

CHAPTER - I

INTRODUCTION

Nature is the master of man, It is the nature provides for every body's need, but not every body's greed. But the mastery of nature is most often challenged by the man and man tries to be the master of nature. As a result the men exploit the nature for its greed and leads to natural disequilibrium and we call it DISASTER. The first question arises into our mind that what is DISASTER? As per the High Power Committee (HPC) on disaster management "DISASTER is an event triggered by natural or manmade causes that leads to a sudden disruption of normalcy within society, causing widespread damage to life and property."

Hence DISASTERS are catastrophic happenings where normal patterns of life get disturbed and external help becomes crucial to save life. Prevent injury and safeguard infrastructure.

DISASTER may be categorized into two types

1. Natural Disaster
2. Manmade Disaster.

DISASTERS indentified by HPC (2001) both natural and manmade are as follows:

1. Water and Climate related Disaster.
 - ✓ Flood
 - ✓ Cyclone
 - ✓ Tornadoes & Hurricanes
 - ✓ Cloud Burst
 - ✓ Heat wave & Cold wave
 - ✓ Snow Avalanches
 - ✓ Droughts
 - ✓ Sea erosion
 - ✓ Thunder & lightning
 - ✓ Hail storm
2. Geologically Related Disaster.
 - ✓ Land slides
 - ✓ Earthquakes
 - ✓ Dam Burst
3. Chemical, Industrial and nuclear related disaster.
 - ✓ Chemical and Industrial disaster
 - ✓ Nuclear disaster

4. Accident related disaster
 - ✓ Forest fire
 - ✓ Urban fire
 - ✓ Village fire
 - ✓ Snake bite
 - ✓ Mines fire
 - ✓ Mines flooding
 - ✓ Oil spill
 - ✓ Serial bomb blasting
 - ✓ Festival related disaster
 - ✓ Electrical disaster
 - ✓ Air/ Rail and Road Accident
 - ✓ Boat capsizing

5. Biological disaster
 - ✓ Epidemics
 - ✓ Pest attack
 - ✓ Food poisoning

Major natural disasters that adversely affect India-

- A. Cyclone
- B. Drought
- C. Earthquake
- D. Fire
- E. Flood
- F. Land slide
- G. Tsunamis
- H. Hail storm

General features of disaster impact relate to

- i. Falling apart of normal pattern of life
- ii. Loss of life and property
- iii. Adverse impact on economic and social structure
- iv. Disruption in community needs of food, shelter, clothing & medical help.
- v. Onset of Psychological trauma
- vi. Loss of lives, crops, livelihood
- vii. Disruption of communication & transport
- viii. Law and order problem
- ix. Epidemical treat
- x. Migration (Both short & long term)

DISASTER MANAGEMENT.

If disaster is an unavoidable feature to nature, what is the role of Civil Society or Govt. to manage this situation? Hence question arises in our mind what is disaster management? The Disaster Management Act 2005 defines- disaster management as a continuous and integrated process of planning, organizing, coordinating and implementing measures, which are necessary to prevent danger or threat of any disaster, mitigation or reduce the risk or severity or consequences of any disaster, capacity building and preparedness to deal with any disaster, prompt response to any threatening disaster situation.

Disaster Management as an activity involves measures to:

- Reduce the risk.
- Provide in time assistance to affected group.
- Ensure rapid recovery and rehabilitation after disaster.
- Preparedness rather than post crisis management.
- Co-ordinated participatory approach.
- Technology up gradation.
- Linkage between disaster & development.
- Forecasting & warning using latest technology.
- Disaster Management as a continuous and integrated part of development process.

DISASTER MANAGEMENT CYCLE

The Disaster Management cycle generating comprises four major stages:

1. **Pre Disaster Stage** :- Pre disaster prevention, preparedness and mitigation stage rests on the principle that prevention is better than cure.
2. **During Disaster** :- During disaster response & relief includes immediate disaster search and rescue operation, provision of food, clothing and shelter for the affect.
3. **Post Disaster** :- Post Disaster rehabilitation, reconstruction and recovery take into view the efforts to restore all essential facilities to pre disaster status. They focus on measures that could pave the way for long term recovery social, economical and physical structures as well as process in such a way that future disasters are uable to impact severely.

Let us look at the nature of disaster management activity at those stages in details.

<u>Disaster stage</u>	<u>Nature of Activity</u>
Prevention	Prevention actions aims at totally avoiding the adverse impact of hazards and providing meets to minimize environmental disaster.
Mitigation	Mitigation means any action taken to minimize the extent of disaster or potential disaster. Mitigation can place before / during or after of disaster.
Preparedness	Preparedness entails activities taken in advance to ensure effective response to the impact of hazard, including the lively and effective early warning, preparation of emergency plan, temporary evacuation of people and property from threatened locator.
Response & relief	Relief can be an immediate, short term or protracted duration. For example search and rescue of the affected people and provision of food, temporary shelter and medical care to the person affected by disaster. The main objective of relief is to assist the affected person to start their normal activities again.
Rehabilitation	Rehabilitation process includes all operators and decisions taken after a disaster with a view to restoring an affected community to its former living conditions by encouraging and facilitating the necessary adjust meets to the changes caused by the disaster.
Reconstruction	Process of reconstruction includes the action taken to re-establish a community, following rehabilitation after a disaster. Those actions generally includes construction of permanent housing complete restoration of all services and physical infrastructure to that of the pre-disaster state.

VISION AND OBJECTIVE OF DM PLAN

1. Vision

The aim of the District Disaster Management Plan is to assess the available resources of the District and ensure the optimum utilization of the resources in the shortest possible time with minimum simple orders and procedure by activating the participation of Government, community and volunteers at all levels. Further this plan will focus on making maximum utilization of human resources, material resources, social resources to prevent loss of lives and minimize the loss of property serving fastest restoration of the situation.

2. Rationale

Basing on the past experiences to combat natural disasters such as flood and cyclone that has ravaged a major portion of the densely populated areas of Mayurbhanj district, followed by the spread of epidemics and allied diseases, the follow up actions taken thereby and the lessons learnt from it, the rationale of an effective and realistic District Disaster Management Plan was felt. A comprehensive DDMP will strengthen the efforts of the District Administration.

3. Objectives

The objective behind the preparation of the District Disaster Management Plan is:

- To mitigate impact of natural and man-made disasters through preparedness at District, Block, Panchayat and Village level.
- To create awareness among the people about hazard occurrence and increase their participation in preparedness, prevention, development, relief, rehabilitation and reconstruction process.
- To have response system in place to face any eventuality

District Disaster Management Plans are also useful at pre-disaster stage, when warnings could be issued, for example that floods are imminent. The plan again serves as guide to officials at the critical time and precious time is saved which might otherwise be lost in consultations with senior officers and getting formal approval from authorities. As it is neither economical nor practicable to protect every item and the entire population against calamitous situations, response plans are formulated for relief, rehabilitation and restoration by separate agencies.

District Disaster Management plan is an operational module for the district administration, how to mitigate the different types of disaster effectively with the locally available resources and personnel and to provide the distressed people with immediate relief. It also ensures a checklist for all the stakeholders for an action oriented response structure and to study their preparedness level.

4 Perspectives and Strategy

A formal plan for managing disaster includes:

- Pre planning a proper sequence of response actions
- Allocation of responsibilities to the participant agencies
- Developing codes and standards operating procedures for various departments and relief agencies involved
- Inventory of existing facilities and resources
- Mechanism for effective management of resources
- Coordination of all relief activities including those of NGOs to ensure a coordinated and effective response
- Coordinating with the state response machinery for appropriate support
- Testing the plan through mock drills
- Defining levels of acceptable risk
- Monitoring and evaluation of actions taken during relief and rehabilitation

CHAPTER – II

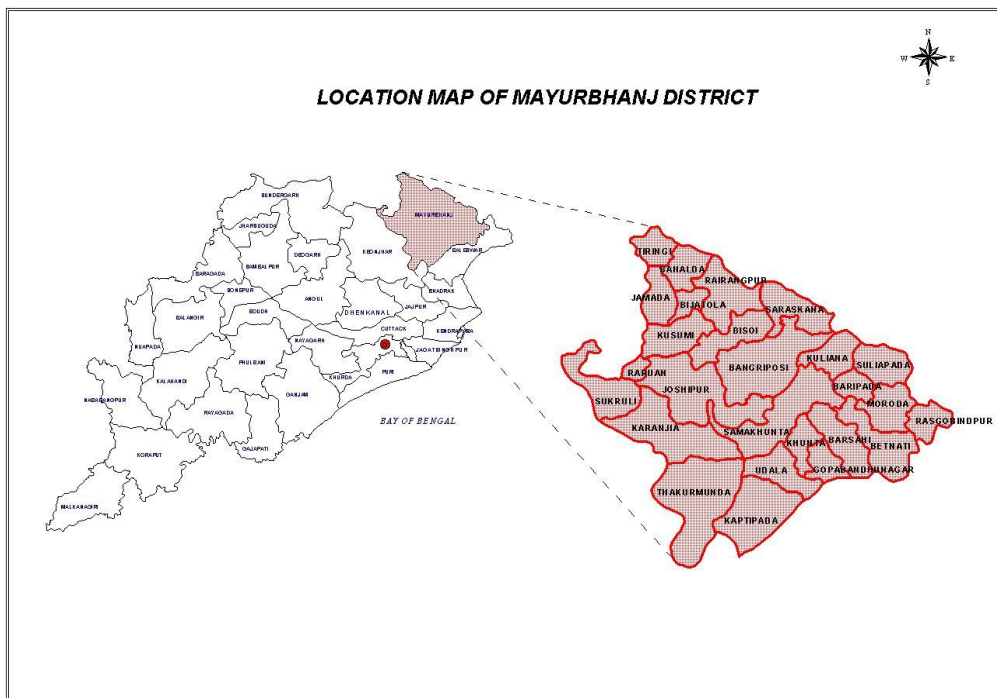
1. Overview of the District

Mayurbhanj presents a panorama of many millennia in the human story. The Similipal Hills still un-trodden in many parts have a charm of their own. Rich in Natural Resources, they stand in their virgin glory and present captivating scenery with animals and plants flourishing in their natural habitat. Mayurbhanj had the distinction of being administered by two contemporary medieval ruling families named as “Mayurs” and “Bhanjs” in unbroken continuity for over a thousand years, until the merger with the state of Orissa on January 1, 1949 and hence the name of the district

2.1 Locations, Area and Administrative Division

2.1.1 Location of Mayurbhanj:

Mayurbhanj is a landlocked district with a total geographical coverage of 10,418 Sq.Km. and is situated in the Northern boundary of the state with district Head quarters at Baripada. The district lies between 21° 16' and 22° 34' North latitude and 85° 40' and 87° 11' East longitudes. The district is bounded in the North by Midnapore district of West Bengal and Singhbhum district of Bihar in the South & East by Balasore West by Keonjhar.



The district is 559.31 mt. above the sea level.

Geographical Area	:	10,418 km (Largest District in order of size)
Forest area	:	4392.13 Sq. Km
Reserve Forest area	:	3330.14 Sq/Km
Population	:	25,14,000 (as per 2011 census)
Male Population	:	12,54,000
Female Population	:	1,26,000/-
Sex Ratio	:	1005
Rural Population	:	2321000
Urban Population	:	193000
S.T.(Male)	:	631149
S.T(Female)	:	627310
S.C. (Male)	:	85844
S.C(Female)	:	84991
Number of Sub-Divisions	:	:4
Number of Blocks	:	26
Number of ULBs	:	Municipality - 02 NAC - 02
Number of GPs	:	382
Number of Revenue Villages	:	3950
a) Inhabited	:	3748
b) Uninhabited:	:	202
No. of Wards	:	5253
Number of ITDAs	:	4
Number of Tahasils	:	26
Number of Fire Stations	:	:10
Assembly Constituencies	:	:09
Literacy Rate	:	69.00 %
Male Literate	:	79.22 %
Female Literate:	:	58.70%

2.1.2 Area and Administrative Divisions:

The District of Mayurbhanj is divided into four administrative Sub-Divisions namely

Sadar - Sub-Division with head quarters at Baripada

Bamanghaty Sub-Division with head quarters at Rairangpur

Panchpir Sub-Division with head quarters at Karanjia

Kaptipada Sub-Division with headquarters at Udala.

Besides the district is divided into 26 Tahasils, 26 C.D Blocks, 382 Grampanchayats, 3950 Revenue Villages, 30 Police stations, 16 police out-posts, 02 Municipalities (Baripada & Rairangpur) and 2 NACs (Udala, Karanjia).

Sl. No	Name of the Sub-division	Headquarters	Number of Blocks	Name of Tahasils
1	SADAR	Baripada	Betnoti, Suliapada, Moroda, Kuliana, Shamakhunta, Badasahi, Rasgovindpur, Bangiriposi, Saraskana, Baripada	Betnoti, Suliapada, Moroda, Kuliana, Shamakhunta, Badasahi, Rasgovindpur, Bangiriposi, Saraskana, Baripada
2	BAMANGATHY	Rairangpur	Bisoi, Bijatala, Rairangpur, Bahalda, Jamda, Kusumi, Tiring	Bisoi, Bijatala, Rairangpur, Bahalda, Jamda, Kusumi, Tiring
3	PANCHPIR	Karanjia	Jashipur, Karanjia, Raruan, Thakurmunda, Sukruli.	Jashipur, Karanjia, Raruan, Thakurmunda, Sukruli.
4	KAPTIPADA	Udala	Khunta, GB Nagar, Udala, Kaptipada	Khunta, GB Nagar, Udala, Kaptipada

2.2 Land:

The District of Mayurbhanj has Geographical area of 10,418 Sq. Kms. (or 10.40 lakh hectare), which is 6.68% of the total geographical area of the State. Mayurbhanj being a land locked district and the central portion being covered by a group of hills named as SIMILIPAL the percentage of plain lands is quite lower in comparison to other lands. As the area is mainly undulating except along the few rivers and as it comprises ridges, slopes and depressions the agricultural lands are mostly terraced to catch the surface drainage coming from the up-lands. The forest area of the district is about 4.39 lakh hectares and the net area sown is 4.05-lakh hectare.

2.3 Forests

Mayurbhanj is a land of lush green forests.

The Similipal forest of the district comprising a single compact area represents virgin semi-ever green form. The growth of the forest is thick and impenetrable and is dominated by gigantic growth of large number of tree species chief being Sal. Other species such as Piasal, Asan, Neem, Kusum, Mahul, Dhow and Sisu are found all over the area too. The under growth is thick in Similipal Reserve forest but thin towards the periphery.

2.4 Climates:

The general climate of the district is characterized by oppressive heat in summer, severe cold in winter with high humidity throughout the year.

The rainfall distribution is equal during the monsoon period. The period from June to October is the rainy season and the district experiences it from the southwest monsoon.

