wells & make necessary arrangements Identification of scarce water pockets and installation of water supply system. Identification of sub-mergible TWs and raising of its platform height. Arrangement of Tankers / Syntax Tanks. Assessment of requirement of disinfectants and ensuring its regular use. 	PHD & RWSS	During normal time & immediately after disaster
	Power	<ul style="list-style-type: none"> Ensuring proper maintenance of Electric Sub-Stations , Power grids Installation of Solar Lamps nears flood & Cyclone shelters & ensure its maintenance. Ensure un-interrupted power supply to the district control room during disaster period 	CESCO	Through out the year.
Health &	IEC Activities distribution leaflets	<ul style="list-style-type: none"> Distribution of leaflets , posters & wall painting , Conducting meeting / workshops, staff development training , orientation to village level volunteers , taskforce members . Awareness generation programme 	CDMO, CDVO & NGO	Pre, during & post disaster period.

Animal Husbandry	Vaccination/ Disinfections	<ul style="list-style-type: none"> • Procurement & stock piling of vaccines. • Regular vaccination of domestic animals . • Regular dis-infection of TWs , Wells & Ponds . • cleanliness of Medical / Hospital Campus • Procurement of a Refrigerator for Veterinary Hospital. 	CDMO & CDVO	Pre, during & post disaster period.
	Training	<ul style="list-style-type: none"> • Imparting trainings on Health care, sanitation, insurance First Aids to Medical staff as well as volunteers 	CDMO	During normal period.
Livelihood Sector	IEC Activities	<ul style="list-style-type: none"> • Distribution of leaflets, posters & wall painting, • Conducting meeting workshops staff development training , orientation to village level volunteers & to beneficiaries on EDP (Entrepreneurship Development Programme). • Awareness generation programme such as conducting relies street plays etc. 	BDOs, DIC, Banks	During normal period.
	Agriculture	<ul style="list-style-type: none"> • Alternative cropping , Installation of L .I. Points . • Crop Insurance, Provision of Credit Facilities & Cold Storage 	Dy. Director Agriculture & DAOs,	During normal period.
	Horticulture	<ul style="list-style-type: none"> • Providing nursery raising training & insurance facilities. 	Dy. Dir Horticulture Department.	During normal period.
	Fishery	<ul style="list-style-type: none"> • Providing fishery training 	Dy. Dir Fishery Department.	During normal period.

Insurance	IEC Activities	<ul style="list-style-type: none"> • Distribution of leaflets, posters, wall painting, • Organising meeting workshops staff development training , orientation to line department , Block functionaries, NGOs , village level volunteers & to beneficiaries on Insurance Schemes. • Awareness generation programmes such as conducting relies street plays etc. 	Block , Insurance Companies , Agriculture Department , Bank , NGOs.	During normal period.
	Infrastructure	<ul style="list-style-type: none"> • Maintenance of Roads / Building • Maintenance of Block Level / GP Level Storage godown 	R & B,	During normal period.
	Life & Livelihood	<ul style="list-style-type: none"> • Insurance of life, livestock, Crop & small business units etc. 	Block , Insurance Companies , Agriculture Department , Bank , NGOs.	During normal period.