May is the hottest month when the mean daily maximum temperature rises up to 47^o Celsius. December is usually the coldest month of the year when the mean daily minimum temperature dips to 4^o Celsius. The higher reaches of the Similipal experiences frosting during the peak of winter.

2.5 Rainfall

. The rainfall is uniform all over the district except a low rainfall for the Bamanghaty subdivision. Storms and depression, which originate in the Bay of Bengal during monsoon, passed over the district during their westward movement and cause heavy rains in the catchments area of the rivers in the district. During this period the rivers were charged with huge quantities of water followed by a flash flood situation. In most of the years, the district has experienced temporary/ long dry spell or flood situation in some parts of the district due to inadequate/heavy rainfall.

The detail year wise rainfall of the district is attached in annexure – A (Last three years)

2.6 Socio-Economic Features

The economic condition of the district is ordinarily affected because of the continual visitation of natural calamities like: flood, cyclone and drought, Heat wave, lightening causing devastation in the fertile region as well as loss of lives and properties in some parts of this district every year. In Mayurbhanj district Tribal concentration is above 70%. So it is natural that the people are in a low socio-economic condition.

2.7 Agriculture and Cropping Pattern

Mayurbhanj is surrounded by no of forest areas as well as Rocky Mountains. People used to cultivate Paddy in most parts of the hill slopes and in plain lands. Most of the cultivators grow short duration local paddy in the un-bonded upland during Kharif season. The crop suffers moisture stress at different stages due to inadequate rainfall.

2.8.10 River Systems

The Budhabalanga is the main river which rises from the Similipal Hills and flows about 90 Km through the district. Katra, Palpala, Chipat, Sono & Gangahar hill streams are its important tributaries. The river Baitarani divides the districts of Mayurbhanj and Keonjhar. The river Subarnarekha meanders through the state of Bihar, West Bengal and Orissa.

There are reservoirs constructed over the streams of Sono River and Kalo River near Udala and Deo River near Karanjia keeping importance of flood control and irrigation.

The District is mainly covered by the following rivers.

Sl No.	Name of Rivers	Areas Covered
1	Budhabalanga	Baripada Sub.Div
2	Jambhira	Baripada Sub.Div
3	Sono	Kaptipada Sub. Div
4	Gangahar	Kaptipada Sub. Div
5	Kharkai	Bamangathy Sub. Div
6	Bhandan	Panchpir Sub.Div.
7	Deo	Panchpir Sub.Div.
8	Simi	Bamangathy Sub. Div & Panchpir Sub.Div.
9	Baitarini	Western Boundaries
10	Subarnarekha	North Boundaries

Danger level at different Locations:

SL. NO	NAME OF THE RIVER	LOCATION OF GAUGE	ZERO VALUE OF GAUGE	WARNING LEVEL	DANGER LEVEL	REPORTING OFFICER
1	BUDHABALANGA	ASTIA	23.30 M	29.70 M	30.92M	EE, Mayurbhanj Irrigation Div.
2	SUBARNAREKHA	RAJGHAT	5.79 M	9.45 M	10.36 M	-do-

These are the different locations where danger levels can be identified in the shortest possible time limits. The reporting Authority is the EE, Mayurbhanj Irrigation Division and also IMD, Baripada situated at Poda Astia.

2.9 Transport and Communication Network

The District is surrounded by NH-18 and NH-6 on both sides. As West-Bengal is close to this district there is a check gate near Jamsola, which permits several vehicles for Inter-State operations. The NH-18 passes the district from Balasore and NH-6 joins at Jharpokharia (inside the district). NH-6 has been joined from Karanjia Block to the place Jharpokharia. There are major District roads in the district joining Baripada to Balasore via Udala, Baripada to Jaleswar via Rasgovindpur. The Block Head quarters and Sub-divisional Headquarters are connected with district roads.

A Broad gauge rail communication is in operational starting from Rupsa to Bangirposi via Baripada covering 100 Km (approx). A broad Gauge Railways Track is functional from Badampahad to TATA via Rairangpur coming under Panchpir and Bamangathy Subdivisions. This District is accessible with communication facilities as road and inter-rail networks. The state capital is 272 Km from district headquarters.

Name of Places	Distance in Km from Baripada	Communication service	Expected Time
State Capital	272	Road & Railway	6 Hours
Calcutta City	240	Road & Railway	5 Hours
Balasore	65	Road & Railway	2 Hours
Keonjhar	180	Road	4.5 Hours
Udala	45	Road	1.5 Hours
Karanjia	122	Road	3.5 Hours
Rairangpur	80	Road	2.5 Hours
Rasgovindpur	40	Road	1.5 Hours

2.10 RESOURCES in Mayurbhanj

2.10.1 Area

The District has a geographical Area of 10418 sq. kms(or 10418 lakh hectares), which is the 6.69% of the total geographical area of the State. The percentage of plain land is comparatively lower than the highland and hills. The district has a cultivable area of 4,37,000 ha. Of this the area under paddy is about 3,29,700 ha. Rice being the staple food of the district, the farmers cultivate paddy in both Kharif & Rabi. The forest cover stretches over an area of 439,200 ha, which accounts for 43% of the total area of the district.

2.10.2 Soil

The soil of the district may be broadly classified into Red soil and Laterite soil . The red soil is further classified into three subgroups namely Typical soil, Red loamy soil and Clay-loam soil. Typical red soil is found mostly in the hills of Bamanghaty & Panchpir sub-divisions and is suitable mainly for paddy, millets, sabai grass and other minor crops.

Red soil, which are found near riverbanks, are suitable for early variety paddy, groundnut, til, castor, black mung and kulthi.

The clay-loam type is found in the sub-division of Kaptipada and Baripada. Medium & late varieties of paddy are grown on this soil. The land remains fallow after the first harvest. However, in some areas gram, linseeds etc are cultivated.

Laterite soil is found in hill & plateau. Two types of laterites namely laterite morrum & laterite rocks have so far been identified in the district. These serve no productive value for agricultural purpose.

2.10.3 Mineral resources

Iron ore (Hematite), Vanadiferous and Tintaniferous, Magnetite, China clay, Galena, Kyanite, Asbestos and Quartzite constitute the principal mineral resources of the district. Of these, iron ore deposits of Gorumaisani, Badampahad & Suleipat hills in Bamanghaty sub-division have been exploited for a period of more than half of century. Galena and lead-ore were discovered between Pithabata & Bangriposi belt, stretching over 30 kms.

2.10.4 Water resources

Mayurbhanj has nine major perennial rivers namely Budhabalanga, Deo, Sunei, Gangahar, Jambhira, Kahirbhadan, Bankbal, Katara and their tributaries, which originate mainly from Similipal Hills. These provide a good potential water resource through out the district. However, only 23.4% of the net shown area is irrigated and the farmers mostly depend on the monsoons for a normal harvest. The need for expansion of irrigation facility is highly essential for the socio economic development of the people. There is a great scope for exploitation of irrigation potential for the all round benefit of the farmers. Besides, there is a tremendous scope for fresh water fishery through scientific aquaculture and exploitation of capture fishery.

2.10.5 Animal Resource

The livestock section is closely associated with Agriculture and it plays an important role in the district economy in terms of income & employment. It is the most important occupation subsidiary towards cultivation, among small & marginal farmers, women & landless agricultural laborers. Most of the people in rural areas rear live stock & poultry. Though there is a good potential for diary farming, which has not been fully exploited. Against the ICMR recommendation of 250 grams per capita consumption per day, use of milk in the district is 22 grams, which is less than half of the state consumption of 47 grams – the national consumption level per day being 214 grams. There is therefore, the need & scope to develop diary activities in the district.

Cattle Population:

Cattle (Crossbred)	44372
Buffalo:	26280
Sheep:	166636
Goat:	686785
Cow (Cross bred)	30707
Poultry	2802928
Pig	80902

2.11 Financial Institutions

Baripada being the head quarters of the district the State Bank Of India is the leading Bank. It has branches at district, sub-divisions and other important places. Other than this bank the branches of Bank of India, Syndicate Bank, Bank of Baroda, U.B.I, Andhra Bank, Allahabad Bank, Central Bank, Axis Bank, HDFC Bank, UCO Bank, Indian Overseas Bank, ICICI Bank, IDBI Bank are in the district.

2.12 Safe Drinking Water Facilities:

District Administration is taking up adequate steps to make provisioning of safe drinking water inside the district. This facilitates mainly the drinking water demand of the general public in the district. District administration along with Deptt RWSS is regularly taking adequate and necessary steps to repair the defunct tube wells to be functional. Besides in the four towns in the district there exists the water supply system through pipe water supply under the supervision of PHED, Mayurbhanj.

CHAPTER - III

Risk assessment and Vulnerability analysis

1. Disaster History of Mayurbhanj District: (Since 2004)

SI No	YEAR	FLOOD	CYCLONE/ WHIRL WIND	HAIL STORM	HEAVY RAIN	SUN STROKE	DROUG HT
1	2004	August	Nil	Nil	Nil	April, May & June.	Nil
2	2005	Nil	Nil	Nil	September	April, May & June.	Nil
3	2006	July to September (4 times)	Nil	July to September	July to September	April, May & June.	Nil
4	2007	July ,August, September (four times)			July, August, September.	Nil	
5	2008	June					Nil
6	2009	June					June to October
7	2010	-	-	-	December		June to October
8	2011	June, September (2 times)		May & June		April, May	-
9	2012	-				May, June	June to October
10	2013	August, 13	October	Nil	October	Nil	Nil
11	2014	Nil	October	Nil	Nil	April, May, June	Nil

3.3 Seasonal Hazard Analysis:

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

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

3.4 Disaster Probability

Sl. No	Type of Disasters	Time of Occurrence	Potential Impact/Probable Damages	Vulnerable Areas and Probability
1	Flood	June - October	Crop, Human, Animal, Infrastructure loss	Baripada Subdivision – 7 Blocks & 1 Municipality Kaptipada Subdivision- 4 Blocks <i>Once in every alternate year</i>
2	Cyclone	June - December	Crop, Human, Animal, Infrastructure loss	Entire District <i>Once in every year</i>
3	Drought	April - June	Crop loss	Bamangathy, Panchpir and part of Baripada and Kaptipada subdivisions. <i>Once in every three year</i>
4	Sunstroke/Fire	April - June	Human, Animal, Infrastructure loss	Entire District. <i>Once in every year causing more than 4 death causality</i>
5	Earthquake	Jan - December	Crop, Human, Animal, Infrastructure loss	Baripada and Kaptipada subdivisions. <i>No proper prediction</i>
6	Epidemics	June - September	Human & Animal loss	Entire District. <i>Once in every year causing a few death casualties sometimes.</i>
7	Lightening	April -October	Human, Animal, Infrastructure loss	Entire District. <i>Once or more in every year</i>

3.5 Risk Assessment vs. Vulnerable Blocks

TYPE OF HAZARD	POTENTIAL IMPACT	VULNERABILITY	VULNERABLE AREAS (BLOCK)
C Y C L O N E	Loss of crop, infrastructure, human and bovine life, livelihood system, houses, Pvt. Public property etc	Communication network. Road network of the effected block. Telephone connections. Private Infrastructures. Kutcha Houses, Semi Kutcha Houses. Agriculture/Horticulture. Crop (estimated Area), Others. Irrigation Sources. Private LI- Points, Govt. LI-Points. Electrical Installations. Drinking Water sources. Tube-wells. Wells. PHD Stand Posts Educational Institutes. Primary Schools, M.E. Schools, High Schools. Colleges.	Entire District

		<p>Live stock. Cows, Buffalos, Goats/Sheep, Poultry Farms, Vulnerable People. Handicapped, Fishermen, Old/Aged, Pregnant, Sick and ailing/diseased, Children below 5 years. Other vulnerable assets. Flood embankments, Canal embankments, Irrigation Projects, Small scale industries, Trees/orchards/plantation.</p>	
FLOOD	Loss of crop, infrastructure, human and bovine life, livelihood system, houses, Pvt. Public property etc	<p>Communication network. Road network & Telephone connections. Private Infrastructures. Kutcha Houses, Semi Kutcha Houses. Agriculture. Crop (estimated Area), Others. Irrigation Sources. Private LI- Points, Govt. LI-Points. Electrical Installations. Drinking Water sources No of tube-wells, No of wells, PHD Stand Posts Educational Institutes. Primary Schools, M.E. Schools, High Schools, Colleges. Live stock. Cows, Buffalos, Goats/Sheep, Poultry Farms, Vulnerable People. Handicapped, Fishermen, Old/Aged Sick and ailing/diseased, Pregnant, Children aged below 5 Other vulnerable assets. Flood embankments,</p>	<p>Baripada Subdivision 7 Blocks & 1 Municipality</p> <p>Kaptipada Subdivision 4 Blocks & 1 NAC</p>
HEAT WAVE	Human and bovine life.	Loss of Human & bovine life.	Whole of the District.
VILLAGE FIRE	Loss of property	Loss of property & Life.	All over the District.
DROUGHT	Loss of crop, livelihood	Crop Loss, Drinking water scarcity.	Bamangathy, Panchpir and part of Baripada and Kaptipada subdivisions.

List of Areas likely to be cut-off due to Flood in the district

Block	GPs & Villages	Reason for cut off	Alternate Rout
Barasahi	Sialighathy, Kochilakhunta, Durgapur GPs	At the left side of river Budhabalanga towards Betanoti Block. At high Flood bridge submerges.	Via Betanoti
Betanoti	Nakhara, Madhupanda, Damphouda, Deopada, Khandadeulia of Patalipura GP.	At the right side of river Budhabalanga towards Barasahi Block. At high Flood bridge submerges	Via Barasahi
Barasahi	Kantisahi, Dasipur, Adidiha, Chenguamangalpur, Bhimda, Ratanpur of Patisari GP	At the right side of river Budhabalanga towards GB Nagar Block. At high Flood temporary bridge submerges	Via GB Nagar
Rasgovindpur	Morada & Totapada of Totapada GP, Katuni RasgovindpurGP, Vedisahi, Nuhakhunta & Gambharia of Khuntapal GP, Ektali, Satsagadia & Bhairangi of Raghampur GP, Pinguli, Padmatalia, Duhilpura of San Manida GP, Jodpada & Gobara of Sarumula GP	At the right side the river water gets chennelised through crop field and at left side river Jambhura is flowing.	Villages of Rasgovindpur GP and Sarumula GP will be accessible via Rasgovindpur. But other villges in the Block get marooned and can only be accessed by Boats.
Barasahi	Dumuria, Agiria, Nunkhua, Bhuradiha, Kunchibania, Mirgidari, Danapal og Mangovindpur GP	At the left side the flood water of Gangahar River gets channeled through the crop field and thus cut off.	Via Balasore, remuna Block or by Boat
Gopabandhu Nagar	Debagaon, Patsanipur of Baradihi GP	At the right side of the river Sono	Via- Udala or by Boat
Kuliana	Kudiapal, Kathruma, Naluapal, Patihinja, Dantamusal, Kamarpal Jhirsani of Patihinja and Gendapokhari GP	At right side of river Budhabalanga	Via Shamakhunta Block

3.8 Infrastructure vulnerability against Hazards -

River Embankments:

Sl No	Name of the River	Location of weak points	Village covered	Name of the Block	Contingency Measures taken
1	Subarnarekha	T.R.E. on right bank of the river from Barahampur to Tambakhuri	Bandhamundi, Gadighaty, Berhampur, Tambakhuri	Rasgovindpur	Flood Protection measures has been taken by providing riprap under flood control measures. The weak point will be kept watch and ward during the flood. Bambo Jafri and sand bag protection will be made if required.
2	Subarnarekha	T.R.E. on right bank of the river	Tikayatpur	Rasgovindpur	R.E. has been scoured near village Tikayatpur. Night patrolling & watch and ward will be done during the flood period. Bambo Jafri and sand bag protection will be made if required.
3	Jambhira	T.R.E. on right bank of the river	Debsole, Musamari, Sansa, Ramchandrapur	Rasgovindpur	Night patrolling & watch and ward will be done during the flood period. Bambo Jafri and sand bag protection will be made if required.
4	Jambhira	T.R.E. on right bank of the river	Vedisahi, Pinguli, Padmatalia, Badampur, Ektali,	Rasgovindpur	Earthwork and stone packing is done. Breach at Ektali is being closed. The weak point will be kept watch and ward during the flood. Bambo Jafri and sand bag protection will be made if required.
5	Sana Nai	T.R.E. on left bank of the river	Jodapada	Rasgovindpur	Very weak point. Night patrolling & watch and ward will be done during the flood period. Bambo Jafri and sand bag protection will be made if required.
6	Palpala	T.R.E. on right bank of the river	Kantapal	Shamakhunta	Night patrolling & watch and ward will be done during the flood period
7	Budhabalanga	T.R.E. on left bank of the river	Kanjibhati	Shamakhunta	Bank protection work has been taken up. The weak point will be kept watch and ward during the flood.
8	Budhabalanga	T.R.E. on right bank of the river from Gambharia to Soriskothe	Andola	Kuliana	The weak point will be kept watch and ward during the flood.

9	Gangahar	T.R.E. on left bank and right bank of the river	Kunchibani a, Dumuria, Agria, Nunkua, Tulasibani, Palpatna, Narangaon	Badasahi	Bank protection (Stone pitching) work has been done for some portion. The weak point will be kept watch and ward during the flood. Bambo Jafri and sand bag protection will be made if required.
10	Gangahar	T.R.E. on right bank of the river	Chenguama ngalpur to Dasipur	Badasahi	Bank protection (Stone pitching) work has been done for some portion. The weak point will be kept watch and ward during the flood. Bambo Jafri and sand bag protection will be made if required
10	Sono	Left bank of the river	Jaypur, Sainkula	GB Nagar	Bank protection work has been done for some portion.
11	Sono	Right bank of the river	Baradihi, Parichhipur	Udala	Raising and strengthening of R.E. at weak point has been done under food for work. Breach closing work has been taken up.
12	Budhabalanga	T.R.E. on left bank of river from Kathpal to Singlamundali to Sorishaktha	Soriskotha	Badasahi	The weak point will be kept watch and ward during the flood
13	Budhabalanga	T.R.E. on left bank of river from Kathpal to Singlamundali to Sorishakatha	Panchaputali	Betanoti	The weak point will be kept watch and ward during the flood.
14	Nalua	Left Bank of river	Karkachhia	Khunta	Bank protection work has been done under food for work and flood control scheme.

CHAPTER – IV

4.1 District Disaster Management Authority

Govt. have formed District Disaster Management Authority at District level in the year 2010 vide Notification No.46269/RDM dt.12.11.10 consisting of the following :

(i)Collector and District Magistrate	:	Chairperson, ex-officio
(ii)Chairman, Zilla Parishad		Co-Chairperson, ex-officio
(iii)Superintendent of Police		Member, ex-officio
(iv)C.D.M.O		Member, ex-officio
(v)Ex. Engineer in charge of embankments		Member, ex-officio
(vi)A.D.M in charge of emergency		Chief Executive Officer, ex-officio
(vii)Ex. Engineer, R.D.Development		Member
(viii)P.D, DRDA		Member
(ix)Deputy Director, Agriculture		Member

4.2 Role of District level Disaster Management Committee

The District Disaster Management committee is the apex planning body at the district level and will play a major role in preparedness and mitigation of disaster. A District Disaster Management Committee is formed in the district to assist the Collector in the following steps.

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

4.3 Responsibility of the Committee

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

4.3 Location of Mounds/Helipads

14 mounds are identified for safe shelter at the time of emergency. Similarly several open fields have been identified which can be used as Helipads at the time of need.

SL.No	Mounds	SL.No	Helipads
1	Vedisahi	1	Baripada Stadium
2	Tikayatpur	2	Dist Police Parade Ground
3	Khuntapal	3	Rajabasa Air strip
4	Paikapada	4	Rasgobindpur Airstrip
5	Baghapal	5	Udala High School Field
6	Mirigidari	6	Khunta Hammer Field
7	Kalakatha	7	Dandbose Airstrip
8	Rangapani	8	Karanjia High School Field
9	Askand	9	Raruan College Field
10	Dhandal	10	Thakurmunda High School field
11	Palpatna	11	Jashipur High School field
13	Dariha		
14	Patalipura		

4.4 Safe Drinking Water Facilities:

List of Block wise running and defunct tube wells as on 1st February,2015 under R.W.S.S. Division, Baripada/Rairangpur.

Sl No	Name of the Block	No. Of Running Tube Wells as on 1 st February,2015
1	Baripada	641
2	Shamakhunta	714
3	Kuliana	910
4	Suliapada	900
5	Betanoti	1176
6	Moroda	905
7	Bangiriposi	1001
8	Saraskona	877
9	Kaptipada	1118
10	Badasahi	900
11	GB Nagar	694
12	Udala	815
13	Rasgovindpur	935
14	Khunta	694
15	Rairangpur	592
16	Bisoi	695
17	Bijatala	775
18	Bahalda	609
19	Jamda	629
20	Tiring	546
21	Kusumi	770
22	Karanjia	808
23	Jashipur	805
24	Raruan	592
25	Sukruli	546
26	Thakurmunda	971
	TOTAL	20715

4.5 FUNCTIONING OF LI POINTS

Total No. of L.I. Projects	Area Covered in Hect.
2175	30,746
No. of Operable L.I. Points	Area Covered in Hect.
1686	23,335

4.6 Powerboats & Country Boats

S.R.C, Odisha has provided 03 (Three) powerboats to this district.

01 (One) boat stationed at Baripada &
02(Two) boats stationed at Rasgobindpur block.

4.7 Permanent School Building-cum-Cyclone Shelters:

Sl. No.	Block	G.P.	Village	Name of High Schools	Type of building
1	Barasahi	Balabhadrapur	Singtia	R.K.High School	SS
		Barasahi	Barasahi	Barasahi High School	DS
2	Betnoti	Baisinga	Baisinga	Munilal High School	SS
		Betnoti	Betnoti	Govt. Girls High School	DS
3	G.B.Nagar	Jaipur	Jaipur	Jayapur High Scvhool	DS
		Sainkula	Sainkula	Sainkula Damodar High School	DS
		Kushalda	Kushalda	Kushalda High School	DS
4	Jashipur	Podadiha	Durdura	Duirdura High School	SS
		Jashipur	Jashipur	Govt. Boys High School	DS
5	Kaptipada	Kaptipada	Kaptipada	Kaptipada High School	DS
		Sanabisol	Sanbisol	Dinabandhu Bidyapitha	SS
6	Khunta	Dukura	Dukura	Dukura High School	SS
		Bholagadia	Bholagadia	Similipal High School	DS
7	Samakhunta	Rangamatia	Rangamatia	Rangamatia High School	DS
		Samakhunta	Dhanpur	LMP High School	SS
8	Thakurmunda	Bharandia	Mirgamundi	Panchasakha High School	SS
		Thakurmunda	Thakurmunda	Thakurmunda Boys High School	DS
9	Udala	Radho	Radho	Radho High School	DS

DS-Double Storied, SS - Single Storied

Besides there are already school buildings in the villages that can be used in emergency as the flood/ Cyclone shelters. The respective Zone Officer consulting with the Sub-Zone Officers and teams will decide the safe place for emergency shelter.

4.8.1 List of Health Institutions:

Bed in hospital	Dist. HQ Hospital	Sub-div. Hospital	Other Hospitals	CHC	PHC	MHC (new)	Dispensaries	Homeopathic Dispensaries	Ayurvedic Hospital and Dispensaries
852	1	3	8	28	82	20	3	35	45

Besides the above institutions, the following allopathic medical institutions are also functioning.

Red Cross Dispensary Palasmundali

E. S. I. Dispensary at Palbani

Police Hospital at Baripada

Jail Hospital attached to Circle Jail, Baripada

4.9 Distance of Emergency units from the Control Room

Sl.No.	Name of the organisation	Approximate distance from DEOC (in KMs.)
1.	<i>Hospitals</i> Dist. Head Quarter Hospital Sub Div. HQ Hospital (Udala) Sub Div. HQ Hospital (Karanjia) Sub Div. HQ Hospital (Rairangpur)	1 Km. 47 Km 120 Km 85 Km
2.	<i>Blood Banks</i> a) Dist. Head Quarter Blood bank b) Sub Div. HQ Blood bank (Udala) c) Sub Div. HQ Blood bank (Karanjia) d) Sub Div. HQ Blood bank (Rairangpur)	1 Km. 47 Km 120 Km 85 Km
3.	Defence establishment	Nil
4.	District Police office Reserve Police Line O.S.A.P. – 5 th Battalion	0.5 Km 0.5 Km 4 Km
5.	<i>Fire Control Room</i> Baripada Betanoti Rasgovindpur Rairangpur Karanjia Udala	0.5 Km 32 Km 36 Km 85 Km 100 Km 47 Km

4.10 Communication and Media including Mass Media**4.11 Mass Media**

There is some local Newspaper published from this district. One Radio-Station at Baripada has been established. The representatives of electronic media like DOORDERSAN, E-TV, Kanak Sambad, O-TV, Naxatra News etc. always in contact and helps in spreading awareness and disaster related news in the area.

4.12 Wireless and V.H.F.

Wireless and V.H.F. stations are the quickest means of communication of weather warning and other important messages on flood and cyclone. Regular wireless, V.H.F. sets are available in all police stations.

Location of the Wireless Station and VHF Stations

Wireless Station	V.H.F Station -Police	VHF Station - Forest
Baripada	Baripada	Nawana
Rairangpur	Betanati	Chahala
Karanjia	Morada	Meghasani
Udala	Baisinga	Jashipur
	Rasgobindpur	Pithabata
	Suliapada	Baripada
	Kuliana	
	Bangirposi	VHF stations by OSDMA. Phase-I
	Bisoi	Emergency Section, District HQ
	Rairangpur	Bahalda Block Office
	Bahalda	Jasipur Block Office
	Tiring	Udala Tehsil Office
	Badampahad	Betnoti Tehsil Office
	Karanjia	Rairangpur SubCollector Office
	Jasipur	Karanjia SubCollector Office
	Raruan	Kalo Dam Site
	Udala	Sunei Dam Site
	Gorumaisani	VHF stations by OSDMA. Phase-I I in the following Block Offices
	Khunta	Bijatala, Bisoi, Jamda Block Offices
	Badasahi	Tiring, Kusumi, Block Offices
	Jamda	Bangiriposi, Kuliana, Saraskona Block Offices
	Hatbadra	Suliapada Rasgovindpur, Moroda Block Offices
	Jharadihi	Badasahi Shamakhunta Block Offices
	Kaptipada	Udala, Kaptipada Block Offices
	Sarat	Khunta, GB Nagar Block Offices
	Thakurmunda	Karanjia, Raruan Block Offices
	Sukruli	Thakurmunda, Sukruli Block Offices

The District Control Room is also availing a telephone having the no. **1077. (Toll free.)**

District Administration, Mayurbhanj & OSDMA will take all necessary steps for easy repair of the VHF installations and the telephone lines so that there will not be any delay in the message dissemination to the departments during the emergency periods.

4.13 The NSS and NCC, Scout & Guide, Satya Sai Seva Samiti, Red Cross volunteers in the district, are receiving special training on disaster preparedness, First Aid and Rescue techniques. Their services may be entrusted as Volunteers during the response action by the district administration. They can be a part of different task forces at District, Block, GP and Village level to actively be involved in rescue, relief, rehabilitation action. District Administration has a close contact with the NSS Coordinator, North Orissa University, NCC Coordinator, MPC Autonomous College, District Red Cross wing and such other wings.

4.14 Emergency Operating Center (EOC) / District Control Room:

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

4.15 Purpose of Emergency Operating Center (EOC)

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

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

The EOC/District Control Room is placed in the Emergency Section of the District Collectorate.

The Control Room shall be in overall charge of the Collector. In the absence of Collector, ADM (Emergency), PD, DRDA, Emergency Officer or any other Officer on duty at that point of time shall remain in charge of Control Room. The person in charge of the Control Room shall be personally responsible for implementation of the Standard Operating Procedure (SOP). She or he shall be responsible to take all decisions as outlined below and signed on behalf of the Collector on all reports mentioned below.

4.16 Assembly in Control Room

Following staff and officers shall assemble in the control room on getting any information from any source about the emergency situation. Apart from these any other officer or staffs who gets the information from any other sources will reach/inform the control room immediately for further onward actions. Collector, ADM, SP, PD, DRDA, District Social Welfare Officer, Emergency Officer, Sub-Collector, Baripada, Tahasildar and few BDOs, CSO, DIPRO, CDMO and R.T.O, All staffs of the Emergency section, Stenos to Collector and other staffs as desired by the Collector.

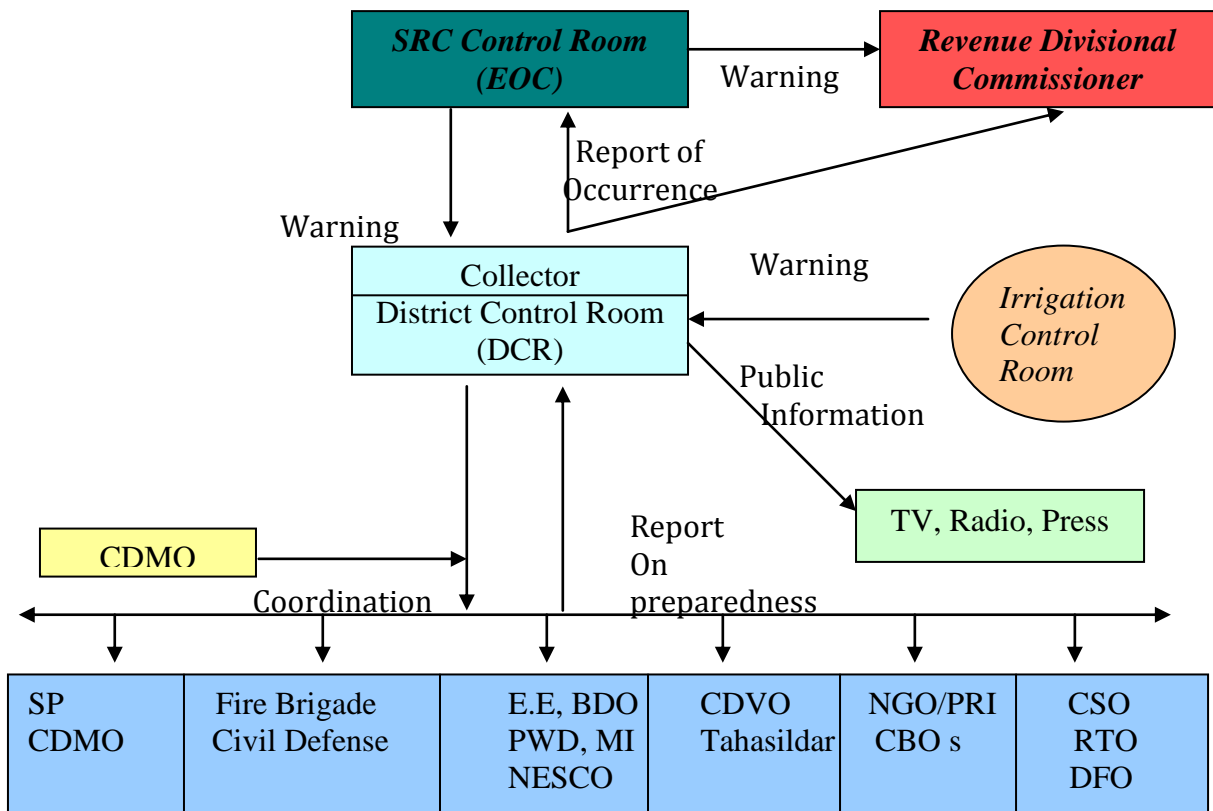
4.17

Warning shall be issued in the following prescribed format.

Emergency Warning Message	Date :
To S.P./All I.I.Cs of Police Stations/ O.I.Cs /BDOs/ Tahsildars/ Sub-Collectors /CDMO/SDMO/CDVO/Agriculture/R.W.S.S./R.D./ R.&.B./ ICDS/ Irrigation /N.H./ NESCO /PHED/Municipality /MLAs /MPs/ Station Director, AIR/DIPRO/ DI of Schools.	
Space for message	
CRASH	
Collector Mayurbhanj	Collector,

4.18 District Control Room/ EOC And Linkages with Other Control Rooms at State and District Levels

Early Warning Dissemination



4.19 Staffing for District Control Room:

The Control Room will act as the nerve center office for the district to tackle the emergency situations and the staffs will coordinate with the line departments for timely response in Disaster Preparedness and Management at the District level. For Normal time and Emergency situations an Emergency Officer and two Support staff will be placed in the District Control Room. Apart from these permanent staffs other staff will be support at the time of need on a temporary basis.

Emergency Officer

One Head Clerk

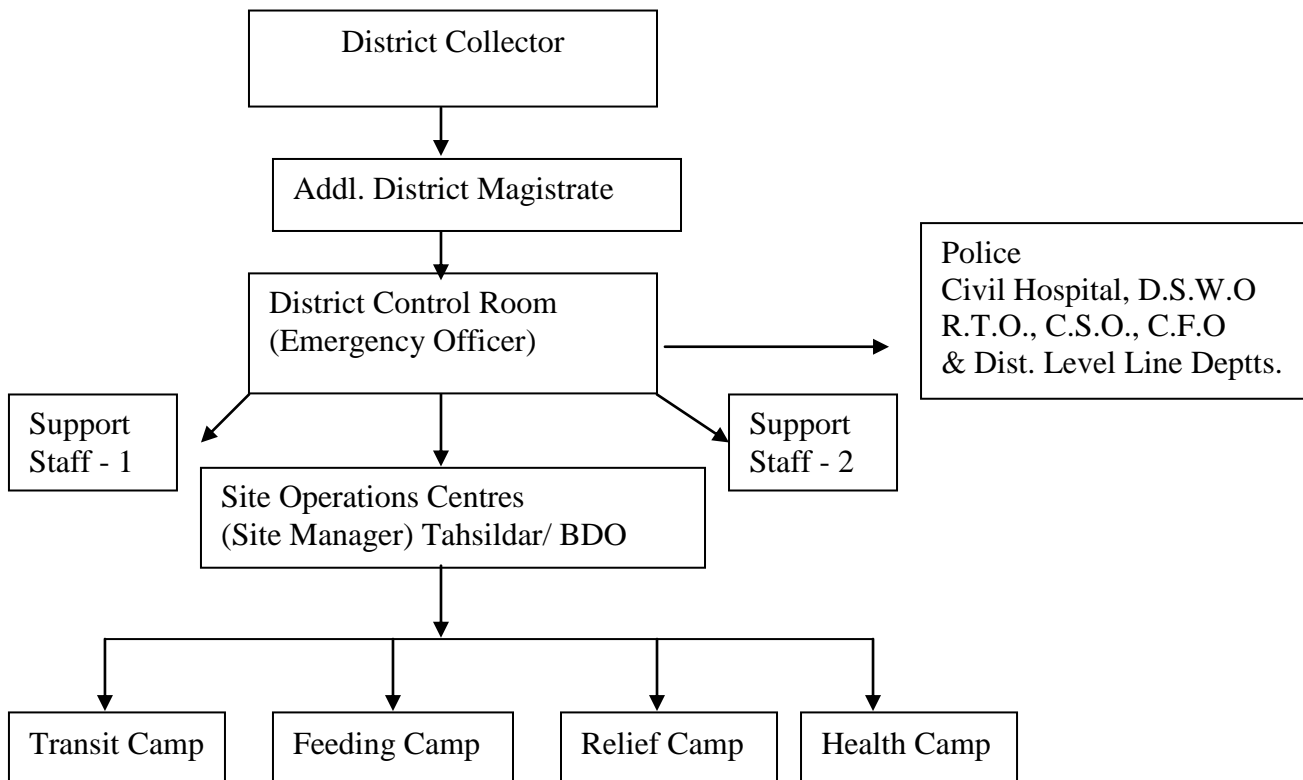
Two Senior Clerk,

Three Support Staff from the grade of junior clerk.

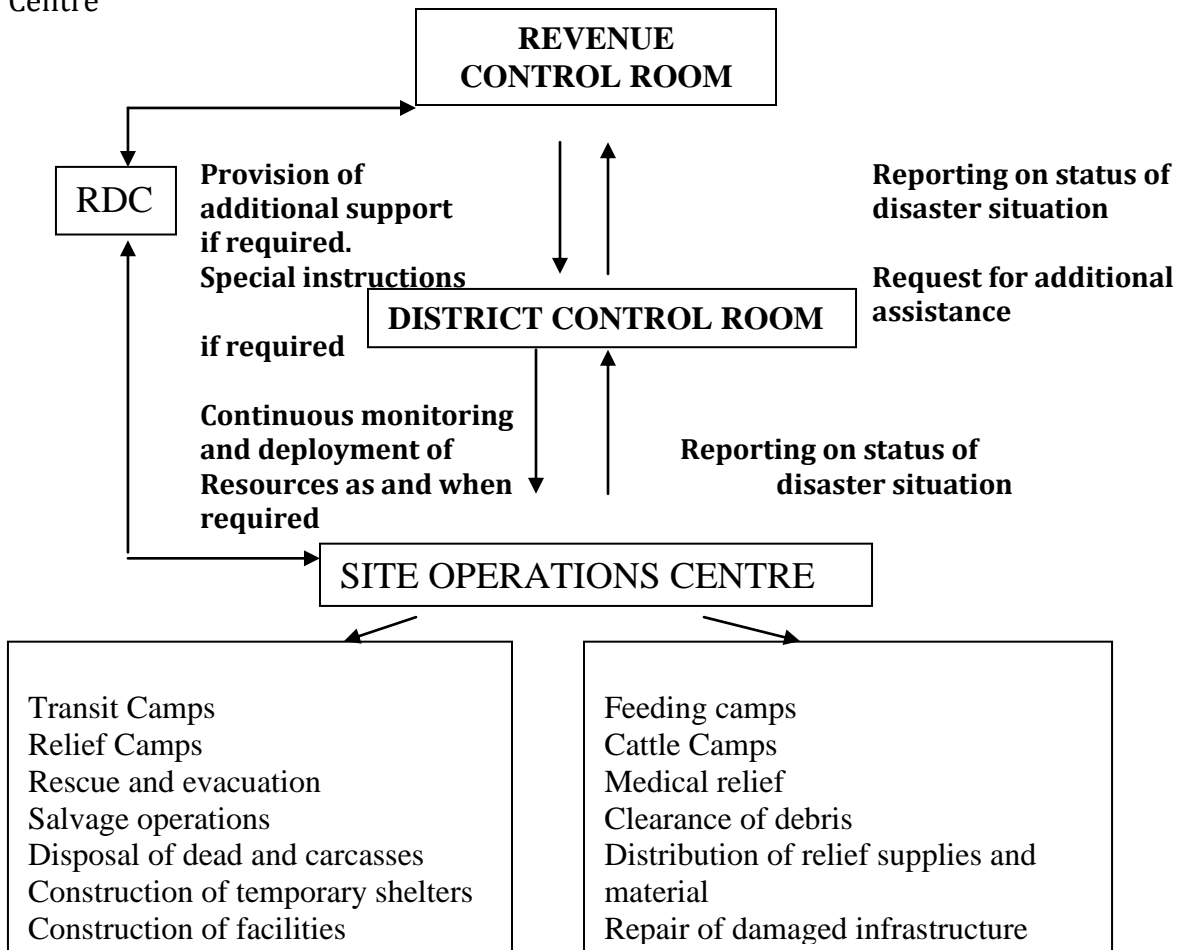
Computer Operator,

Two Peons.

4.20 Co-Ordination Structure At District Level Control Room



4.21 Flow Of Information Between Revenue Control Room, DCR And Site Operations Centre



4.22 Scope of work for the Emergency Operating Center

Normal Time Activity

- To ensure that all warning and communication systems, instructions are in working condition.
- To receive information on a routine and regular basis from the departments on the vulnerability of the various Grampanchayats and Villages to disaster
- To receive reports on preparedness from the relevant district level departments and other departments, as per the formats. Based on these reports, the EOC/DCR will forward the Preparedness Measures details on behalf of the Collector to the Revenue Control Room, State Relief Commissioner, Revenue Divisional Commissioner and OSDMA.
- To upgrade and update District level disaster mitigation action plan according to changing scenarios in the district
- Data bank updating and maintain an inventory of resources.
- To update all information in the GIS.
- To inform Emergency Operations Centre (EOC) under Relief Commissioner of any changes including updating of data bank and annexure

- To monitor preparedness measures including simulation exercises undertaken by various departments
- To ensure proper dissemination of DDMP at the district level, local level and disaster prone areas.
- To identify appropriate NGOs/Civil society Organization, with their capacities who can be mobilized during the time of disaster and can be helpful in community level disaster preparedness.
- Special task force training to the volunteers and training to other stake holders like PRIs, Teachers, Govt. Officials etc on DRM.
- To organize post-disaster evaluation and update DDMP accordingly
- To prepare reports and documents on district level disaster events and submit the same to EOC.
- District level training of officials and NGOs in emergency response

Warning or Occurrence of Disaster

During Emergency

- Weather tracking and early warning dissemination
- To collect and transmit information regarding matter relating to natural calamity.
- Mapping of vulnerable areas
- Database on hand of civil society organizations and their activities
- Database on hand of volunteers, special task force members.
- Facilitate assemble and pre-positioning of civil society organizations and volunteers with necessary kits.
- Flow of information to central control room in Relief Commissioner's office and OSDMA
- Men and material management in emergencies with proper inventorization

4.23 Information, Facilities And Amenities At District Control Room (EOC)

The EOC is equipped with
Action Plan including sub-plans and local plans
Vulnerability Maps
List of contact persons during emergencies

EQUIPMENTS:

3 desktop computer
inverter/APC 0.5kv UPS
24 hour Internet connectivity/Oswan net connection
FAX, plain paper PANASONIC KX FP105
Generator Birla Ecogen 1000.
Fire Extinguisher
CEASE FIRE, ABC Stored pressure type 1KG.
Room Thermometer
Hard Board with soft tops for
Soft board for pinning maps and charts with all round bidding
Steel Almira for filing of documents
Map of the district

4.24 CONTROL ROOM AT SUB-DIVISION, TAHASIL AND BLOCK LEVEL

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

- Control Rooms are managed by a clerk/Revenue Supervisor/Extension officer and a peon.
- Immediately after getting warning about flood/cyclone, one Gazette Officer along with the above staff may be deployed in the control room.
- The Head of office will ensure proper working of the control room telephones.
- A register will be maintained in the control room to record the messages and warning received over telephones and action taken thereon.
- The Sub-ordinate Control Rooms will keep constant touch with the District Control Room during and after occurrence of any calamity
- In case any message of devastating nature is received, this should immediately be passed on to Collector/Addl. Dist. Magistrate/concerned Sub-Collector or District Control Room and necessary action will be taken according to their instructions.

4.25 Information, Education and Communication (IEC)

(Awareness, Training, DMTs, DM Plan Preparation, Mock Drill)

4.26 Plan Dissemination and Evaluation

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

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

To the district authorities, government departments, NGOs and other agencies and institutions within the district and

To general public

In every Year the same plan is updated before disaster season and disseminated to the district Authorities and Public

CHAPTER – V

Prevention, Response & Mitigation

5.1 Response Measures at the district:

Steps to be taken immediately on receiving Cyclone / Flood Warning or information about any other Emergency from any source

- *Officer in charge of Control Room/ EOC:*

The control room is in overall charge of the Collector.

In the absence of Collector, ADM, PD DRDA, 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. She/he shall take all decisions as outlined below and sign for the Collector on all reports mentioned below. She/he shall not wait for orders from anybody.

- *Assembly in Control Room:*

Following staff and officers shall assemble in the Control Room on getting any information from any source about any emergency. Apart from these, other officers or staff who gets the information from any source will be in contact with the Control room.

- Collector, ADM, PD, DRDA, District Social Welfare Officer, Emergency Officer, Sub-Collector Baripada, CDMO, CSO, DIPRO and RTO and all the coordinators of the District level DMTs.
 - All staffs of Emergency Section
 - Getting the Control Room ready

Following preparatory steps will be taken for keeping the control room functional during emergency.

- Shifting/Connecting two phone lines to control room functional. One of the above is the toll free no that is 1077.
- Connecting/functioning of the VHF set in Control room. If required, the police VHF may be in use.
- Charging the battery of inverter, if present in control room or Collector's office.

The overall responsibility of all the above preparatory action may be strictly undertaken by the DEO, Mayurbhanj under the direction and supervision of the Collector or ADM.

District Administration will take the following immediate steps as preparedness.

- All the field Officers will be kept alert. Those are the BDOs, Tahasildars, MOs, VAS, Police, Industries, Telephone, Agriculture, RWSS, RD, R&B, ICDS, Irrigation, NESCO, NH, PHD, Municipality, MLAs, MPs, MIs, CI/DI/SIs, Station Director, All India Radio of the district.
- DIPRO shall *inform the media*. Warning shall be issued in the prescribed format:
- All the officers will be called on and they will remain in headquarters immediately after receiving the message.
- A *logbook* will be prepared for recording chronological sequence of events
- **Food and Kerosene:**
 - The CSO will check with the field staffs on stacking of emergency food in vulnerable pockets prior to any event in sufficient quantity.
 - Check up availability of food (rice, chuda and *Gur*) and kerosene at block headquarters, with storage agents and other inaccessible pockets. BDO shall contact all Storage Agents. They will ensure visiting the god owns 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 god owns are located.
 - The BDOs should take steps to start movement of food stock and Kerosene Oil from block headquarters to areas that are likely to be cut-off.
 - The CSO under the guidance of the district Collector should start movement of food stock and K. Oil from district headquarters to block headquarters.
- **Health sector:** The CDMO will make a rapid assessment of the following.
 - Check up the stock of medicines, bleaching powder, and halogen tablets. If necessary, immediate requisition will be sent.
 - The CDMO will take action to start movement of medicines, bleaching powder, etc. to PHCs/CHCs.
 - The Medical Officers will be ensured to be present in places at the PHCs and CHCs contacting police stations, blocks and Tahasildars or even by telephone.
 - CDMO shall decide the locations of camps, if required.
 - All CDPOs will be teamed up with the MO of PHC/ CHC with their vehicles and supervisors.
 - *Vehicles:* One hired vehicle has been engaged in District EOC as per order of SRC, Requisition may be made for small and big vehicles immediately by DEO to RTO, keeping in view the intensity of forthcoming disaster.
 - The field Officers will be advised to make requisition for vehicles. Tahasildar, BDO and Police station will take steps on it. For any further support the district control room may be contacted

- **Boats:** Requisition of boats will be made within the district. If necessary Office of the SRC will be contacted for the purpose.
- Balasore, Bhadrak and Keonjhar Collector will be intimated to remain in readiness for *supply of stocks of rice and Chuda*.
- After making an assessment of the seriousness of the emergency, *Educational institutions will be closed* for the period. The Cyclone/ Flood Shelters will be kept ready.
- **Veterinary measures:** Immediately SRC and MD, OMFED will be contacted and the supply of cattle feed will be tied up. CDVO shall make assessment of vaccines and fodder availability.
- **Air dropping zones:** The lat-long book will be used for identification the air dropping zones, if required. An advance list of villages where air dropping may be needed will be kept ready.
- Each JE of RD, R&B, and NH & IRRIGATION shall keep ready a gang of 20 persons (severe cyclone- 40-person gang) with axes and saws. They will also have one chain-pulley system ready. The volunteers in the other hand also will be kept ready by the district emergency units, NSS, NYK, Scout & Guide, NCC and NGOs.
- *District Level Officers specially in charge of Relief and rescue operation:* At special cases requisition of the services of officers who have been effective in the past will be made and accordingly the allotment of areas will be made to them with full powers of decision-making on the spot. **However the Sub-Collectors will be the special Officers at their Sub-Divisions with full power and decision-making.**
- A thorough assessment of relief items available in stock at different places will be done and accordingly the next requirement by the Civil Supply Department.
- **Functional distribution of work:**

Following functional distribution of work shall be done. Each team will have staff and resources. The team leader will have full power to take decisions. The teams are:

- Information Management, Warning dissemination and Office documentation Team.
- Rescue and Evacuation Team
- Emergency Health Management Team.
- Relief Management Team.
- Transport Management Team.
- Infrastructure Management Team.
- Animal Resource Management Team.

- **Civil Society Organisations:** Civil Society Organisations will be communicated. They will be alerted with areas/functions. They will be introduced to the field functionaries. They will prepare a list of volunteers. A quick inventory of their resources may be prepared and UNICEF, UNDP, WFP, CARE, OXFAM, Action Aid and other international agencies may be contacted. Quick assessment of district needs and expectations from different agencies will be done. The District Control Room will make the coordination effort.
- **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.

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 covered	Days 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	Remarks
	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			

- DIPRO and DEO will take necessary action in flowing message to the Public. Message to public over All India radio or directly with a loud speaker should be specific. Apart from the general warning, it should include the following three points.
 - Take shelter in nearest Pucca building.
 - Keep cattle tied in open spaces.
 - Keep sufficient dry food.
- Regularly contact will be made from the control room to R.D.C., S.R.C., Home Secretary, Revenue Secretary, PS/ Secretary/ Addl. Secretary to Chief Minister, Chief Secretary and Health Secretary etc.
- Written orders will be given for identifying places for starting free kitchens. Issue of clearance will be made at least for 3 days or even more.
- Regularly check up will be made with <http://www.npmoc.navy.mil/jtwc.html> and www.imd.ernet.in and other disaster warning web sites.
- Spare copies of district maps, Jurisdiction maps of all irrigation divisions shall be kept ready in good numbers.
- Mobile phones Nos of Sub-Collectors, other officials, BDOs/ Tahasildars will be kept noted in the control room.
- Contact will be made with State Bank of India for making available VSAT network in case of failure of all communication channels.
- Requisition will be made for all IB/ Rest sheds.
- Requisition will be made of School/ College for army/ police forces.
- All field officers will be directed to hire generators and keep sufficient oil for running them.
- All police stations will be directed to keep spare batteries for VHF.
- Looking at the onset of emergency and after making quick preparations, Emergency meeting of important official and non-official agencies will be conveyed under the chairmanship of the Collector and respectively clear instructions will be given.
- A duty roster will be made so that important Officials cannot breakdown together.

FOR EMERGENCY OPERATION CENTER/DISTRICT CONTROL ROOM, MAYURBHANJ.

TELEFAX: 06792 – 252759

TOLL FREE NO. – 1077

Email- deombjbpd@gmail.com

LOCATION: EOC BUILDING, COLLECTORATE, BARIPADA, Dist MAYURBHANJ.

Response Structure

5.2 FLOOD AND CYCLONE MANAGEMENT PLANNING

5.2.1 Dissemination of Weather and Flood warning:

Flood and Weather warning notices received from Central Flood Forecasting Control Room station at Rajghat in Balasore district at river Subarnarekha and Poda Astia, Baripada of river Budhabalanga and such other weather warning notices received from Government in Revenue department/ Board of Revenue, will immediately be transmitted to the Control Rooms of the Sub-Collectors by the Control Room/ Emergency Operating Center stationed at District Head Quarter for keeping the people of the areas alert. The Irrigation Control room also will be kept in contact to receive and note down the water level in rivers and dams. The EOC at the district level is equipped with Computer and Internet Connection. During the time the messages are also received directly from the weather web sites for the forecasting of the warning.

The Sub-Collectors will transmit the weather warning or other emergency warning to the Zone Officers and the Asst. Zone Officers. Similarly the Zone Officers transmit it to the Sub-Zone Officers and to the task force members at villages and GPs. Sometimes also the warning information will be transmitted directly to the Sub Zones, villages to alert vulnerable people at the quickest interval. DIPRO and SDPROs of this district will also alert people of their respective jurisdiction through mike, if situation so warrants. The Zone Officers also may take such action to disseminate the warning message through mike if the field situation requires it.

Also in other places the ward members and a few volunteers may be identified for the said purpose. The GP Executive Officer and GP secretary of the vulnerable GP along with these identified volunteers will regularly listen to the warning new broadcast by AIR, DOORDARSAN and will alert the villagers respectively about the forecast of Heavy Rain/ Cyclonic Storm/ Appearance of Flood etc. the Zone Officers concerned have been instructed to keep them alert always.

The following arrangements will be made at the Disaster Warning Dissemination phase:

- The weather warning is to be received and monitored regularly by the DEO/DIPRO at the EOC/ District Control Room.
- For rain forecasting the weather sites will be accessed and monitored regularly and also the Rain Recording at the Block HQ will be monitored daily.
- There will be a close communication with the Irrigation control room (EE, Irrigation) and monitoring of increase in water level and release of water in the Dam Site will be made and accordingly the warning will be disseminated.

- At the release of water from the Dam, the Zone Officers and accordingly the Sub-Zone Officers will be informed to warn the people at downstream side and take necessary actions.
- The CDMO Office will keep close contact with the EOC. They will ensure the information reach to the health workers in the field.
- They will collect information on health status daily and provide necessary feed back to the Collector and EOC.
- From SP office the message will be transmitted to alert the Police force to be vigilant and take hold of the Law and order situations. They should take necessary steps to arrest and take into custody the Rumors mongrels and calm down general public.
- If necessary they may deploy the forces in Calamity area.
- The Emergency Officer and staffs of EOC will immediate inform all the district level officials and also to SRC, OSDMA.

5.2.2 Evacuations and Rescue Operation:

The Sub-Collectors being the Sub-Division Officers will coordinate with the Zone Officers and Addl. Zone Officers will draw a plan for the sifting and evacuation of the vulnerable population in the district. The Zone Officers will warn the **Search and Rescue team** (special task forces) in the villages to participate actively with them in the operation the Gram Rakhies and Home Guards.

The S.P. and Commandant Home Guards may be contacted by the Zone Officers to deploy required nos of trained persons/ forces for the rescue operation and to maintain law and order and peace keeping during evacuation.

The Zone Officers may arrange boats/ vehicles before the hand for evacuation and rescue operation.

The Zone Officers and the Addl. Zone Officers may immediately contact and coordinate with the Fire Brigade, Police, NCC, NSS, Civil Defence, Scout and Guide and NGO Volunteers. Rescue materials and Rescue kits may be arranged and kept at the risk points. On contact the Fire Officers, Baripada and Udala will be drafted to the spot immediately soon after getting the information for rescue operation and draw out water accumulation from low laying area. The other Fire Officers at other places also will take similar action if such situation arises in their jurisdiction.

5.2.3 Identification of Buildings as Cyclone and Flood Shelter:

During high flood some villages of this district get submerged and some others are partly submerged. The marooned people are to be rescued to the nearest safe places for shelter. The places will be notified by the BDOs/ Tahasildars in their Boards and also in the notice board of the GP Executive Officer's Office. The Zone Officers will also give wide publicity regarding these safe places in the areas. Besides, if required, the Zone Officers may also select a few educational buildings or Govt buildings for the purpose of temporary shelter to the Flood/ Cyclone victims. Also there are **Shelter Management Groups** (village Volunteers) at the village level and GP level who will assist in this operation.

5.2.4 Relief Operation.

At the time of disaster, distribution of relief materials should be organized in planned and disciplined manner so that there will be no irregularity overlooking or overlapping in distribution of relief materials.

The relief teams in the flood prone villages are formed and will associate themselves in smooth distribution of relief materials. From the Block point, the team will be headed by the responsible Block extension Officer and necessary support will be entrusted with the GP Executive Officers as well the GP Secretaries along with the GP level relief team. If necessary the Gram Rakhies and Home Guards will be tagged with each relief party.

The SP and Commandant of Home Guards will be contacted by the Zone Officer to deploy required no of trained personnel to each relief party for smooth functioning of the relief distribution. Also the services of NCC, NSS and NGO volunteers may be requisitioned to help in relief work.

5.2.5 Food Stuffs in inaccessible pockets

The places in the district, which are likely to be worst affected and inaccessible are identified and necessary arrangements made. The detail stock of food stuff in accessible pockets are reflected in the list submitted by CSO.

As regards supply of flaked rice (Chuda) steps will be taken to purchase it from local market as well from the neighboring districts like Balasore and Bhadrak. The CSOs of those districts will be requested to arrange stock of Chuda from the Chuda Miller of their district, as there is no such trader is available. For the supply of other such relief goods the CSO, Mayurbhanj will take necessary steps with the consultation of the Collector to procure from local market or from neighboring districts.

5.3 FIRE MANAGEMENT PLANNING

Preparedness:

- The Fire Officer is the Officer in Charge.
- Communication will be established with Emergency Operating Center, Police, and CDMO Office etc.
- Regular Staff assessment has been made for 24 hours to meet emergency.
- Trained persons can be engaged to fight out and save the lives against different disasters like Fire accident, Flood rescue, Evacuation etc.
- In intervals the unit will take steps to demonstrate and educate people.]
- Essential equipments and materials are stocked like, Fuel, Masks, Ladders, Life jackets, Life buoys, Foams etc and the vehicle is in good condition.
- A detail list of materials and experts available is mention in previous chapter for reference

Control Room:

Fire Department is divided into 6 (six) Circles. Each has a coordinating Office as Fire Station. Every Station is connected with a Phone No and a toll free connection that is functional within that telecom circle. The detail No of the Stations are Mentioned as follows

Baripada Fire Station:	101, 06792 - 252701
Rairangpur Fire Station:	101, 06794 - 222066
Udala Fire Station:	101, 06795 - 232260
Betnoti Fire Station:	101, 06793 - 220131
Karanjia Fire Station:	101, 06796 - 220210
Rasgovindpur Fire Station:	101,

These control rooms are operational throughout the year and 24 hours with the staffs on duty on rotation.

Response Actions:

- District Fire Officer at Baripada is monitoring the emergency response action consulting with the district EOC and other Fire Stations.
- Receiving the message from any corner by telephone or from any other source of the district, the fire teams are getting ready within instant of time with the required rescue material, experts and vehicle.
- The Fire Station Officer receives the message directly from the field or even they receive message from district EOC to provide support for emergency operation. EOC coordinates with the Fire Officer at Baripada and he coordinates with other Fire Station.
- At requirement the total team will split into different sub teams to be engaged in different locality.
- The concern fire rescue team engages it's bridged to the spot directly to provide support action. Then it will intimate the EOC, district authorities for further support to be provided to the affected community.
- The team will take the help of local DMTs during its response action for rescue action. The trained Volunteers will also be engaged in operation under the guidance of the Team leader from Fire bridged Unit.
- At requirement the bridged will take the help of local available material for rescue purpose and even will use the rescue kit available at district and block level. Requiring other rescue materials that are not available the team will coordinate with the EOC. EOC will look into to get support of any such materials from IDRN list or from any other source.
- If the Fire Unit will not be able to provide adequate skill full support in any such Rescue incident, it will intimate the district EOC and it will coordinate with ODRAF Team or any such other units in the district like INS, Chilka or defence units.
- Local Police will also provide support at the emergency for any such emergency operation.
- The EOC and District Fire Officer will coordinate with the manpower and material support to be required for any rescue activities in the district.

Relief:

- At the emergent relief need the EOC will be contacted for the purpose
- CSO and relief management team will ensure early procurement of dry food and transporting this relief material to the accident place. Prior to this the team will receive the no of persons requiring relief, type of dry food and quantity.
- As per ORC norms the ex-gratia and subsequent other assistance will be provided to the affected families.
- RWSS / BDO will ensure portable drinking water facility to the affected population.

Medical Need:

- CDMO will coordinate with the support service as regards to medical facility.
- Necessary medicines, ORS etc will be provided from AWW, PHC or CHC. The concern PHC or CHC will ensure adequate support in terms of treatment to the injuries.
- If required the mobile medical team from the district will be sent with vehicle and medicine to the spot with immediate attention.
- The victims if serious will be sent to the nearest hospital and if necessary extra medical teams will be procured from adjacent district.
- The team will also guide and coordinate the DMTs at GP/village level for First Aid and allied service.

IEC Activities:

- Posters and leaflets on rescue activities are getting distributed.
- Awareness is made in terms of public meetings and communicating to the volunteers on Flood and Fire rescue measures
- Distributing papers on Does and Don'ts to volunteers and publics.
- Arranging special training programs and communicating such preventive activities.
- Demonstrating by skilled volunteers and experts on rescue activities and arranging mock drill on it.
- The NGOs and other volunteering Units like NSS, NCC, NYK are conducting awareness programs on fire safety tips.

5.4 HEAT WAVE MANAGEMENT PLANNING:

Mayurbhanj experiences oppressive heat during summer. The maximum temperature varies from 35°C to 47°C in the district. The district is vulnerable to this disaster causing 3nos death causality at an average. A major population being daily labourer and depending on alternate source of livelihood, during the summer often face heat stress. By the years together due to massive awareness activities the vulnerability against heat stress has been reduced to an extent. Still some more precautions are to be carried out against such disaster.

Zoning: -

The district has been divided into 4 zones those are Baripada, Udala, Karanjia and Rairangpur. The ADMO, Mayurbhanj and SDMOs are in charge of respective zones. The ADMO, PH will remain in charge of overall supervision of all activities as nodal person. For any such response against heat stress the cases may be referred to the control rooms opened in the respective zones or either the same may be communicated to the district EOC or Block control rooms.

Control Room: -

Control rooms at District/ Sub-Division/ Block/ Tahasil level shall start functioning immediately for dissemination of heat wave warning received from Revenue Control Room/ S.R.C., Orissa. A control room will be opened round the clock at Baripada District Headquarter Hospital CHCs and PHCs will be in close contact with respective SHH for any critical condition. ORS packets are available at all hospitals and also with Anganwadi Workers.

Preparedness and Response Action:

Medical Arrangements

- At district and 3 Sub-division hospitals arrangements are made for separate ward and beds for heat stroke patients.
- CDMO will review the patients admitted in the hospitals and treatments taken. The CDMO should take necessary steps to inform and keep alert the health functionaries in the district. He will review the situation in monthly meetings.
- ORS will be available sufficient in quantity to the Anganwadi workers.
- The Blocks are to open outlets to provide drinking water to the general public (JalaChatra) through Grampanchayats and Municipalities. This also may be opened with the help of other humanitarian organizations at need places.
- Functioning of Tube wells at the vulnerable pockets will be ensured.

5.5 ACCIDENT RESPONSE PLANNING:

The district is surrounded with both NH-18 and NH-6. Both the NH passes through about 9 Blocks. The NH-18 passes the district from Balasore and NH-6 joins at Jharpokharia (inside the district). NH-6 has been joined from Karanja Block to the place Jharpokharia. There are major District roads in the district joining Baripada to Balasore via Udala, Baripada to Jaleswar via Rasgovindpur. Also major roads are connected from Rairangpur to Karanja also. Some other important road network is joining the important points in the district. So many times road accidents are becoming incident in the district. In the past years a few major road accidents claimed some human life losses.

Response Action: (Information, Resue and First Aid)

- Information may be received at the district point at the EOC. People can access to the toll free connection that is 1077. Similarly also information may be provided to Medical Control room (Tel No. - 06792-252702), Police control room -100. Fire control room -101. After receiving the message the EOC will coordinate to inform Police and/ or Fire Unit and also to the Medical Team.
- District Rescue team will proceed immediately to the spot with the rescue kits.
- After reaching at the accident spot will be operational in rescue activities, rescuing the victims from danger.
- Simultaneously the Medical mobile team will be contacted and sent to the spot with adequate medicine for primary health service and First Aid. The team will provide First Aid to the victims, if require, and send them to the nearest Hospital or to the district hospital.

- If required the RTO and transport team will be contacted to provide transit vehicle support to transport rescued victims to the hospital or to the destiny. A mobile Ambulance (Arogyaduta) is provided and placed at Jharpokharia by IRCS, District Branch to provide ambulance support.
- Requiring any cutting/welding or rescue equipments the EOC may be contacted and it will coordinate from IDRDM website or from resource inventory to access the needy equipment and transporting them to the spot within minimum of time.
- If there will be any need of immediate relief, then IRCS District Branch will be contacted to provide dry food and medicine support for the victims. For any long-term relief requirement, CSO will be contacted to provide the requirement.
- The DMT members and trained volunteers (on First Aid and Rescue) will be coordinated at the need of time and will be engaged for the support service.

IEC Activities:

- Posters and leaflets on related activities are getting distributed.
- Awareness is made in terms of public meetings and communicating to the volunteers, students, youths on Road Safety measures.
- Distributing papers and also communicating in the meetings on Does and Don'ts to volunteers and publics.
- Arranging special training programs and communicating such preventive activities.
- Arranging mock drill on it.
- The NGOs and other volunteering Units like NSS, NCC, NYK are conducting awareness programs on Road safety tips.
- A series of training program will be conducted of Truck and Bus (Heavy Vehicle) drivers on road safety measure by the IRCS, district branch.
- Nos. of trainings are organized for youths and school/college students on different road safety signals, knowledge etc. Similarly workshops are also arranged.
- First Aid trainings will be provided to the drivers, conductors, students, youths etc during the commencement of these training programs.

5.6 DROUGHT MANAGEMENT PLAN FOR THE DISTRICT OF MAYURBHANJ: -

Mayurbhanj being the largest district of the state is situated towards northern boundary between 21 deg. 16 min. and 22 deg. 34 min. north latitude and 85 deg. 40 min. and 87 deg. 11 min. east longitude with altitude of 559.31 mts. above the sea level. The climate of the district is hot and moist sub-humid and thus lies within “ *North Central Plateau agro-climatic zone*”. The soil is red loam with light textured. The normal average rainfall is 1600.6 mm with highest temperature of 41 deg. Centigrade to 47 deg. Centigrade during the month of May. Although Kharif season is from April to September, the district experienced rainy season from June to September. The rainfall is normally uniform throughout the district except Bamanghaty Sub-division area, which usually gets low rainfall compared to other Sub-divisions of the district. The district has received 1294.84-mm rainfall during the year 2004. Eight rivers flow in the district and the river Baitarani and Subarnarekha pass in the western and northern boundary respectively. Along with these some other rivers passing through the district get charged with water during the rainy season and at the time of heavy precipitation causes flood in the district. There are no major irrigation projects in

the district. Only 9 nos. of medium irrigation projects, 197 minor irrigation projects, some lift points and some small irrigation structures provide irrigation facilities to 21.5% of the total cultivated area during Kharif season. In most of the years, the district has experienced temporary/ long dry spell or flood situation in some parts of the district due to inadequate/heavy rainfall. So the agricultural operation mostly depends on the behavior of monsoon. The quantum of the rainfall along with its distribution spreading over the district influences the cropping pattern.

The district is dominated with the tribes. The socio-economic condition of these tribes is generally low. Rice being the principal diet of the farming community, the farmers used to cultivate paddy in all categories of land that is up, medium and low land in the Kharif season. As the result of inadequate rainfall and its erratic in nature, the crop raised in the sloppy and unbunded upland suffers moisture stress temporarily during different stages of crop growing periods. Under prolonged dry spell situation, there is no possibility to take up second alternate crops in those uplands.

C. FUNCTIONING OF CONTROL ROOM: -

In order to monitor the natural calamity arising out of flood, cyclone, drought, pest and disease attack, availability of inputs, crop condition and recording of rainfall situation, the control room will be functioning at range level, agriculture districts and sub-district level having contact telephone numbers is as follows during the entire Kharif season.

CONTROL ROOM (Agriculture)

DDA Office, Baripada	956792-252743
DAO, Baripada	956792-252677
DAO, Karanjia	956796-220224
DAO, Rairangpur	956794-222032
ADAO, Udala	956795-232284
ADAO, Betanoti	956793-220236
ADAO, Bangiriposi	956791-223244
ADAO, Jashipur	956797-232449

5.7 HEALTH/EPIDEMICS MANAGEMENT PLANNING.

PREPAREDNESS: -

There are three major disasters like *Flood, Cyclone, drought, earthquake and Epidemics* for which the Medical Unit in the district has a strict vigilance over any disorder situation that may arise.

Zoning: -

The district has been divided into 4 zones those are Baripada, Udala, Karanjia and Rairangpur. The ADMO, Mayurbhanj and SDMOs are in charge of respective zones. The ADMO, PH will remain in charge of overall supervision of all activities as nodal person.

Control Room: -

At district level a control room has been opened with the *telephone no. 06792-252702* in the office of ADMO, (PH), Mayurbhanj starting from May 2014 to 30/11/2014 from 8A.M. to

8P.M. to keep liaison and coordinate with other departments of district and state headquarter. The control room will be opened round the clock during disaster. Also in the SDHs, PHCs, CHCs the control rooms are being established and functioning. The CHCs and PHCs are instructed to liaison with the SDMO / Medical Officer in charge for any health hazard situation arises in their area.

FLOOD VULNERABLE AREAS

<i>Sl No</i>	<i>Name of the Block</i>	<i>GP</i>	<i>Village</i>	<i>Population</i>
1	Badasahi	18	65	67112
2	Betanoti	03	06	8720
3	Khunta, GB Nagar	04	18	9840
4	Rasgovindpur	08	33	9820
5	Morada	05	14	5422
6	Kaptipada	06	14	10820
7	Baripada Municipality	W.No.- 5,7,8,9,14		8980

Epidemic Vulnerable Area

However the entire district is vulnerable to epidemics though special attention is given to the above-mentioned place. At any instant of time any place may be vulnerable to any type of epidemics.

Response

M. R. C. (Medical Relief Centre) will be opened at the time of flood emergency at the following places.

Kaptipada CHC	-----	Sanbisol, Jambani, Pedagadi
Khunta CHC (GB Nagar)	-----	Jaida
Badasahi CHC	-----	Jadida, Askand, Sakua, Salagaon
Betanoti CHC	-----	Gobindraipur, patalipura, Demfouda
Rasgovindpur	-----	Gadighati, Handidhua, Padmatalia
Morada-	-----	Itamundia
Baripada Municipality	-----	Belgadia, Madhuban

For other types of epidemic at any places of the district the respective CHCs and PHCs will be the MPC and will provide adequate support and service. A strict vigilance from the district point will be followed to those areas during the response period.

Formation of Teams

One Medical team has been formed in the DHH (district headquarter hospital), Baripada. The task force team is operating under Orissa Multi-Disease Surveillance system and consisting of M.O. – 1, Sanitary Inspector – 1, HW – 2, LT – 1, Sr Helper/Attendant – 1, with drugs logistics and a vehicle with Driver. The team is kept in readiness always to rush to any place if required.

Similarly at Sub-Division level all the SDHs and at Block level PHCs, CHCs are ready with their response team comprising the same composition of the members as described above to attend any disaster rescue operation.

The district Medical Unit has established 3 *mobile teams* that are in all readiness to rush to any affected site of epidemics or natural calamities. Besides this also other medical officers

in charge and identified Para-medical staffs are kept allot to render their service during the time of emergency in the district and if required at other areas of the state.

Reporting

The Medical Unit has one surveillance system to collect the reports of the communicable disease and epidemics from sub-center level. The same again is compiled at district level and reported through Internet

Sanitation Response

1st and 2nd round disinfections in the district has already been competed. After the flood situation, if required, post flood measures will be taken and properly disinfected.

During any type of disaster response the sanitation measures will be carried out with the support of the experts from medical professionals and the subsequent DMT members and Volunteers at the locality. Bleaching Powder as the material is stocked with AWW and health workers. These workers will provide support towards post disinfections in aright way.

IEC Activities.

Regular IEC activities in terms of rallies, public educations, meetings, workshops, trainings, street plays, posters are conducted to prevent infectious disease and natural hazards have been done. The flood prone areas have been identified and disinfectants, Halogen tablets, ORS have been kept in those areas with health workers & AWWs .

5.8 ANIMAL RESOURCE MANAGEMENT PLANNING:

Training and awareness:

Training and awareness creation to the field staffs to prevent loss of lives of domestic animals are organized and imparted at the Block level as a part of the committee there.

Control Room:

A control room will be in operation in the office of CDVO, Mbj round the clock during disaster period. The Tel. No. is ---- (06792) 252728, there is also a fax line connected to it. Similarly, in four Sub-Divisions the SDVOs will be the Zonal Officers, the telephone nos are given below

SDVO, Baripada: - 252478

SDVO, Udala: - 232266

SDVO, Karanjia: - 220283

SDVO, Rairangpur: - 222137

The VASs at the Block Head Quarter are the Nodal Officers to liason with the BDOs at the time of Natural Calamity or any Disaster likely situation.

Local supplier for supply of cattle feed: Eastern Hatchery, Baripada and OMFED

Measures already taken for pre monsoon vaccination:-

HSV: 12,720

BQV: 15,610

FMDV: 2,000

Already the vaccination work has been undertaken in pre monsoon .

Shelter for animals:

The animals that are at risk are to be kept safely in the Animal Sick Home. The Veterinary Dispensaries and the places adjoining the rescue shelters will be act for the purpose. At the outbreak, sufficient quantity of fodder (Straw & Rice bran) and drinking water will be

stored. A group of volunteers are to be kept in readiness to take up immediate action to rescue and place safely the marooned animals at the Sick Home.

Requirement – One tube well in each Sick Home i.e. Veterinary Dispensary.

First Aid/Medical Group:

The field Officers of this department will be responsible to provide support to the animals suffering, quantity of cattle feed, drinking water, medicine and vaccination at the time of disaster.

Besides special groups of veterinary and para veterinary persons will be kept ready to proceed to the affected area.

Relief Group:

This group will be there in two ranges for distribution of relief material. 10 qtl of straw and 10 qtl of rice bran are to be kept in 10 different points.

Post Disaster Management:

- Immediate up to date data to be kept in readiness.
- A quick assessment of the damage property and livestock to be listed
- Areas for different levels of relief are to be identified.
- Establishment of communication services to reach in affected places and to provide guidance.
- Preparation of respective plan to reduce the impact of disaster.
- Vaccination for HSV and BQV.
- De-worming of animals.
- Health and Nutritional coverage for affected livestock.
- Planning for economic reconstruction of area.
- Public awareness through NGOs for disposal of carcass.

5.9 Preparedness & Response plan of various line departments

5.9.3 Irrigation

Mayurbhanj Irrigation Division, Baripada looks after the maintenance of T.R.E. , O.A.E. and other flood control works of Mayurbhanj district by three sections such as

1. K.C. pur Irrigation Section HQ at Rasgovindpur
2. Udala Irrigation Section HQ at Manitri
3. Baripada Irrigation Section HQ at Baripada

Under Baripada Irrigation Sub-Division, No-1 at Baripada.

Vulnerable points:-

The different vulnerable points have been identified under the Mayurbhanj Irrigation Division on the river bank of rivers Subarnarekha, Budhabalanga, Jambhira, Palpala, Sono, Gangahar and river Nalhua. Instruction have been issued to take immediate steps to collect the flood fighting materials such as sand and empty cement bags for taking emergency protection measures.

Maintenance of River Gauges/ Discharge observation: -

There are two nos of river gauge stations in Mayurbhanj irrigation Division, which are maintained by C. W. C., one is at Astia of River Budhabalanga and other is at Rajghat of river Subarnarekha. Instructions have been issued to take the Zero value of gauges and to mark the danger level and warning level at different gauge stations by painting for correct recording of discharge and gauge level of river and rainfall data of different raingauge stations at the specified time. The Zero level, Danger level and Warning level of different gauge stations are mentioned.

Danger level at different Locations:

SL.NO	NAME OF THE RIVER	LOCATION OF GAUGE	ZONE VALUE OF GAUGE	WARNING LEVEL	DANGER LEVEL	REPORTING OFFICER
1	BUDHABALANGA	ASTIA	23.30 M	29.70 M	30.92M	EE, Mayurbhanj Irrigation Div.
2	SUBARNAREKHA	RAJGHAT	5.79 M	9.45 M	10.36 M	-do-

Opening of flood control room and it's functioning.

Flood control room will function in the circle office and in the division office from 01.06.14 to 30.10.14. the control room will normally function from 6 A. M. to 10 P.M. in normal situation when the rivers are below the warning level and will function round the clock during the period of emergency. The following are the telephones in the control room.

Circle Office 06792-252265

Mayurbhanj Irr. Division 06792-260442

VHF stations have been installed at Kalo and Sono Dam Sites.

Response & Reporting of flood damage: -

In case any breaches and damage occurred during flood, the same should be immediately reported to all concerned as well to the office control room. The list of Officials responsible at different locations is mentioned in Capability Analysis Section.

Review of flood responsibility: -

Field staffs as per the distribution of responsibility have been instructed not to leave head quarter and to keep proper watch and ward of the weak and vulnerable points all along the embankment.

Use of wireless and VHF: - The staffs of the deptt. are also instructed to use the police wireless, CWC wireless or VHFs installed by OSDMA.

Drainage Clearance: - The concern Sub-divisional Officers and Junior Engineers have already taken steps in clearance of debris on the water way to make free flow of flood water.

5.9.5 Civil Supplies Office has intimated that in order to meet the emergent requirement during the flood season, at each inaccessible places, rice (4430qtl) and kerosene oil (21100 Lts) are kept reserve in all 13 identified places with the respective Storage Agent and Sub-Wholesaler.

5.9.6 RWSS & PHD

They have reported that regularly the technical teams are attending complains against the defunct tub wells. The mobile teams are formed to attend complains on a rotation basis and also on emergency. The necessary materials and Bleaching Powder are stacked at Block points to be used during and at post disaster period.

Executive Engineer, RWSS/PH will be the Officer in Charge-Water Supply.

If essential provisions will be made for the emergency distribution of water.

Provision will be made to acquire storage tanks, and water distribution to the affected villages, population and cattle camps.

During Flood or any disaster the supplied drinking water will be disinfected as per standards and procedures laid down.

People will be informed to store emergency supply of drinking water.

Stand by Diesel pumps/ Generators will be kept ready.

5.9.7 Lift Irrigation

There are 2175 nos of Lift Irrigation Projects with an irrigation potential of 30,746 hectares in Kharif and Rabi in Mayurbhanj. Out of this 1686 Projects are functional having the irrigation potential of 23,335 hectares.

5.9.8 PWD and Rural Works

The Executive Engineers will be the Officers In Charge.

Inspection and emergency repair will be carried out for all buildings and structures of State Government (including Hospital Building).

Inspection and emergency repair will be carried out for all roads, road bridges, under water inspection of foundation and piers, concrete and steel work.

Heavy equipments and machineries along with vehicles will be secured and kept ready for any required immediate response action.

Equipments, Manpower and material are to be kept ready for road cleaning if necessary and also to construct immediately any temporary road at the affected area.

5.9.9 NESCO

The Executive Engineers will be the Officers In-Charge.

A regular communication will be established with emergency operating center and departmental offices.

Standby arrangements will be made for temporary electric supply for important buildings like Collectorate, Hospitals, Water supply Departments, Communication Buildings etc.

Equipments, Manpower and material are to be kept ready for restoration of Electric Supply as soon as possible in the affected places.

5.10 Preparatory Action by the CRISIS RESPONSE STRUCTURE in the district.

Early warning dissemination

PREPAREDNESS	RESPONSIBILITY
<input checked="" type="checkbox"/> Setting up control room and manning of Control Room round the clock.	*All District level officials. All Sub collectors. All Tahasildars. All BDOs DIPRO. Leading NGOs. & Team members of district level Information Management Teams
<input checked="" type="checkbox"/> Assignment of duties to the District level officials and Sub-collectors/ Tahasildars / BDOs	
<input checked="" type="checkbox"/> Arrangement of vehicle and sound system for information dissemination	
<input checked="" type="checkbox"/> NGO coordination and assignment of duty	
<input checked="" type="checkbox"/> Proper record keeping and transmission of information to all the levels.	
<input checked="" type="checkbox"/> Early warning to fisherman.	
<input checked="" type="checkbox"/> Holding of Natural calamity meeting.	
<input checked="" type="checkbox"/> Ensure functioning of warning systems & communication systems.	
<input checked="" type="checkbox"/> Create awareness with the target groups.	
<input checked="" type="checkbox"/> Ensure Mock drill.	

Evacuation

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

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

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Identification of Shelter/Temporary shelter in high-elevated places and arrangement of tents etc. <input checked="" type="checkbox"/> Arrangement of Food/Drinking water /Medicine in the shelter places. <input checked="" type="checkbox"/> Person's allocation for each shelter. <input checked="" type="checkbox"/> Arrangement of transportation. <input checked="" type="checkbox"/> Arrangement for safe shelter for animals. <input checked="" type="checkbox"/> Providing the lighting facilities for shelter places. <input checked="" type="checkbox"/> Deployment of Police Personnel <input checked="" type="checkbox"/> Temporary supply of safe drinking water. 	<ul style="list-style-type: none"> *Sub-collectors. *Tahasildars *BDOs *Medical Officers *Paramilitary Forces *Police. *PHD/RWSS. *RTO/MVI <p style="text-align: center;">&</p> <p>Team members of Trasportation Manegement and Infrastructure Management Team</p>
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Emergent Relief / Free Kitchen Operation.

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

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

Health and Sanitation Response structure.

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

Infrastructure Restoration.

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

Collector & District Magistrate, Mayurbhanj.

Proper functioning of Control Rooms to be monitored
Close of breaches and embankments to be ensured
Alternate arrangements to those cut off areas to be planned
Senior Level Officers should be deployed before the areas get cut off
Boats should be deployed
Storage of food (infant food, dry food) in vulnerable pockets to be monitored.
Arrangements for keeping drainage clear to be made
Army assistance to be kept ready
Rescue & Relief measures to be organized

Superintendent of Police, Mayurbhanj.

There will not be communication problem
There will not be law and order situation in the affected areas
Army and Civil Defense assistance will be required
Routes might be blocked with carcasses should be cleared
There will not be a traffic jam on the roads

District Emergency Officer

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

CDMO

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

RWSS

Most of the water available will be unfit for drinking
Existing storage bodies of water may be damaged and unusable
There will be an alternative need (poly packs) of water to assist victims in rescue operation
People to be informed of emergency supply of water
Tankers and containers to be acquired for distribution of water

5.12 MITIGATION MEASURES

The District Administration has already taken steps in providing instructions to the line departments and Block Administrations to take adequate and emergent action at least in the following details. They also have been instructed to ensure the completion of the related activities by the mentioned time frame, before disaster season. Also every department has been advised to take development action plans should be disaster proof and that can help in disaster mitigation.

5.12.1 Short Term Measures

Type of Sector	Sub Sector	Mitigation Measures	Responsible Dept.	Time Frame
Infrastructure development	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the BDOs and DI & PRO	During the last week of May & 1 st week of June.
	Road	Repair of vulnerable/ affected points identified by the departments	PWD, RD	By 15 th of June
	Embankments	Receiving the Height of the embankment points identified Repair of Vulnerable/affected points identified	Irrigation Department	By 15 th of June
	Safe Shelters & Multi purpose Cyclone shelters	Ensure maintenance of shelters	RD department, DI and CI of Schools	Before 15 th of June

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

5.12.2 Long Term Measures:

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

Instructions have been given to all district level departments to put forth such activities in their yearly action plan. Also they should notice and take necessary steps to ensure the developmental units and new constructions are disaster free and disaster resilient.

Sector Wise Vulnerability Reduction Measures

Type of Sector	Sub Sector	Mitigation Measures	Responsible Deptt.	Time Frame
Communication & Infrastructure	Communication	Ensure maintenance and good running condition of communication systems	Telecom and District Administration	By 31 st of May
	Drinking water and sanitation	Repair of the Damaged standpoints Check the Leakage of overhead tanks and pipes	RWSS	All the time
	Technology Dissemination	Installation of VHF in all the block headquarters	OSDMA and District Administration	Before April 30 th
Health/Animal Husbandry	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and CDVO	By May 31 st and after the receipt of warning
	Vaccination	Stock piling of vaccines	CDVO & CDMO	By April 30 th
	Training	Health care, sanitation, first aid	CDVO & CDMO	After the 1 st Natural Calamity Meeting
Livelihood	Awareness	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and CDVO	By May 31 st and after the receipt of warning
	Agriculture	Flood Resistant crops/ Alternative cropping Drought Resistant - short duration paddy Crop insurance Coordination with Irrigation and DRDA	Agriculture and horticulture department	Normal period Pre flood Period
	Horticulture	Nursery raising Insurance	Horticulture Department	Normal period Pre flood
Insurance	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and CDVO	During normal period
	Livelihood	Ensure insurance of livestock, crops, work sheds/workshops etc.	Agriculture, Cooperative Society	During normal period
	Life	Awareness	NGOs	During normal period

5.12.3 Special Mitigation Measures undertaken in the district.

(Structural and Non-Structural Plans and their Continuation).

- Walling and Posters are done regularly describing Does and Don'ts and precautionary measures to be taken into action at pre, during and post disaster events. The posters of remedies on Fire accident, Sunstroke, Flood and Cyclone, Nutritional care during disasters etc are disseminated at the Govt buildings and public places.
- Special trainings are organized in the district of Govt Officials, NGOs, Volunteers, Disaster Management Committee members, PRIs etc on DRM.
- Special Task Force trainings are organized of the Disaster Management teams, Volunteers (NSS, NYK) etc on First Aid, Search & Rescue etc.
- Meetings, rallies are arranged at district, block and village level to put an impact on necessity of Disaster preparedness and subsequent measures.
- In the district, Observation of Disaster preparedness Day, Volunteers Day, competitions among school and college students on special DRM topics etc are taking place-creating awareness among the community on Disaster management.
- To establish a better communication networking within the district, the District Control Room and Block headquarters along with a few more important stations like Dam sites, Tahasils and Sub-Collector's Office are connected with VHF systems. It will establish a two-way communication linkage between the stations. The EOC is connected with a toll free telephone having no- 1077, which can be accessed for any disaster related information.
- Repair and restoration of vulnerable points on road. The engineering department and all Blocks are in regular coordination of such measures.
- Repair and restoration of proper vulnerable points on embankments. The engineering department and all Blocks are in regular coordination of such measures.
- Proper maintenance of shelter places. For this a regular communication is obtained with DEPE, Mayurbhanj, CI of Schools and engineering departments.
- It is regularly ensured by the district control room and subsequent control rooms at Sub-divisions, Zones and Sub-Zone level, the functioning of Telephones connected, Computers along with other electronic equipments functional.
- The functioning of all water supply systems is ensured functioning well. Alternative arrangements have also been made for functioning of units during emergency and each repairing of it.
- The functioning of tube wells is ensured before the disaster in the rural areas. Utmost priority has been given for repairing of the units. Also a few more vulnerable positions have been identified and constructions are carried out.
- Prior to the disaster seasons adequate vaccination has been done by the health and animal husbandry departments.

- Training programs and awareness are continuing for common people on various health aspects. Volunteers are receiving trainings on health care, sanitation, First Aid and PFA.
- There formed a “crop and weather watch group” in the district consisting the technical members of Agriculture department. The group at the district level will be responsible to advise on the alternate cropping pattern, relative crop corrections etc during the drought period and flood resistant crops.
- The Agriculture department will make an assessment on the vulnerability of crops and advise accordingly on the requirement of seeds and associate fertilizers.
- Crop insurance will be made with the farmers’ field crop by the agencies.
- The Horticulture Units will supply the horticulture plants to the farmers. Important horticulture plants should be taken with insurance coverage.
- The Departments, Units and Individuals are advised to make insurance of livestock, crops, work sheds/workshops etc.

In the current year it was strategically agreed that all the 1st and 2nd priority of development action plan in the GPs and Villages will be taken as the activities under Flood Protection, Drought Mitigation, Watershed Management and provisioning of drinking water and irrigation related. A list of this as mitigation action plan is attached as annexure.

CHAPTER – VI**6. Coordination and Linkages****6.1 Pre Disaster Warning (Coordination)**

Warning Dissemination Phase:				
Collector:				
To collect information on:	Activity	Person Responsible	Resources required-to be sourced from	Time frame and remarks.
Weather warning	Regular monitoring of the activities of The District Control Room.	DCR, EO, DIPRO	Communication equipment to be procured much before disaster season.	48 hours prior to any warning.
Rain forecast	Monitoring of rain recording at block HQ.	BDOs.	Proper functioning of rain gauge.	Within 24 hours.
	Monitoring of weather sites by staff	Person Responsible for DCR.	Internet connectivity at DCR.	On daily basis from 10 th of June
Water level in the Dam & Release of water from Dam.	Standing orders to EE, Irrigation to provide details of water level	EE, Mayurbhanj Irrigation and Emergency Staffs	Close communication with the EE, Irrigation	On daily basis from 10 th June
Warning to district authorities in the downstream side of Dams	Inform officials positioned at the downstream through DIPRO.	DIPRO, S.P. Volunteers.	VHF, Internet, Vast Phone, Jeeps with Loud Speakers	12 hours before release of water from the dam.
CDMO:				
Keep close contact with the Collector and the Emergency Officer.	Give latest report on any health hazard, Epidemic or death due to natural causes like heat wave, lightening etc.	Doctors and other Paramedical staff of the district.	Telephone, Fax, Computer, Internet.	Immediately.
Ensure Information reached to the health workers at field level.	Keep a database of all the contact Telephone numbers/other means of communication,	Doctors and paramedical staff of the district.	Vehicles of health department and a few can also be hired from private. Operators.	Immediately upon receipt of message.
Collect information on health status on a daily basis.	Activate and constantly monitor the disease surveillance system.	Members of the disease Surveillance team. UN agencies.	Telephone, Fax, Computer, Internet.	Daily.
Feed back to the Collector.	Give a daily feedback on the action taken and anticipated Problems.	ADMOs, MOs , Media		Daily.

S.P.:				
To collect information on:	Activity	Person Responsible	Resources required to be sourced from	Time frame and remarks.
Alert the Police force to be vigilant and take hold of the Law and order situations.	Messages to all P.S through VHF and Telephones	OICs, VHF Control, Telephone Operators	Proper functioning of the equipments.	Immediately upon receipt of warning
To arrest and take into custody the Rumors mongrels.	Similar instruction to all PS	Staff of the police department		Immediately upon receipt of warning
Deployment of force in the calamity Area	Delegate forces to the areas likely to Face any disaster.	Staff of the police department		
Alert fire brigade for action.	Contacting the Fire officer.	Staff of adjoining Fire Stations.		
Calm down general public.	Give proper warning with careful use of Word to prevent chaos among public.	Appropriate instruction to people Disseminating warning of any sort.		
Emergency Officer:				
Publicity of warning received.	Through public address system. News bulletins through DIPRO.	RTO, DIPRO, Station Director A.I.R	Jeeps with loudspeakers	
Inform SRC and other district authorities	Prior collection of telephone numbers of all persons with disaster Mgmt Experience	Staff of emergency cell.	Computer, Stationery etc.	Normal times and updated at regular intervals
Alert all other depts. like NESCO, PHD,PWD etc,	Inform them about the gravity of the situation	Officials of all depts.		

6.2 Coordination among line departments in pre and post disasters. Responsibility of different Officers in Pre & Post Disaster Situations.

Duties ⇒	Normal time.	1 st warning	Post Disaster.
Officer ↓			
EE, NESCO	<p>He should see that the field staff checks the electrical line and replace old materials used in the power supply.</p> <p>He should see that all wiring are in service connections are rectified.</p> <p>He should see that the report regarding cyclone warning should be reported to other subordinate offices.</p> <p>He should see that trees, branches etc. fall on electrical lines are out and removed.</p> <p>The field staff should see that electrical supply in the places where cyclone may be serve is cut off.</p> <p>The field staff should be in touch with local Tahasildars and inform the situation at frequent intervals.</p>	<p>On receipt of the 1st warning it should be communicated to all the subordinate staff.</p> <p>He should see that all the vehicles under his control be kept in perfect order.</p> <p>Alert the entire staff to return their Hqrs. And get in touch with immediate requirement.</p>	<p>Restoration of power lines on priority to:-</p> <ol style="list-style-type: none"> 1.Hospital, Water supply 2.Control Room 3.Fire Stations and to other offices on priority basis <p>Live wires on ground should be removed promptly.</p> <p>Damaged or fallen electrical poles should be immediately replaced and obstructions on roads should be got removed.</p>
EE, Irrigation.	<p>The branches to canal drain to be closed.</p> <p>The Embankments should be Strengthened.</p> <p>It should be checked whether the passage bridge and channels are in good condition.</p> <p>The obstruction in the canals if any should be got removed immediately to be enabling free flow of water.</p> <p>The bocks and shutters of the canals are to be checked and satisfied that they are in good condition.</p> <p>The instruments and materials etc. required attending to immediate repairs breach of closures etc. should be stacked at places where they may be required locating such places early.</p> <p>Navigation in the canal should be stopped.</p>	<p>1st warning should be communicated to all the subordinate staff lock suptd. And employees.</p> <p>They should be alerted to check whether the canals and drains are in proper condition to allow free flow of water.</p> <p>The stations tour should take their duty places and be readily available.</p> <p>Keep sufficient no. of vehicles for one by the staff on cyclone duty. Lunches to be requisitioned.</p>	<p>Damages due to Hazards to Govt. properties lives of man and cattle etc. should be assessed and reported to Tahasildars, Sub-Collector concerned immediately.</p>

	<p>Water supply in to canals should be out off by closing the sluices.</p> <p>The canals and drains should be free from constructing and they should be made available for free discharge of drain water.</p>		
FIRE OFFICER.	<p>The Fire personnel should alerted and other vehicles should be kept in good working condition.</p> <p>Materials required for use in emergency should be indented for and kept in reserve</p> <p>Message received from public on disaster for help should be immediately attended.</p> <p>Keep in touch with each of the other fire stations in the district.</p>	<p>The 1st warning should be immediately communicated to fire stations.</p> <p>The staff should be called on for duty. Full complement of the staff should be available for the vehicles should be obtained and kept in reserve.</p>	<p>Removal of collapsed houses, walls etc. should be attended</p> <p>Persons involved in house collapsed should be promptly reserved.</p> <p>Report on the relief activities, under taken should be promptly reported.</p>
EE, R&B/ EE, NH div.	<p>Govt. buildings should be inspected and necessary repairs to be got executed to with standing hazards affected.</p> <p>Public addresses equipment should be obtain kept ready.</p> <p>The community Radio sets available in the coastal villages should be ascertained</p> <p>The names of Hamlets where they are not available to be reported.</p> <p>Specific duties should be assigned to the field staff.</p> <p>The field staff should proceeds to the place of work allotted and be ready to attend to cyclone duty.</p>	<p>The 1st warning should be communicated immediately to all subordinate officers.</p> <p>Wide propaganda should be arranged.</p> <p>The Sub-Divisional public relation officer should be available at their Hqrs.& got ready for cyclone duty with short notice.</p> <p>Ensures that all community Radio sets are in working condition.</p>	<p>Photographs of damages should be taken. The field staff should conveying formation regarding the quantum of disaster loss of property lives men and cattle.</p> <p>They should be posted with up-to-date information and the information should be passed to the Collector immediately.</p>

<p>CDMO</p>	<p>Sufficient stock of medicines / disinfectants / vaccines should be kept ready at different places in the District.</p> <p>The Medical Officer sub-Divisional Dispensary should be supplied with sufficient Qty. of Medicines.</p> <p>List of medical staff to serve in specific places should be drawn and kept ready in advance.</p> <p>Keep sufficient First aid kits.</p> <p>To keep sufficient Ambulance.</p> <p>The staff drafted for cyclone duty should be asked to assume duty at their respective places of duty.</p> <p>Sufficient No. of Medical Officers and motor staff should be drafted into batches and places of work should be allotted in the advance.</p>	<p>The 1st warning of the cyclone should be communicated to all the subordinate officers, Health Officers.</p> <p>The staff of the entire Dept. should be altered to attend the cyclone duty with short notice.</p> <p>Sufficient No. Of vehicle in good condition to be kept ready.</p>	<p>The injured persons should be lifted to the nearest Hospital after first aids.</p> <p>Preventive action to arrest spreading of infections diseases should be taken</p> <p>a) Chlorination. b) Disinfections. c) Inoculation. d) To set up sufficient no. of medical camps to meet the situation.</p> <p>Record of all persons treated with full details should be maintained, as the particulars should be required at a later date.</p> <p>Reports on the performance should be sent by the staff on duty through the C.D.M.O. from time to time that in turn will keep the Collector informed of the situation.</p>
<p>SP</p>	<p>Detailed plan of action fixing various duties to different officers and the Deptt. Should be kept ready for implementation in the event of hazard.</p> <p>Police wireless sets to be kept in order & place their installations to be identified.</p> <p>The officers should be asked to proceed to their places of hazard plan prepared.</p>	<p>Soon after 1st warning of cyclone is received all the subordinate police staff should be alerted.</p> <p>The home guards should be alerted.</p> <p>Sufficient No. of vehicles should be reserved for cyclone duty.</p>	<p>Help should be rendered to the cyclone affected persons to reach rehabilitation centers.</p> <p>Injured persons should be transported to Medical Centres.</p> <p>Deed persons, cases should get removed</p>

	<p>The public in cyclone zones should be altered to vacant their place of residence.</p> <p>Properties of the public should be guarded at the time of evacuation of the people.</p> <p>V.H.F. sets to be set up at places identified.</p> <p>Control room to be started. Wireless sets to be set up at places identified.</p>	<p>Sufficient Qty. of petrol and oils to vehicles is ensured.</p> <p>Communication of warnings through VHF to all police stations.</p> <p>Police stations in turn to communicate to villages.</p>	<p>with local officials and non-officials assistance.</p> <p>Record of identification of the dead should be maintained.</p> <p>Asst. Public and departmental officers in cyclone relief operation.</p>
<p>RTO</p> <p>CSO</p> <p>TDM</p>	<p>List of vehicles running condition to be requisitioned kept ready.</p> <p>The MVI/Asst. MVI will report before A.D.M. (Relief)</p> <p>The Asst. Engineer & Jr. Engineers will remain alert.</p> <p>To contact all Block Control Room and Collectors Office.</p> <p>Installation of wireless systems and telephones to be ensured for communication</p>	<p>Availability of petrol, oils should be ensured.</p> <p>The R.T.Os and M.V.Is should be asked to serve requisition orders on owners of vehicles for cyclone duty.</p> <p>Soon after receipt of 1st warning all the public call officers to be informed to instruct the village Sarpanch's / Postmaster for dissemination of warning in the villages.</p> <p>All telephone sets to be informed of disaster warning Provision of vehicles. B.D.O. for relief.</p>	<p>Electricity Dept. for restoration.</p> <p>Roads and buildings for clearance.</p> <p>Restoration of Telephone lines to control room to Collector, Hospital, fire station S.P. and other offices as per the list appended.</p>

<p>TAHASILDARS /BDO'S</p>	<p>Cyclone plan to be up-to date.</p> <p>List of villages likely to be marooned to be maintained.</p> <p>List of officers appointed for evacuation and maintenance of relief center to be kept.</p> <p>List of place selected for feeding centers storerooms etc. to be kept ready.</p> <p>Evacuation.</p> <p>To get suppliers of required information</p> <p>To arrange enumeration teams for cyclone damages.</p> <p>To arrange for removal of dead bodies etc.</p> <p>To keep in touch with all department officers, Sub-Collector & collector office to proceed with relief preparation</p> <p>To duster the assistance of voluntary organization.</p>	<p>To disseminate the 1st cyclone warning by communicating it to local officers and village level workers and by beat of drum in each village. The village wise list of persons to whom warnings to be conveyed is appended.</p> <p>To take steps to serve orders of requisition of services of employees.</p> <p>To take steps to obtain the required No. of vehicles.</p> <p>To contact the control room of Collector frequently for instruction on matter requiring order to kept informed of the situation.</p>	<p>To call for Block level Relief committee meeting to discuss the relief measures to be taken.</p> <p>Local schools to be declared closed.</p> <p>To asses the loss of human life and cattle</p> <p>Teams of enumerate houses damaged death of men and cattle in full details.</p> <p>Arrange feeding centers if necessary.</p>
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6.3 Coordination of NGOs, CBOs etc in Planning, Preparedness, Response, Recovery, Training and Awareness

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

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

Organizing NGOs according to their specialization to form response groups

Awareness building within the community

Prepare Community Contingency Plan in their area of operation

Review and analyze past disasters

Work closely with the community in identifying the risk population such as elderly and disabled, children, pregnant women, sick, single women and people residing on the seashore

Formation of Task Forces by involving their own volunteers and young boys and girls of the (17 to 25 years) village

Capacity building of the Task Forces

Mobilizing and utilizing the community funds during the time of emergency

Specifying roles and responsibilities of the Task Force

Mock drills for finding out the suitability / adequacy of preparedness

Maintaining transparency in activities

Being accountable to District Administration

Coordination of Multiple Agencies

It will be ensured by the district Administration to coordinate with such steps if the situation demands on it

Multiple agencies like International Agencies (UN Agencies, etc,) to coordinate with district administration for rehabilitation

Help to be taken from International NGOs and National Donor Agencies to meet Additional support, if any

Armed and Paramilitary Forces

The help of armed and paramilitary forces and ODRAF will be ensured during disaster in following steps

To identify, access escape routes to be followed during emergency so as to ensure passing of vehicles with least inconvenience.

To plan adequate contingency measures for manpower, transport and communication

To document traffic control, measures to be followed during emergency

To assess and plan for augmentation of existing facilities if needed

To help the response groups in carrying out activities in a organized manner

Maps

1. Orissa Map
2. District Map
3. Road network
4. River system
5. Vulnerability
6. Showing DRM Blocks
7. Showing Infrastructures.
8. River Embankments & Vulnerable point.
9. Forest Location

ANNEXES:

Annexure-A	Minutes of Flood preparatory meeting.
Annexure-I	Check List for Officers
Annexure-II	Role & Responsibility for Officers
Annexure-III	Does and Don'ts of Disasters
Annexure-IV	Rainfall Year wise of the district
Annexure-V	Crop Contingency Plan
Annexure-VI	Phone No & Websites
Annexure-VII	Permanent School Buildings
Annexure-VIII	River Embankments
Annexure-IX	ORC-Important Notes
Annexure-X	Flow Chart

